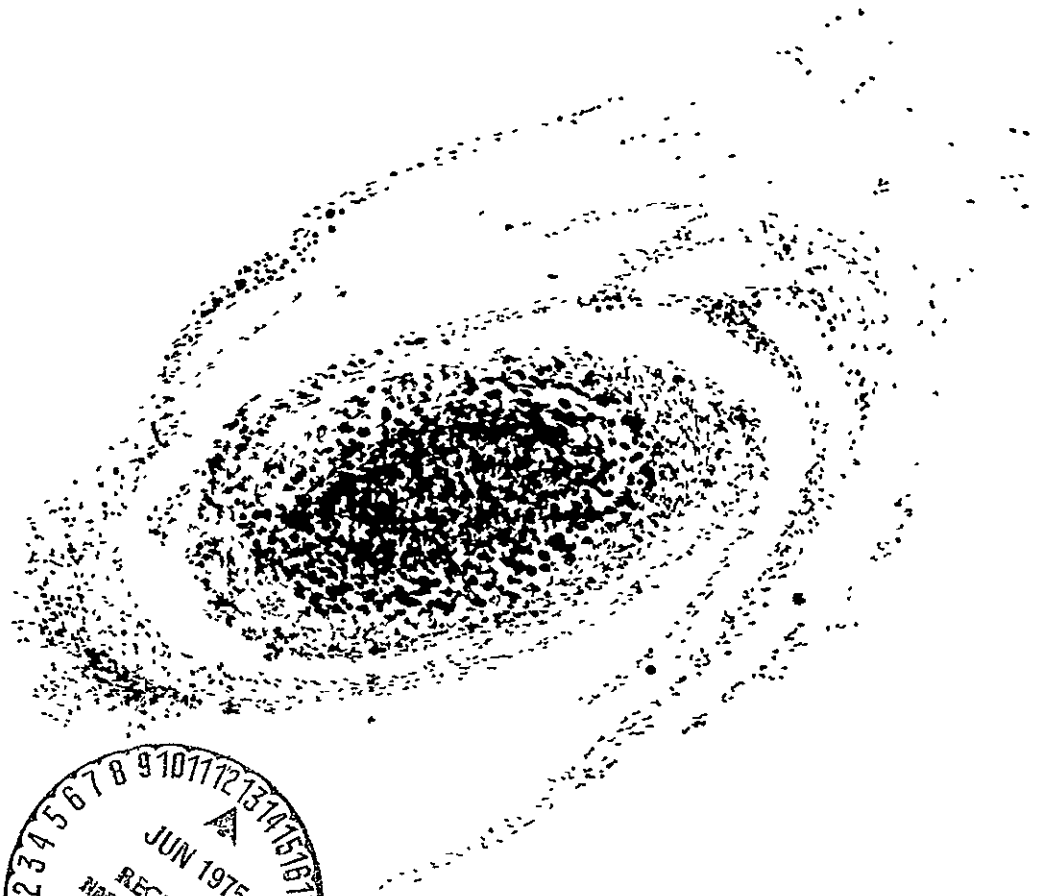
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A TABLE OF SEMIEMPIRICAL gf VALUES Part 2

R.L. KURUCZ and E. PEYTREMANN

(NASA-CR-142880) A TABLE OF SEMIEMPIRICAL gf VALUES. PART 2: WAVELENGTHS: 272.3395 nm TO 599.3892 nm (Smithsonian Astrophysical Observatory) 403 p HC $10.50 CSCL 03A
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SPECIAL REPORT 362

Research in Space Science
SAO Special Report No. 362

A TABLE OF SEMIEMPIRICAL gf VALUES

R. L. Kurucz and E. Peytremann

in three parts

Part 2; Wavelengths: 272.3395 nm to 599.3892 nm
Pages: 401-800

February 14, 1975

Smithsonian Institution
Astrophysical Observatory
Cambridge, Massachusetts 02138

408-088

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
272.3395	27.02	-2.78	91715.100	2.5	128423.100	1.5
272.3443	26.01	-.23	61587.240	5.5	98294.600	5.5
272.3450	22.01	-2.03	31113.610	3.5	67820.870	4.5
272.3477	24.01	-.46	31168.780	3.5	67875.680	3.5
272.3483	24.00	-7.47	7593.160	2.0	44299.980	2.0
272.3555	26.02	-4.24	86847.110	2.0	123552.950	1.0
272.3579	26.00	-.68	704.003	2.0	37409.530	1.0
272.3590	28.01	-4.45	99040.750	1.5	135746.130	1.5
272.3642	24.01	-3.69	30307.600	1.5	67012.280	2.5
272.3642	23.02	-3.68	105282.650	2.5	141987.320	3.5
272.3650	24.01	.06	33694.470	5.5	70399.040	5.5
272.3660	41.01	.32	12985.861	0.0	49701.163	0.0
272.3746	24.00	-4.12	20517.400	2.0	57220.670	2.0
272.3760	77.00	-.43	15970.189	0.0	52684.143	0.0
272.3800	14.03	-.16	291497.500	1.5	328200.040	2.5
272.3807	14.03	-.01	291497.600	2.5	328200.040	3.5
272.3807	14.03	-1.31	291497.600	2.5	328200.040	2.5
272.3840	75.00	-.34	15647.559	0.0	52360.435	0.0
272.3931	23.00	-7.58	0.000	1.5	36700.780	2.5
272.3932	26.01	-1.77	47626.140	.5	84326.910	1.5
272.3960	63.00	-.55	0.000	0.0	36711.259	0.0
272.3980	41.00	-.61	2097.096	0.0	38808.085	0.0
272.3990	24.01	-1.42	33694.470	5.5	70394.460	4.5
272.4003	17.03	-.12	215026.000	0.0	251725.800	1.0
272.4003	9.02	-.59	395268.130	1.5	431967.930	.5
272.4018	17.02	.16	217913.100	1.5	254612.700	1.5
272.4043	24.01	.07	31168.780	3.5	67868.050	2.5
272.4059	25.01	-2.06	44521.520	4.0	81220.580	3.0
272.4060	44.00	-.14	9436.930	0.0	46146.841	0.0
272.4151	25.01	-1.30	49291.310	3.0	85989.120	2.0
272.4165	24.01	-2.26	29952.080	.5	66649.710	1.5
272.4168	21.01	-.92	27917.690	1.0	64615.280	0.0
272.4210	10.01	-3.33	292451.780	1.5	329148.800	1.5
272.4220	10.01	-3.46	292451.780	1.5	329148.670	2.5
272.4324	23.00	-2.41	0.000	1.5	36695.490	.5
272.4350	74.00	.10	2903.671	0.0	39609.674	0.0
272.4397	19.02	-4.06	208687.800	1.5	245382.300	.5
272.4410	42.00	.22	16696.107	0.0	53401.302	0.0
272.4460	25.01	-.30	29951.120	1.0	66644.780	1.0
272.4479	9.02	-1.80	389737.630	.5	426431.030	.5
272.4600	26.01	-2.12	50076.100	1.5	86767.870	2.5
272.4630	74.00	-.59	6129.972	0.0	42832.203	0.0
272.4726	28.01	-.81	72985.650	1.5	109675.720	.5
272.4769	10.00	-4.09	134459.287	1.0	171148.780	0.0
272.4776	23.03	-1.27	227712.500	4.0	264401.900	4.0
272.4776	15.03	.07	256544.100	0.0	293233.500	1.0
272.4790	25.02	-3.42	140280.800	4.5	176970.010	5.5
272.4840	18.02	-.84	188714.050	3.0	225402.590	3.0
272.4873	24.00	-4.55	24093.160	2.0	60781.250	2.0
272.4881	26.01	-.71	8391.920	2.5	45079.910	2.5
272.4887	26.00	-1.16	24118.815	4.0	60806.720	3.0
272.4890	90.01	-1.56	0.000	0.0	36698.729	0.0
272.4933	26.00	-2.07	17550.180	3.0	54237.460	4.0
272.4950	58.01	-.77	2581.041	0.0	39278.962	0.0
272.4954	26.00	-1.10	7728.058	3.0	44415.057	4.0
272.5017	26.00	-2.66	0.000	4.0	36686.159	4.0
272.5030	74.00	-.66	3306.958	0.0	40003.802	0.0
272.5067	23.00	-3.46	137.380	2.5	36822.860	3.5
272.5094	26.01	-1.85	47674.780	1.5	84359.900	1.5
272.5126	10.00	-4.07	135888.717	1.0	172573.400	2.0
272.5150	42.00	0.00	11050.080	0.0	47745.308	0.0
272.5181	21.01	-1.26	28021.210	2.0	64705.160	2.0
272.5184	24.01	-1.40	68737.990	5.5	105421.900	5.5
272.5330	26.00	-2.29	12560.933	3.0	49242.872	3.0
272.5330	24.00	-3.93	23933.900	4.0	60615.840	3.0
272.5344	26.00	-3.03	12560.933	3.0	49242.680	2.0
272.5470	40.00	-.50	1209.863	0.0	37900.782	0.0
272.5534	24.02	-4.82	63420.300	3.0	100099.500	4.0
272.5557	25.01	-.30	52383.720	4.0	89062.600	5.0
272.5577	9.02	-4.35	427545.310	1.5	464223.930	1.5
272.5580	57.00	-.15	1048.548	0.0	37737.987	0.0
272.5602	26.00	-1.26	7985.783	2.0	44664.061	2.0
272.5616	17.01	-2.34	121499.000	2.0	158177.100	1.0
272.5639	25.02	-3.56	97271.760	5.5	133949.540	4.5
272.5666	23.00	-4.05	137.380	2.5	36814.800	1.5
272.5759	27.00	-4.13	14036.280	1.5	50712.450	2.5
272.5763	25.00	-1.46	23719.520	1.5	60395.640	1.5
272.5767	22.01	-1.61	8997.690	3.5	45673.750	4.5
272.5797	28.01	-2.90	98969.440	5.5	135645.100	5.5
272.5848	9.02	-.33	395385.660	2.5	432060.640	1.5
272.5908	25.01	-.54	29951.120	1.0	66625.280	0.0
272.5914	10.00	-4.75	135888.717	1.0	172562.800	1.0
272.5950	10.01	-3.28	280989.530	1.5	317663.130	1.5
272.5950	42.00	-.49	11775.998	0.0	48460.457	0.0
272.5957	15.01	-4.65	101636.490	1.0	138310.000	2.0
272.6053	26.00	-.91	8154.713	1.0	44826.920	0.0
272.6080	41.00	-.79	1129.205	0.0	37811.914	0.0
272.6092	23.01	-5.15	11908.270	2.0	48579.960	3.0
272.6117	26.02	-4.78	142908.480	5.0	179579.830	5.0
272.6136	28.01	-4.74	98969.440	5.5	135640.530	4.5
272.6218	23.03	-.52	255747.600	3.0	292417.600	3.0
272.6223	24.01	-1.64	38315.000	2.5	74984.930	1.5
272.6234	26.00	-.50	21038.987	2.0	57708.760	2.0
272.6244	26.01	.09	62662.300	5.5	99331.950	4.5
272.6268	24.01	-1.23	32836.840	3.5	69506.160	3.5
272.6277	24.00	-3.98	20517.400	2.0	57186.600	3.0
272.6307	27.01	-1.43	47345.700	5.0	84014.500	5.0
272.6320	73.00	-1.88	1935.780	0.0	38615.260	0.0
272.6329	25.01	-4.41	55371.300	3.0	92039.800	2.0
272.6336	10.01	-4.27	276511.820	.5	313180.230	1.5
272.6490	40.01	.08	725.918	0.0	37403.111	0.0
272.6498	26.00	-4.21	12560.933	3.0	49227.160	3.0
272.6500	24.00	-1.26	7593.160	2.0	44259.360	3.0
272.6511	26.01	-.96	27620.390	2.5	64286.440	3.5
272.6539	24.00	-2.62	20520.920	3.0	57186.600	3.0
272.6542	23.01	-1.26	12545.150	4.0	49210.780	3.0
272.6650	42.00	-.20	21051.613	0.0	57726.654	0.0
272.6700	72.00	-.73	5565.369	0.0	42239.737	0.0
272.6703	14.01	-1.43	81251.580	1.5	117915.060	.5
272.6742	25.02	-4.09	138312.700	4.5	174975.650	5.5
272.6745	24.00	-1.92	20523.690	4.0	57186.600	3.0
272.6794	26.01	-.54	64087.500	2.5	100749.750	2.5
272.6844	23.01	-3.58	14461.730	3.0	51123.310	2.0
272.6855	24.01	-1.81	32836.840	3.5	69498.270	4.5
272.6857	16.02	-.50	174036.190	1.0	210697.600	2.0
272.6864	26.02	-3.86	182810.660	5.0	219471.970	4.0
272.6865	25.01	-3.03	49291.310	3.0	85952.600	3.0
272.6946	8.02	-.51	400354.800	2.0	437015.000	1.0
272.6970	42.01	.57	25891.064	0.0	62561.801	0.0
272.6994	25.01	-1.66	41182.530	7.0	77842.090	6.0
272.7020	40.00	-.94	564.603	0.0	37234.668	0.0
272.7023	24.01	.49	54444.190	3.5	91103.360	4.5
272.7038	28.01	-3.91	98969.440	5.5	135628.410	4.5
272.7123	23.00	-4.34	553.020	4.5	37210.850	5.5
272.7211	24.00	-3.42	24303.940	3.0	60960.580	4.0
272.7228	25.01	-4.22	31760.930	2.0	68417.340	2.0
272.7230	51.00	-.62	18309.257	0.0	54976.498	0.0
272.7245	24.01	.19	31219.490	4.5	67875.680	3.5
272.7250	90.01	-.74	9598.245	0.0	46265.217	0.0
272.7255	28.01	-4.61	97273.830	2.5	133929.880	3.5
272.7306	6.01	-1.20	177774.590	.5	214429.950	1.5
272.7315	9.02	-1.00	390077.800	2.5	426733.040	2.5
272.7317	15.01	-3.89	105303.190	1.0	141958.400	1.0
272.7333	9.03	-2.23	551366.000	3.0	588021.000	2.0
272.7380	26.01	-.63	25428.800	5.5	62083.170	4.5
272.7383	25.00	.08	30354.210	3.5	67008.540	2.5
272.7430	41.01	.23	12985.861	0.0	49650.413	0.0
272.7440	73.01	.70	5242.739	0.0	41907.157	0.0
272.7501	9.02	-1.61	390080.300	1.5	426733.040	2.5
272.7535	26.01	-.33	8391.920	2.5	45044.210	1.5
272.7550	75.00	-.40	14115.066	0.0	50778.005	0.0
272.7579	24.01	-1.80	32854.460	4.5	69506.160	3.5
272.7585	25.01	-.15	41190.470	6.0	77842.090	6.0
272.7626	24.01	-1.61	32855.090	2.5	69506.160	3.5
272.7688	25.00	-3.78	17568.480	1.5	54218.710	1.5
272.7763	27.01	-.09	49697.500	4.0	86346.730	3.0
272.7765	23.03	-.28	255146.800	2.0	291796.000	1.0
272.7780	63.01	-.04	0.000	0.0	36659.848	0.0
272.7780	73.00	.38	10566.135	0.0	47225.983	0.0
272.7811	26.02	-4.54	76956.790	3.0	113605.370	3.0
272.7869	17.02	-.04	205037.300	1.5	241685.100	2.5
272.7926	23.01	-1.93	12621.570	5.0	49268.610	4.0
272.7930	28.01	-3.16	57420.160	2.5	94067.140	1.5
272.7940	76.00	-.20	10082.190	0.0	46739.888	0.0
272.7942	9.02	-.57	384358.540	.5	421005.360	.5
272.7950	26.01	-1.72	43238.610	2.5	79885.320	2.5
272.7950	74.00	-.80	6129.972	0.0	42787.535	0.0
272.8021	26.00	-.76	7376.762	4.0	44022.518	4.0
272.8040	22.01	-3.00	30958.700	2.5	67604.200	3.5
272.8057	26.01	-1.57	63273.030	2.5	99918.300	1.5
272.8077	25.01	-.41	51553.060	5.0	88198.070	6.0
272.8080	41.00	-.94	1532.493	0.0	38188.310	0.0
272.8096	23.01	-4.99	2968.220	4.0	39612.970	5.0
272.8166	24.01	-1.00	32854.460	4.5	69498.270	4.5
272.8168	25.00	-3.39	27201.540	2.5	63845.320	1.5
272.8185	26.02	-4.79	142535.070	2.0	179178.620	3.0
272.8253	29.01	-4.07	88605.160	1.0	125247.800	2.0
272.8255	29.01	-4.84	88926.090	0.0	125568.700	1.0
272.8270	76.00	-1.22	2661.698	0.0	39314.962	0.0
272.8359	24.01	-3.41	32836.840	3.5	69478.060	2.5
272.8400	3.01	-.10	561245.000	0.0	597896.517	0.0
272.8471	26.02	-1.69	105895.350	1.0	142535.070	2.0
272.8524	29.01	-4.97	111876.600	3.0	148515.600	4.0
272.8534	26.00	-1.06	24118.815	4.0	60757.680	4.0
272.8535	26.02	-3.71	84369.920	2.0	121008.780	3.0
272.8592	25.01	-1.28	68417.340	2.0	105055.430	2.0
272.8593	23.02	-2.39	63303.120	4.5	99941.200	3.5
272.8609	18.02	-2.66	188517.320	1.0	225155.180	1.0
272.8617	25.01	.53	41204.340	5.0	77842.090	6.0
272.8617	25.01	.73	41182.530	7.0	77820.280	8.0
272.8630	75.00	-.82	13711.778	0.0	50360.206	0.0
272.8639	23.01	-.91	36.050	1.0	36673.510	2.0
272.8659	10.01	-2.98	281025.940	2.5	317663.130	1.5
272.8684	28.01	-2.14	98969.440	5.5	135606.300	6.5
272.8688	28.01	-4.35	78955.450	1.5	115592.250	1.5
272.8691	28.01	-4.18	98969.440	5.5	135606.200	5.5
272.8700	42.00	-.30	11050.080	0.0	47697.568	0.0
272.8702	24.01	-4.43	32355.940	3.5	68992.550	4.5
272.8717	6.01	-.50	177793.540	1.5	214429.950	1.5
272.8733	28.02	-1.92	83033.800	2.0	119670.000	2.0
272.8733	15.03	.42	256602.700	1.0	293238.900	2.0
272.8756	26.00	-1.95	24118.815	4.0	60754.710	4.0
272.8757	27.00	-1.06	16467.900	4.5	53103.780	3.5
272.8820	26.00	-.50	19788.248	4.0	56423.276	4.0
272.8830	44.00	-.32	9033.642	0.0	45679.384	0.0
272.8831	10.01	-4.74	280262.330	3.5	316897.210	3.5
272.8855	26.01	-4.01	26055.400	2.5	62689.960	2.5
272.8865	25.01	-1.21	49427.320	4.0	86061.750	3.0
272.8903	26.01	-.64	27314.930	3.5	63948.840	4.5
272.8910	90.01	-1.51	1774.465	0.0	38419.133	0.0
272.8940	45.00	-.93	2581.041	0.0	39225.306	0.0
272.8941	28.01	-3.88	99442.860	4.5	136076.260	4.5
272.8950	71.00	-1.15	0.000	0.0	36644.131	0.0
272.8961	24.01	-3.85	32844.920	1.5	69478.060	2.5
272.8970	26.00	-3.19	888.132	1.0	37521.144	2.0
272.9008	23.03	-1.30	217836.300	3.0	254468.800	2.0
272.9010	28.01	-3.27	67031.020	.5	103663.500	1.5
272.9034	26.01	-4.12	23031.300	1.5	59663.450	1.5
272.9040	69.01	-1.41	161.315	0.0	36804.237	0.0
272.9100	72.00	-1.19	2339.068	0.0	38981.184	0.0
272.9130	42.00	-.47	11372.710	0.0	48014.424	0.0
272.9135	15.03	-.06	256602.700	1.0	293233.500	1.0
272.9149	18.02	-1.80	188517.320	1.0	225147.930	2.0
272.9160	58.01	-.45	5887.999	0.0	42529.310	0.0
272.9214	28.01	-4.10	99040.750	1.5	135670.490	.5
272.9214	6.01	-.90	177774.590	.5	214404.330	.5
272.9239	25.02	-4.75	138245.090	5.5	174874.500	4.5
272.9281	26.02	-2.53	105906.230	2.0	142535.070	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
272.9325	10.01	-4.53	280268.960	2.5	316897.210	3.5
272.9330	63.01	-1.39	0.000	0.0	36639.029	0.0
272.9330	90.01	.11	8952.985	0.0	45592.014	0.0
272.9344	26.01	-.21	62945.120	3.5	99573.110	4.5
272.9353	23.00	-3.68	553.020	4.5	37180.900	4.5
272.9403	24.01	-1.69	68737.990	5.5	105365.200	4.5
272.9412	25.00	.01	30354.210	3.5	66981.300	3.5
272.9432	26.01	-2.42	26932.740	.5	63559.560	.5
272.9440	63.01	-.88	1613.150	0.0	38250.702	0.0
272.9460	44.00	-.77	8469.040	0.0	45106.324	0.0
272.9482	23.02	-4.42	63315.050	3.5	99941.200	3.5
272.9491	23.00	-4.78	137.380	2.5	36763.410	2.5
272.9560	77.00	-.79	10485.478	0.0	47121.419	0.0
272.9572	26.01	-.88	50142.930	2.5	86767.870	2.5
272.9577	21.01	-.56	28021.210	2.0	64646.080	1.0
272.9592	26.02	-4.65	182379.860	5.0	219004.530	4.0
272.9615	25.01	-.17	70342.580	3.0	106966.940	2.0
272.9620	74.01	.32	8791.670	0.0	45426.806	0.0
272.9639	23.01	-3.09	14461.730	3.0	51085.770	3.0
272.9640	75.00	-.49	16212.162	0.0	52847.030	0.0
272.9680	42.01	.15	12340.601	0.0	48974.932	0.0
272.9688	26.02	-2.78	83358.880	2.0	119982.260	1.0
272.9712	28.01	-2.56	67880.160	2.5	104503.220	2.5
272.9719	24.01	-2.87	32855.090	2.5	69478.060	2.5
272.9742	25.01	-3.90	31661.720	3.0	68284.380	3.0
272.9754	24.00	-4.85	24282.340	4.0	60904.840	3.0
272.9771	23.02	-1.95	61777.150	1.5	98399.420	.5
272.9816	23.00	-4.02	553.020	4.5	37174.680	3.5
272.9830	41.00	-.89	2742.356	0.0	39374.674	0.0
272.9832	28.00	-3.11	13521.352	2.0	50142.800	3.0
272.9920	78.00	-.68	6533.259	0.0	43164.369	0.0
272.9949	10.01	-4.90	280262.330	3.5	316882.210	2.5
273.0022	30.02	-1.52	221343.600	2.0	257962.500	2.0
273.0080	39.00	-1.59	0.000	0.0	36628.963	0.0
273.0200	42.01	.53	26375.009	0.0	63002.362	0.0
273.0244	25.01	-3.43	30679.240	5.0	67295.160	4.0
273.0270	90.01	-.33	8549.697	0.0	45176.111	0.0
273.0299	24.00	-4.20	20517.400	2.0	57132.590	1.0
273.0306	24.01	-2.69	36101.820	3.5	72716.910	4.5
273.0320	41.01	.53	12985.861	0.0	49611.605	0.0
273.0330	44.00	-1.19	2016.438	0.0	38642.047	0.0
273.0444	10.01	-4.71	280268.960	2.5	316882.210	2.5
273.0468	26.00	-2.17	18378.187	2.0	54991.110	1.0
273.0475	28.01	-4.86	99418.610	3.5	136031.430	2.5
273.0500	83.00	-.10	21535.558	0.0	58158.887	0.0
273.0508	22.01	-3.11	16515.790	.5	53128.170	1.5
273.0523	28.01	-4.72	99040.750	1.5	135652.930	1.5
273.0526	18.01	-4.59	135601.650	.5	172213.800	1.5
273.0551	23.00	-4.10	0.000	1.5	36611.810	2.5
273.0610	76.00	-.23	5081.424	0.0	41703.278	0.0
273.0627	6.01	-1.20	177793.540	1.5	214404.330	.5
273.0646	28.01	-3.36	78955.450	1.5	115565.980	2.5
273.0656	10.01	-3.21	281171.380	2.5	317781.790	1.5
273.0683	10.01	-3.22	281171.380	2.5	317781.420	2.5
273.0700	3.01	-.58	561276.000	0.0	597896.647	0.0
273.0710	77.00	-.55	11775.998	0.0	48396.511	0.0
273.0710	72.00	-1.38	0.000	0.0	36620.513	0.0
273.0730	73.01	1.20	27907.502	0.0	64527.746	0.0
273.0733	26.01	-.65	8680.470	1.5	45289.840	1.5
273.0776	9.03	-3.67	423606.400	1.0	460215.200	0.0
273.0827	9.02	-.96	430374.750	2.5	466982.860	2.5
273.0830	75.00	-.77	14518.354	0.0	51137.257	0.0
273.0850	72.00	-.71	4516.821	0.0	41135.456	0.0
273.0860	25.01	-.69	70342.580	3.0	106950.240	3.0
273.0902	24.02	-4.06	57422.100	4.0	94029.200	3.0
273.0910	26.02	-3.80	79860.420	5.0	116467.410	4.0
273.0914	25.02	-4.26	139857.840	4.5	176464.780	3.5
273.0930	44.00	-.10	9114.300	0.0	45731.863	0.0
273.0956	23.02	-3.38	61777.150	1.5	98383.530	2.5
273.0982	26.00	-1.11	8154.713	1.0	44760.739	1.0
273.0991	26.02	-4.02	105929.160	3.0	142535.070	2.0
273.1007	22.01	-5.40	16515.790	.5	53121.480	.5
273.1044	24.01	-3.03	68760.000	3.5	105365.200	4.5
273.1062	24.00	-3.26	24299.890	2.0	60904.840	3.0
273.1109	27.00	-.40	16470.600	1.5	53074.920	1.5
273.1110	16.02	-.09	170067.310	2.0	206671.610	2.0
273.1139	22.00	-4.79	8602.340	2.0	45206.270	3.0
273.1178	9.02	-2.12	430374.750	2.5	466978.150	1.5
273.1183	25.01	-1.83	68417.340	2.0	105020.670	1.0
273.1248	23.00	-4.98	323.420	3.5	36925.880	3.5
273.1253	26.01	-.05	61527.590	6.5	98129.980	6.5
273.1275	10.01	-3.06	292546.700	.5	329148.800	1.5
273.1277	26.00	-1.55	21038.987	2.0	57641.060	3.0
273.1360	76.01	1.23	15486.244	0.0	52098.042	0.0
273.1362	10.00	-4.22	134459.287	1.0	171060.220	2.0
273.1365	24.00	-3.55	24303.940	3.0	60904.840	3.0
273.1370	63.00	-.71	0.000	0.0	36611.664	0.0
273.1390	7.01	-1.05	190120.240	1.0	226720.800	2.0
273.1535	10.00	-3.74	134459.287	1.0	171057.900	1.0
273.1554	7.01	-4.37	190120.240	1.0	226718.600	1.0
273.1560	75.01	1.03	18712.545	0.0	55321.662	0.0
273.1582	28.01	-2.92	93390.060	2.5	129988.050	2.5
273.1635	18.01	-3.13	172816.210	.5	209413.480	1.5
273.1639	28.01	-2.09	71770.830	2.5	108368.050	2.5
273.1684	25.01	-.23	49465.130	3.0	86061.750	3.0
273.1708	30.02	-4.84	257678.700	2.0	294275.000	3.0
273.1730	27.02	-3.18	70934.100	2.5	107530.100	3.5
273.1759	26.02	-4.71	182408.910	3.0	219004.530	4.0
273.1777	27.00	-3.46	16778.160	2.5	53373.530	3.5
273.1804	23.01	-4.15	2808.760	3.0	39403.770	4.0
273.1836	28.01	-4.79	76727.360	5.5	113321.950	4.5
273.1849	26.00	-4.20	19788.248	4.0	56382.664	5.0
273.1898	24.00	-1.40	7593.160	2.0	44186.920	2.0
273.1961	29.01	-1.97	85388.770	2.0	121981.680	2.0
273.1994	12.00	-1.57	21850.405	0.0	58442.874	1.0
273.2005	26.01	-.95	26352.800	4.5	62945.120	3.5
273.2040	58.01	-.66	4194.191	0.0	40796.876	0.0
273.2179	9.02	-4.29	427731.850	2.5	464321.840	2.5
273.2187	28.01	-3.77	99040.750	1.5	135630.630	2.5
273.2210	75.00	-.04	14921.641	0.0	51522.049	0.0
273.2226	28.01	-4.57	98969.440	5.5	135558.800	4.5
273.2258	25.00	-.36	30419.610	2.5	67008.540	2.5
273.2285	24.01	-2.98	38396.360	.5	74984.930	1.5
273.2299	28.01	-4.80	97273.830	2.5	133862.210	1.5
273.2306	24.00	-4.68	24282.340	4.0	60870.630	4.0
273.2307	22.00	-1.40	11776.806	4.0	48365.090	3.0
273.2336	18.01	-.78	172335.520	2.5	208923.410	2.5
273.2423	24.00	-1.80	24940.610	2.0	61527.340	1.0
273.2432	24.01	-1.78	33521.230	3.5	70107.830	4.5
273.2448	26.01	-3.69	1872.600	4.5	38458.990	4.5
273.2490	26.02	-3.11	182418.700	4.0	219004.530	4.0
273.2501	18.01	-1.89	172335.520	2.5	208921.200	1.5
273.2520	9.02	-1.37	416185.420	2.5	452770.850	3.5
273.2555	24.00	-1.02	24093.160	2.0	60678.120	1.0
273.2596	10.00	-3.54	134459.287	1.0	171043.690	2.0
273.2605	15.01	-1.85	103340.010	2.0	139924.300	2.0
273.2607	24.00	-1.37	23933.900	4.0	60518.160	3.0
273.2607	24.00	-1.26	23933.900	4.0	60518.160	3.0
273.2610	63.00	-.81	0.000	0.0	36595.050	0.0
273.2648	23.00	-7.52	2424.890	4.5	39008.600	5.5
273.2670	77.00	-.42	12098.628	0.0	48692.875	0.0
273.2680	72.01	-.15	17260.709	0.0	53854.822	0.0
273.2682	24.00	-2.78	20517.400	2.0	57100.660	2.0
273.2713	28.01	-3.90	99040.750	1.5	135623.590	1.5
273.2714	25.00	-1.39	30425.710	1.5	67008.540	2.5
273.2720	40.01	-.14	725.918	0.0	37319.495	0.0
273.2720	70.01	-.19	31375.775	0.0	67969.352	0.0
273.2770	26.00	-1.09	23783.617	5.0	60365.700	6.0
273.2800	76.00	-.23	5081.424	0.0	41673.930	0.0
273.2809	25.00	-3.55	17637.150	.5	54218.710	1.5
273.2820	90.01	-1.00	0.000	0.0	36592.238	0.0
273.2824	10.02	-2.87	398986.640	2.0	435568.000	3.0
273.2845	27.00	-1.50	15774.040	1.5	52355.120	.5
273.2880	42.01	.59	12824.546	0.0	49415.981	0.0
273.2891	23.00	-2.84	0.000	1.5	36580.460	1.5
273.2907	9.02	-1.52	416168.300	1.5	452748.540	2.5
273.2920	73.00	-1.71	0.000	0.0	36590.899	0.0
273.2924	23.01	-2.38	339.210	4.0	36919.230	3.0
273.2931	26.01	-.13	50187.950	3.5	86767.870	2.5
273.2945	24.00	-2.06	20520.920	3.0	57100.660	2.0
273.2984	24.00	-2.21	20517.400	2.0	57096.620	1.0
273.2988	28.01	-2.21	99040.750	1.5	135619.910	1.5
273.3019	27.01	-1.87	25861.460	0.0	62440.200	1.0
273.3040	75.01	1.43	17099.394	0.0	53688.687	0.0
273.3125	28.01	-2.40	99040.750	1.5	135618.080	2.5
273.3159	25.01	-1.41	44745.460	2.0	81322.330	1.0
273.3167	25.00	-1.68	23818.870	.5	60395.640	1.5
273.3180	74.00	-.59	9436.930	0.0	46024.348	0.0
273.3260	41.01	-.15	725.918	0.0	37312.265	0.0
273.3294	2.01	.00	390142.340	0.0	426728.232	0.0
273.3339	23.00	-4.55	323.420	3.5	36897.880	4.5
273.3340	73.01	.71	18470.572	0.0	55055.849	0.0
273.3368	26.00	-6.35	12560.933	3.0	49135.003	3.0
273.3369	8.01	-1.07	203942.210	.5	240516.280	1.5
273.3390	42.00	.19	11372.710	0.0	47957.317	0.0
273.3413	21.01	-4.14	2540.970	2.0	39114.440	1.0
273.3442	29.01	-4.81	110363.400	2.0	146936.480	2.0
273.3460	41.01	-.82	80.658	0.0	36664.329	0.0
273.3463	28.02	-1.71	82172.900	3.0	118745.700	3.0
273.3490	10.01	-4.36	291202.030	3.5	327774.480	4.5
273.3493	12.00	-1.70	21870.464	1.0	58442.874	1.0
273.3494	12.00	-1.39	21870.464	1.0	58442.853	2.0
273.3516	24.00	-.35	23512.000	1.0	60084.090	1.0
273.3525	26.01	-.37	66012.830	4.5	102584.810	5.5
273.3570	22.00	-5.05	8492.421	1.0	45063.800	2.0
273.3582	26.00	-.33	6928.266	5.0	43499.485	4.0
273.3590	44.00	-.34	9517.587	0.0	46099.518	0.0
273.3650	24.00	-4.78	20517.400	2.0	57087.700	2.0
273.3670	24.00	-4.56	23933.900	4.0	60503.940	4.0
273.3688	26.02	-3.11	84671.870	3.0	121241.670	4.0
273.3719	24.00	-1.62	25106.340	3.0	61675.720	2.0
273.3735	28.01	-4.42	98969.440	5.5	135538.610	5.5
273.3751	9.02	-1.28	390976.350	1.5	427545.310	1.5
273.3774	24.00	-1.88	20519.600	6.0	57088.250	5.0
273.3890	25.01	-.31	49882.150	4.0	86449.240	4.0
273.3906	23.01	-1.89	106.630	2.0	36673.510	2.0
273.3913	24.00	-4.04	20520.920	3.0	57087.700	2.0
273.3920	24.00	-4.35	24303.940	3.0	60870.630	4.0
273.3960	78.00	-.25	725.918	0.0	37302.898	0.0
273.3964	26.02	-3.94	146891.040	3.0	183457.150	4.0
273.3998	26.02	-3.76	146891.040	3.0	183456.690	3.0
273.4006	26.00	-1.74	7985.783	2.0	44551.325	3.0
273.4009	21.02	-.16	25536.700	.5	62102.200	.5
273.4053	18.01	-4.93	170530.310	3.5	207095.230	2.5
273.4076	30.02	-2.66	221343.600	2.0	257908.200	1.0
273.4079	24.00	-4.51	20523.690	4.0	57088.250	5.0
273.4080	70.01	-.90	32585.638	0.0	69161.013	0.0
273.4082	24.01	-2.04	30307.600	1.5	66872.120	.5
273.4090	25.02	-3.64	97239.860	6.5	133804.280	6.5
273.4098	24.00	-2.81	20523.940	5.0	57088.250	5.0
273.4161	25.00	-2.93	27281.850	.5	63845.320	1.5
273.4166	23.00	-4.63	137.380	2.5	36700.780	2.5
273.4169	25.00	-2.87	27201.540	2.5	63764.900	2.5
273.4175	28.01	-4.53	99559.330	2.5	136122.610	2.5
273.4187	9.02	-2.63	416185.420	2.5	452748.540	2.5
273.4250	28.01	-5.67	14995.570	2.5	51557.850	3.5
273.4269	26.00	-.39	17550.180	3.0	54112.203	2.0
273.4294	25.00	-.98	30419.610	2.5	66981.300	3.5
273.4310	75.00	-.67	14518.354	0.0	51090.652	0.0
273.4350	41.01	-.52	7420.492	0.0	43992.255	0.0
273.4420	90.01	-.69	4113.534	0.0	40684.361	0.0
273.4433	26.02	-3.88	182444.700	3.0	219004.530	4.0
273.4467	25.01	-1.09	49889.860	3.0	86449.240	4.0
273.4491	25.01	-2.51	68496.370	1.0	105055.430	2.0
273.4506	27.01	-.28	50381.600	3.0	86940.460	2.0
273.4518	28.01	-4.61	99418.610	3.5	135977.310	4.5
273.4539	26.00	-3.12	24118.815	4.0	60677.230	5.0
273.4551	28.01	-4.85	99040.750	1.5	135599.000	.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
273.4552	24.01	-1.80	38362.560	1.5	74920.800	.5
273.4558	7.01	-1.20	190120.240	1.0	226678.400	2.0
273.4617	26.00	-3.26	7728.058	3.0	44285.436	2.0
273.4653	26.01	-2.42	43620.980	1.5	80177.870	1.5
273.4689	7.01	-1.66	178273.380	0.0	214829.790	1.0
273.4750	22.01	-3.43	9118.150	4.5	45673.750	4.5
273.4773	26.02	-4.61	98661.880	1.0	135217.170	1.0
273.4799	26.01	-.61	50212.930	2.5	86767.870	2.5
273.4814	20.00	-5.12	0.000	0.0	36554.749	1.0
273.4850	39.01	-.10	24519.886	0.0	61084.963	0.0
273.4860	40.01	.26	241.973	0.0	36806.916	0.0
273.4914	30.02	-3.78	257491.100	0.0	294044.500	1.0
273.4985	25.00	-1.22	23549.200	2.5	60101.650	2.5
273.5022	18.01	-4.02	172213.800	1.5	208765.770	.5
273.5026	29.01	-4.99	72724.000	2.0	109275.900	3.0
273.5093	26.01	-.66	63273.030	2.5	99824.040	2.5
273.5147	8.02	-.72	400464.700	1.0	437015.000	1.0
273.5165	10.00	-4.56	134459.287	1.0	171009.340	1.0
273.5250	63.00	-.51	0.000	0.0	36559.729	0.0
273.5260	73.01	.59	9678.902	0.0	46238.498	0.0
273.5318	23.02	-2.34	49327.740	2.5	85875.740	3.5
273.5323	26.00	-2.90	12560.933	3.0	49108.876	4.0
273.5330	69.01	-1.93	0.000	0.0	36558.660	0.0
273.5390	23.01	-3.66	2687.010	2.0	39234.050	3.0
273.5395	24.01	-2.29	36101.820	3.5	72648.790	3.5
273.5454	27.00	-4.20	14399.280	.5	50945.470	.5
273.5476	26.00	-1.08	7376.762	4.0	43922.652	3.0
273.5608	26.00	-.42	17726.985	2.0	54271.110	1.0
273.5608	21.01	-.34	28161.030	3.0	64705.160	2.0
273.5611	22.00	-.07	7255.369	2.0	43799.455	2.0
273.5621	23.01	-2.16	18269.490	1.0	54813.450	0.0
273.5631	23.01	-2.15	16533.000	5.0	53076.820	6.0
273.5650	42.00	-.38	16696.107	0.0	53250.491	0.0
273.5669	25.01	-2.43	70342.580	3.0	106885.900	4.0
273.5678	26.01	-1.24	63948.840	4.5	100492.040	3.5
273.5712	26.01	-1.10	61587.240	5.5	98129.980	6.5
273.5720	44.00	.07	0.000	0.0	36553.448	0.0
273.5758	24.01	-.76	54444.190	3.5	90986.310	3.5
273.5787	10.01	-3.87	312810.670	4.5	349352.400	4.5
273.5823	10.02	-3.67	398986.640	2.0	435527.900	2.0
273.5830	90.01	-1.44	4032.876	0.0	40584.855	0.0
273.5861	10.01	-3.93	312811.650	4.5	349352.400	4.5
273.5880	42.00	-.80	11775.998	0.0	48327.309	0.0
273.5970	74.00	-.18	19115.832	0.0	55665.940	0.0
273.6003	28.01	-4.46	99340.550	3.5	135879.410	3.5
273.6110	23.01	-.85	36489.340	1.0	73026.760	2.0
273.6164	24.00	-2.94	24093.160	2.0	60629.870	2.0
273.6210	24.01	-4.14	33418.110	2.5	69954.200	2.5
273.6284	17.02	-3.57	205037.300	1.5	241572.400	1.5
273.6292	30.02	-2.28	221143.700	3.0	257678.700	2.0
273.6370	24.00	-2.86	23933.900	4.0	60467.850	5.0
273.6390	76.00	-1.00	5726.684	0.0	42271.182	0.0
273.6420	42.00	-.30	18228.600	0.0	54772.698	0.0
273.6423	24.01	-3.04	55023.300	2.5	91556.540	1.5
273.6444	26.02	-2.78	83646.980	1.0	120179.950	0.0
273.6461	24.00	-1.62	7593.160	2.0	44125.900	1.0
273.6483	26.01	-2.56	26932.740	.5	63465.190	1.5
273.6539	12.00	-2.87	21911.178	2.0	58442.874	1.0
273.6541	12.00	-1.87	21911.178	2.0	58442.853	2.0
273.6541	12.00	-.95	21911.178	2.0	58442.843	3.0
273.6623	23.01	-2.13	19132.690	2.0	55663.270	1.0
273.6626	26.02	-4.74	182392.550	2.0	218923.080	3.0
273.6659	25.01	-3.48	44521.520	4.0	81051.620	3.0
273.6683	22.00	-5.40	8436.618	0.0	44966.390	1.0
273.6690	23.01	-1.93	14556.090	4.0	51085.770	3.0
273.6727	24.01	-2.38	30864.610	2.5	67393.800	3.5
273.6760	45.00	-1.57	2581.041	0.0	39120.599	0.0
273.6883	15.03	-.90	303115.000	2.0	339642.100	1.0
273.6891	27.01	-5.22	11321.500	2.0	47848.500	1.0
273.6960	42.01	.46	15566.901	0.0	52103.789	0.0
273.6964	26.01	-.52	8680.470	1.5	45206.490	.5
273.6965	26.00	-2.25	7985.783	2.0	44511.795	2.0
273.6979	27.00	-3.31	14399.280	.5	50925.110	1.5
273.6982	28.01	-4.81	99418.610	3.5	135944.400	3.5
273.7003	19.02	-2.13	207421.900	2.5	243947.400	1.5
273.7020	25.01	-.22	49427.320	4.0	85952.600	3.0
273.7076	24.01	-1.53	31351.150	2.5	67875.680	3.5
273.7083	24.01	-3.16	38396.360	.5	74920.800	.5
273.7090	41.01	-.66	403.288	0.0	36938.440	0.0
273.7093	25.01	-1.87	68496.370	1.0	105020.670	1.0
273.7093	15.03	-1.63	303115.000	2.0	339639.300	2.0
273.7117	25.01	-.30	49465.130	3.0	85989.120	2.0
273.7157	25.01	-4.87	31760.930	2.0	68284.380	3.0
273.7214	24.01	-1.27	30864.610	2.5	67387.300	2.5
273.7215	24.00	-1.34	24093.160	2.0	60615.840	3.0
273.7220	9.02	-1.41	390210.430	3.5	426733.040	2.5
273.7221	22.01	-7.17	907.960	1.5	37430.550	.5
273.7258	17.02	-3.37	205037.300	1.5	241559.400	.5
273.7289	24.01	-2.11	68843.510	3.5	105365.200	4.5
273.7311	26.00	-.59	888.132	1.0	37409.530	1.0
273.7334	28.01	-2.49	100010.170	.5	136531.260	1.5
273.7342	29.01	-1.81	71493.680	2.0	108014.660	3.0
273.7378	15.03	-3.17	303115.000	2.0	339635.500	3.0
273.7387	25.02	-4.05	139944.400	3.5	176464.780	3.5
273.7419	22.01	-1.76	31300.920	4.5	67820.870	4.5
273.7430	90.01	-.54	8307.725	0.0	44838.339	0.0
273.7445	24.00	-3.38	24299.890	2.0	60819.500	3.0
273.7464	24.01	-.74	31351.150	2.5	67870.500	1.5
273.7494	10.01	-2.52	312833.450	5.5	349352.400	4.5
273.7578	28.00	-2.02	13521.352	2.0	50039.180	2.0
273.7594	26.01	-4.83	31483.200	3.5	68000.820	4.5
273.7627	26.01	-1.88	25805.320	4.5	62322.500	3.5
273.7636	26.00	-1.01	19390.165	6.0	55907.220	5.0
273.7648	24.01	-1.12	31351.150	2.5	67868.050	2.5
273.7648	25.00	-2.58	27248.000	1.5	63764.900	2.5
273.7710	10.01	-5.00	291801.880	1.5	328317.950	2.5
273.7748	24.00	-4.43	24303.940	3.0	60819.500	3.0
273.7756	28.01	-1.63	98822.550	6.5	135338.010	5.5
273.7767	24.01	-1.45	30864.610	2.5	67379.920	1.5
273.7830	72.00	-.81	5484.711	0.0	42009.988	0.0
273.7853	26.02	-4.15	182408.910	3.0	218923.080	3.0
273.7880	42.01	.63	35247.336	0.0	71771.946	0.0
273.7964	24.00	-4.52	20520.920	3.0	57033.600	4.0
273.7991	28.01	-4.97	99132.780	5.5	135645.100	5.5
273.7993	9.02	-.27	384493.060	1.5	421005.360	.5
273.8000	74.00	-.32	16292.819	0.0	52815.828	0.0
273.8016	9.03	-.76	519539.000	1.0	556051.000	1.0
273.8038	25.02	-4.50	138362.800	3.5	174874.500	4.5
273.8133	26.02	-4.83	182412.650	4.0	218923.080	3.0
273.8135	25.03	-4.00	152700.500	4.0	189210.900	4.0
273.8170	71.01	-.65	27100.927	0.0	63621.669	0.0
273.8172	24.00	-3.07	20523.690	4.0	57033.600	4.0
273.8191	24.00	-2.55	20523.940	5.0	57033.600	4.0
273.8195	30.02	-3.37	257678.700	2.0	294188.300	2.0
273.8214	26.00	-3.32	8154.713	1.0	44664.061	2.0
273.8248	26.02	-4.79	77075.300	1.0	113584.200	2.0
273.8294	25.01	-.01	67295.160	4.0	103803.440	3.0
273.8308	27.01	-2.58	9812.700	4.0	46320.800	4.0
273.8320	75.00	-.40	15647.559	0.0	52166.300	0.0
273.8330	76.00	-.35	13308.491	0.0	49827.099	0.0
273.8330	90.01	-1.24	4113.534	0.0	40632.142	0.0
273.8388	28.01	-2.46	100010.170	.5	136517.200	.5
273.8405	30.02	-3.65	257796.000	5.0	294302.800	4.0
273.8460	76.00	-.13	15324.929	0.0	51841.803	0.0
273.8480	78.00	-.51	10001.532	0.0	46518.140	0.0
273.8548	28.01	-3.18	76402.030	2.5	112906.930	1.5
273.8548	25.00	-1.09	25281.040	2.5	61785.940	3.5
273.8587	26.02	-4.06	182418.700	4.0	218923.080	3.0
273.8600	29.02	-3.95	86133.000	.5	122637.200	.5
273.8600	42.01	.33	27504.214	0.0	64019.222	0.0
273.8658	24.01	-2.51	32844.920	1.5	69348.360	1.5
273.8670	28.01	-2.64	94067.140	1.5	130570.420	.5
273.8676	30.02	-4.06	260418.100	2.0	296921.300	3.0
273.8677	26.01	-1.20	62065.570	3.5	98568.750	3.5
273.8695	26.02	-4.85	77102.430	2.0	113605.370	3.0
273.8697	22.01	-3.94	16625.250	1.5	53128.170	1.5
273.8759	25.01	-2.66	53017.160	1.0	89519.250	2.0
273.8760	72.01	-.06	4839.451	0.0	41352.325	0.0
273.8766	23.01	-4.87	19161.270	0.0	55663.270	1.0
273.8832	23.02	-2.47	49805.290	3.5	86306.400	4.5
273.8856	25.00	.16	30354.210	3.5	66855.000	4.5
273.8877	25.00	-1.52	25285.430	4.5	61785.940	3.5
273.8886	28.01	-2.03	55299.650	4.5	91800.050	4.5
273.8931	26.01	-.86	72130.440	4.5	108630.240	5.5
273.8953	26.00	-4.45	11976.239	4.0	48475.740	3.0
273.8958	23.00	-3.99	323.420	3.5	36822.860	3.5
273.8960	25.01	-2.16	30795.750	4.0	67295.160	4.0
273.8961	27.01	-1.88	11651.310	2.0	48150.700	3.0
273.8991	27.01	-1.57	27902.500	4.0	64401.500	4.0
273.9031	23.01	-1.73	32299.240	1.0	68797.700	2.0
273.9051	25.02	-3.19	94397.200	3.5	130895.390	4.5
273.9051	25.00	-3.53	25287.740	3.5	61785.940	3.5
273.9083	9.02	-1.08	391047.540	.5	427545.310	1.5
273.9115	10.01	-3.87	292651.320	1.5	329148.670	2.5
273.9135	23.01	-2.32	19166.190	1.0	55663.270	1.0
273.9157	25.02	-3.46	97239.860	6.5	133736.640	5.5
273.9171	8.02	-1.20	400518.400	0.0	437015.000	1.0
273.9199	22.01	-5.69	16625.250	1.5	53121.480	.5
273.9220	44.00	.07	8469.040	0.0	44975.783	0.0
273.9234	10.01	-3.08	281332.550	.5	317828.320	.5
273.9240	56.00	-2.51	0.000	0.0	36506.476	0.0
273.9260	73.01	.37	5565.369	0.0	42071.579	0.0
273.9269	15.03	.69	256751.300	2.0	293246.600	3.0
273.9313	24.00	-3.47	24286.540	1.0	60781.250	2.0
273.9320	77.00	-.58	13873.093	0.0	50378.503	0.0
273.9386	24.00	-.11	23933.900	4.0	60427.630	5.0
273.9390	92.01	-.94	241.973	0.0	36746.450	0.0
273.9403	28.02	-2.33	97841.400	2.0	134334.900	3.0
273.9421	24.01	-2.98	32855.090	2.5	69348.360	1.5
273.9423	7.01	-4.25	174212.030	2.0	210705.260	2.0
273.9426	26.01	-1.70	36126.410	1.5	72619.610	2.5
273.9469	28.01	-3.64	51045.460	4.5	87538.090	3.5
273.9499	26.01	-2.74	46967.470	2.5	83459.700	1.5
273.9508	26.01	-1.10	26170.190	5.5	62662.300	5.5
273.9534	10.01	-2.39	281171.380	2.5	317663.130	1.5
273.9542	26.01	.34	7955.240	3.5	44446.890	3.5
273.9552	24.01	-.60	38362.560	1.5	74854.080	.5
273.9559	25.01	-3.37	44745.460	2.0	81236.890	1.0
273.9622	22.01	-2.85	31113.610	3.5	67604.200	3.5
273.9644	28.01	-2.96	99154.810	4.5	135645.100	5.5
273.9702	23.02	-3.19	63315.050	3.5	99804.570	2.5
273.9703	13.01	-2.97	110087.500	2.0	146577.000	1.0
273.9716	23.01	-1.37	0.000	0.0	36489.340	1.0
273.9729	24.00	-3.69	7810.820	1.0	44299.980	2.0
273.9764	24.01	-1.19	33619.130	4.5	70107.830	4.5
273.9768	29.01	-1.91	73595.640	1.0	110084.290	1.0
273.9843	25.00	-1.05	23296.670	3.5	59784.310	3.5
273.9846	15.03	-.06	256751.300	2.0	293238.900	2.0
273.9849	24.01	-.92	32355.940	3.5	68843.510	3.5
273.9856	25.01	-2.24	49465.130	3.0	85952.600	3.0
273.9988	28.01	-3.41	99154.810	4.5	135640.530	4.5
273.9998	26.01	-1.63	62083.170	4.5	98568.750	3.5
274.0000	77.00	-1.31	7017.204	0.0	43513.554	0.0
274.0015	24.01	-1.54	33418.110	2.5	69903.460	3.5
274.0090	24.01	-1.16	12148.000	2.5	48632.360	3.5
274.0156	23.02	-2.29	61578.740	.5	98062.220	1.5
274.0160	25.00	-2.14	30354.210	3.5	66837.640	2.5
274.0180	41.01	.41	9759.560	0.0	46253.513	0.0
274.0180	77.00	-1.47	5726.684	0.0	42220.637	0.0
274.0190	9.02	-1.45	390976.350	1.5	427459.370	.5
274.0221	25.01	-2.04	32836.400	1.0	69319.010	0.0
274.0238	25.01	-1.11	49820.160	2.0	86302.550	3.0
274.0252	15.03	-1.23	256751.300	2.0	293233.500	1.0
274.0272	10.01	-2.51	281720.280	1.5	318202.210	1.5
274.0284	26.02	-4.52	77102.430	2.0	113584.200	2.0
274.0315	24.00	-3.62	24299.890	2.0	60781.250	2.0
274.0318	10.01	-4.67	281720.280	1.5	318201.600	.5
274.0320	76.00	.26	14760.326	0.0	51252.415	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
274.0322	18.01	-2.98	172213.800	1.5	208695.070	1.5
274.0334	9.02	-1.37	390077.800	2.5	426558.910	1.5
274.0350	40.01	-.62	3710.246	0.0	40201.935	0.0
274.0376	25.02	-3.11	84610.530	.5	121091.080	1.5
274.0430	32.00	.44	16292.819	0.0	52783.443	0.0
274.0432	24.01	-3.07	30864.610	2.5	67344.420	2.5
274.0439	25.01	-4.47	34910.430	4.0	71390.140	3.0
274.0456	27.00	-1.50	7442.410	3.5	43921.890	2.5
274.0510	40.01	-.39	4194.191	0.0	40683.750	0.0
274.0522	9.02	-1.47	390080.300	1.5	426558.910	1.5
274.0538	30.02	-4.92	257566.100	1.0	294044.500	1.0
274.0539	26.02	-4.07	182444.700	3.0	218923.080	3.0
274.0545	25.00	-.75	25265.740	5.5	61744.040	5.5
274.0560	23.03	-.91	217990.700	1.0	254468.600	2.0
274.0586	23.00	-2.49	0.000	1.5	36477.750	.5
274.0619	24.00	-4.57	24303.940	3.0	60781.250	2.0
274.0620	63.01	-1.27	1613.150	0.0	38101.244	0.0
274.0700	73.01	.65	17018.737	0.0	53505.766	0.0
274.0750	76.00	-.15	11292.053	0.0	47778.416	0.0
274.0784	25.01	.10	44745.460	2.0	81220.580	3.0
274.0790	74.01	1.23	23632.653	0.0	60118.484	0.0
274.0805	24.01	-1.59	55081.700	1.5	91556.540	1.5
274.0824	28.01	-4.02	99154.810	4.5	135629.400	3.5
274.0836	23.00	-4.54	137.380	2.5	36611.810	2.5
274.0836	9.02	-2.98	391257.420	2.5	427731.850	2.5
274.0870	22.00	-5.53	8492.421	1.0	44966.390	1.0
274.0898	28.01	-3.30	99154.810	4.5	135628.410	4.5
274.0904	28.01	-4.47	99132.780	5.5	135606.300	6.5
274.0909	18.01	-2.24	159393.310	1.5	195866.760	1.5
274.0964	25.01	-1.49	52653.270	4.0	89126.000	3.0
274.0973	23.03	-.49	255445.500	3.0	291918.100	2.0
274.1006	23.01	-.40	36673.510	2.0	73145.680	3.0
274.1006	28.01	-3.73	99040.750	1.5	135512.920	2.5
274.1051	16.02	-.93	170067.310	2.0	206538.870	1.0
274.1060	26.01	-3.04	50076.100	1.5	86547.550	2.5
274.1061	24.00	-.89	24056.110	5.0	60527.550	6.0
274.1069	18.01	-1.81	159393.310	1.5	195864.640	2.5
274.1097	26.00	-1.53	24335.764	2.0	60806.720	3.0
274.1150	41.00	.01	8711.012	0.0	45192.051	0.0
274.1170	73.00	-.26	9194.957	0.0	45675.730	0.0
274.1186	28.01	-2.92	100078.780	1.5	136548.550	2.5
274.1190	3.00	-2.02	0.000	0.0	36480.507	0.0
274.1200	24.01	-1.70	30864.610	2.5	67334.200	3.5
274.1244	30.02	-3.09	257566.100	1.0	294035.100	2.0
274.1316	26.01	-.99	50076.100	1.5	86544.140	1.5
274.1320	25.01	-1.70	49291.310	3.0	85759.300	4.0
274.1320	42.01	.24	26616.982	0.0	63095.759	0.0
274.1323	26.00	-1.72	24338.766	3.0	60806.720	3.0
274.1328	26.02	-4.09	182392.550	2.0	218860.430	2.0
274.1335	28.01	-4.20	99154.810	4.5	135622.600	3.5
274.1380	76.00	-.45	11292.053	0.0	47770.031	0.0
274.1386	26.01	-.32	27620.390	2.5	64087.500	2.5
274.1483	28.01	-4.94	98969.440	5.5	135435.260	4.5
274.1538	15.01	-2.71	103340.010	2.0	139805.100	3.0
274.1550	40.01	-.62	1290.520	0.0	37766.236	0.0
274.1554	25.02	-4.33	97271.760	5.5	133736.640	5.5
274.1563	24.00	-3.56	20520.920	3.0	56985.670	3.0
274.1573	23.01	-2.52	208.890	3.0	36673.510	2.0
274.1578	26.00	-2.66	12968.552	2.0	49433.108	2.0
274.1620	42.01	.34	24358.571	0.0	60833.356	0.0
274.1672	26.01	-1.39	64286.440	3.5	100749.750	2.5
274.1688	26.00	-2.14	20641.110	4.0	57104.207	5.0
274.1710	70.01	-.48	33311.556	0.0	69785.144	0.0
274.1750	45.00	-.47	9114.300	0.0	45587.356	0.0
274.1770	27.01	-3.06	24886.500	2.0	61348.500	1.0
274.1772	24.00	-3.38	20523.690	4.0	56985.670	3.0
274.1811	22.00	-5.53	8602.340	2.0	45063.800	2.0
274.1813	28.01	-4.69	97273.830	2.5	133735.260	2.5
274.1826	23.00	-5.37	0.000	1.5	36461.260	2.5
274.1834	28.01	-4.77	97273.830	2.5	133734.980	3.5
274.1846	10.03	-3.99	488215.000	.5	524676.000	1.5
274.1909	23.01	-2.14	32299.240	1.0	68759.400	1.0
274.1919	10.01	-2.13	281720.280	1.5	318180.310	2.5
274.1937	26.02	-2.69	83237.860	3.0	119697.640	2.0
274.1950	28.01	-3.06	93528.440	3.5	129988.050	2.5
274.1952	10.01	-2.57	281720.280	1.5	318179.870	1.5
274.1957	18.01	-2.81	172213.800	1.5	208673.320	2.5
274.1970	75.00	-.25	22019.503	0.0	58489.632	0.0
274.2016	26.00	-2.53	704.003	2.0	37162.729	3.0
274.2021	24.01	-.76	12032.720	1.5	48491.390	2.5
274.2025	25.00	-2.81	25285.430	4.5	61744.040	5.5
274.2092	24.01	-.44	38396.360	.5	74854.080	.5
274.2109	30.02	-2.92	260418.100	2.0	296875.600	2.0
274.2142	27.01	-3.19	27902.500	4.0	64359.560	3.0
274.2149	26.01	-2.08	25787.600	1.5	62244.570	1.5
274.2152	26.02	-3.31	82410.940	2.0	118867.870	1.0
274.2166	24.00	-1.41	24200.230	6.0	60656.970	7.0
274.2185	23.01	-2.30	16421.510	4.0	52877.990	5.0
274.2203	26.02	-3.45	84369.920	2.0	120826.170	2.0
274.2255	26.00	-1.34	7728.058	3.0	44183.607	2.0
274.2309	25.02	-3.14	97000.800	4.5	133455.640	5.5
274.2312	23.03	-.75	255463.300	2.0	291918.100	2.0
274.2324	26.00	-.21	17550.180	3.0	54004.820	3.0
274.2334	27.02	-4.86	136129.100	2.5	172583.600	3.5
274.2334	27.02	-4.86	136129.100	2.5	172583.600	3.5
274.2354	28.01	-2.55	66571.340	2.5	103025.580	2.5
274.2406	26.00	-.48	704.003	2.0	37157.546	2.0
274.2425	23.01	-1.76	36.050	1.0	36489.340	1.0
274.2439	26.01	-.84	63465.190	1.5	99918.300	1.5
274.2462	25.01	-.06	70497.440	4.0	106950.240	3.0
274.2484	28.01	-3.24	99040.750	1.5	135493.260	1.5
274.2486	28.01	-3.63	100078.780	1.5	136531.260	1.5
274.2515	18.01	-2.58	172816.210	.5	209268.310	1.5
274.2530	39.00	-1.09	0.000	0.0	36462.682	0.0
274.2559	26.02	-3.85	182408.910	3.0	218860.430	2.0
274.2560	40.01	.09	0.000	0.0	36462.283	0.0
274.2568	28.01	-2.90	99154.810	4.5	135606.200	5.5
274.2592	26.01	-.84	64040.960	3.5	100492.040	3.5
274.2660	23.01	-1.43	3162.800	5.0	39612.970	5.0
274.2690	76.00	-.63	11292.053	0.0	47752.608	0.0
274.2726	23.03	-1.49	227712.500	4.0	264161.800	5.0
274.2730	10.01	-3.21	281332.550	.5	317781.790	1.5
274.2732	25.01	-3.43	70517.720	3.0	106966.940	2.0
274.2765	25.00	-.26	25265.740	5.5	61714.520	4.5
274.2789	21.01	-1.91	27917.690	1.0	64366.150	2.0
274.2796	23.01	-3.39	18269.490	1.0	54717.850	1.0
274.2832	28.01	-.23	57080.550	3.5	93528.440	3.5
274.2836	24.00	-1.00	24056.110	5.0	60503.940	4.0
274.2942	25.00	-1.29	25281.040	2.5	61727.460	2.5
274.2963	23.01	-2.27	18269.490	1.0	54715.630	2.0
274.2974	10.01	-4.44	302247.780	3.5	338693.780	4.5
274.2982	10.01	-4.88	302247.780	3.5	338693.680	3.5
274.2984	28.01	-2.43	66579.710	1.5	103025.580	2.5
274.2984	24.00	-2.94	7927.470	2.0	44373.340	3.0
274.3025	10.02	-3.13	399082.570	1.0	435527.900	2.0
274.3049	30.02	-3.29	257678.700	2.0	294123.700	3.0
274.3070	42.00	.12	11050.080	0.0	47505.584	0.0
274.3070	90.01	-1.15	0.000	0.0	36455.504	0.0
274.3106	24.01	-2.25	36272.660	4.5	72716.910	4.5
274.3176	25.01	-.30	49291.310	3.0	85734.620	3.0
274.3178	25.01	-1.17	52653.270	4.0	89096.560	4.0
274.3194	23.00	-2.20	137.380	2.5	36580.460	1.5
274.3194	26.01	-.03	8846.760	.5	45289.840	1.5
274.3220	26.01	-3.77	38164.240	2.5	74606.970	2.5
274.3242	25.01	-4.42	51553.060	5.0	87995.500	5.0
274.3246	26.01	-.73	42401.330	1.5	78843.720	.5
274.3248	26.02	-4.51	182480.720	2.0	218923.080	3.0
274.3280	63.00	-.58	0.000	0.0	36452.714	0.0
274.3350	10.01	-1.81	281720.280	1.5	318161.290	2.5
274.3383	25.00	-3.31	23549.200	2.5	59989.770	1.5
274.3404	18.02	-3.17	231341.800	2.0	267782.100	3.0
274.3420	74.00	.07	13227.833	0.0	49678.686	0.0
274.3426	23.00	-4.53	323.420	3.5	36763.410	2.5
274.3447	25.00	-.27	25287.740	3.5	61727.460	2.5
274.3482	24.00	-2.27	8095.210	3.0	44534.460	4.0
274.3532	10.00	-4.89	135888.717	1.0	172327.300	0.0
274.3553	23.03	-.63	220343.500	1.0	256781.800	1.0
274.3562	26.00	-.59	7728.058	3.0	44166.240	3.0
274.3565	9.02	-2.03	390120.770	.5	426558.910	1.5
274.3590	73.00	-1.00	1935.780	0.0	38384.375	0.0
274.3637	24.01	-.49	11962.000	.5	48399.190	1.5
274.3640	72.00	-.36	5565.369	0.0	42013.299	0.0
274.3688	25.02	-3.42	94850.660	1.5	131287.180	.5
274.3695	27.01	-2.19	48150.700	3.0	84587.120	4.0
274.3710	42.00	-.29	10888.765	0.0	47335.766	0.0
274.3751	24.00	-3.28	21856.940	3.0	58292.620	4.0
274.3761	23.01	-1.87	2968.220	4.0	39403.770	4.0
274.3782	25.00	-.57	23296.670	3.5	59731.940	4.5
274.3832	30.02	-3.61	260418.100	2.0	296852.700	1.0
274.3870	75.00	-.37	16212.162	0.0	52657.037	0.0
274.3886	18.02	-1.16	188714.050	3.0	225147.930	2.0
274.3940	44.00	-.53	6452.602	0.0	42896.548	0.0
274.3955	24.01	.18	33521.230	3.5	69954.200	2.5
274.3989	25.01	-3.63	70517.720	3.0	106950.240	3.0
274.4000	77.00	-.29	10485.478	0.0	46928.627	0.0
274.4024	25.00	-.33	30411.740	.5	66843.790	1.5
274.4039	23.02	-4.63	105282.650	2.5	141714.500	2.5
274.4069	26.00	-.96	978.076	0.0	37409.530	1.0
274.4104	26.01	-1.45	62662.300	5.5	99093.290	5.5
274.4119	10.01	-4.97	302247.780	3.5	338678.570	3.5
274.4151	26.00	-1.65	24118.815	4.0	60549.180	5.0
274.4183	25.00	-2.08	25281.040	2.5	61710.980	3.5
274.4228	24.01	-3.45	68992.550	4.5	105421.900	5.5
274.4247	25.00	-2.17	25285.430	4.5	61714.520	4.5
274.4260	63.01	-1.61	0.000	0.0	36439.696	0.0
274.4263	26.01	-3.87	2430.080	3.5	38858.960	2.5
274.4266	25.00	-1.28	30354.210	3.5	66783.050	3.5
274.4340	74.00	.14	19680.435	0.0	56119.069	0.0
274.4421	25.00	-2.05	25287.740	3.5	61714.520	4.5
274.4426	26.02	-3.84	98661.880	1.0	135086.600	0.0
274.4450	44.00	-.02	8711.012	0.0	45148.185	0.0
274.4451	23.01	-4.43	16340.970	3.0	52767.360	3.0
274.4480	9.03	-.06	519890.000	2.0	556316.000	2.0
274.4514	25.00	-.17	25285.430	4.5	61710.980	3.5
274.4522	28.01	-4.01	99154.810	4.5	135580.250	4.5
274.4529	26.00	-1.71	7985.783	2.0	44411.137	1.0
274.4534	23.01	-2.50	2808.760	3.0	39234.050	3.0
274.4555	24.00	-4.59	24093.160	2.0	60518.160	3.0
274.4555	24.00	-3.18	24093.160	2.0	60518.160	3.0
274.4600	24.01	-.99	54678.950	4.5	91103.360	4.5
274.4617	25.00	-2.06	30419.610	2.5	66843.790	1.5
274.4632	23.01	-2.40	18293.870	2.0	54717.850	1.0
274.4688	25.00	-1.38	25287.740	3.5	61710.980	3.5
274.4690	26.02	-4.98	115110.920	4.0	151534.130	3.0
274.4747	25.00	-1.79	23719.520	1.5	60141.980	.5
274.4800	23.01	-1.94	18293.870	2.0	54715.630	2.0
274.4826	22.00	-1.22	8436.618	0.0	44858.030	1.0
274.4872	28.01	-2.84	99040.750	1.5	135461.550	2.5
274.4882	28.01	-4.11	56371.410	3.5	92792.080	3.5
274.4889	26.01	-1.56	27620.390	2.5	64040.960	3.5
274.4902	25.01	-.00	49882.150	4.0	86302.550	3.0
274.4960	41.01	-.02	10566.135	0.0	46996.538	0.0
274.4965	24.01	-.22	30307.600	1.5	66727.160	2.5
274.5000	28.02	-1.91	97996.300	3.0	134415.400	4.0
274.5000	33.00	.32	18067.285	0.0	54497.157	0.0
274.5010	18.01	-.54	172829.580	1.5	209248.550	2.5
274.5014	26.00	-1.83	24338.766	3.0	60757.680	4.0
274.5077	25.00	-.82	30425.710	1.5	66843.790	1.5
274.5081	25.00	-.96	30419.610	2.5	66837.640	2.5
274.5090	42.00	-.40	10646.793	0.0	47075.471	0.0
274.5097	27.00	-.17	16778.160	2.5	53195.980	2.5
274.5097	25.01	-1.91	68496.370	1.0	104914.180	0.0
274.5136	29.02	-4.00	85446.400	1.5	121863.700	1.5
274.5148	26.01	-1.58	62151.610	2.5	98568.750	3.5
274.5197	23.00	-3.86	0.000	1.5	36416.490	1.5
274.5201	25.02	-3.05	94707.200	4.5	131123.640	5.5
274.5238	26.00	-3.45	24338.766	3.0	60754.710	4.0
274.5254	26.02	-4.68	182444.700	3.0	218860.430	2.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
274.5271	29.01	-1.25	71919.930	3.0	108335.430	2.0
274.5296	26.01	-.35	63273.030	2.5	99688.200	3.5
274.5300	41.01	-.47	4113.534	0.0	40539.426	0.0
274.5326	27.00	-6.65	4690.180	2.5	41104.960	2.5
274.5349	22.00	-6.10	0.000	2.0	36414.470	3.0
274.5365	25.02	-3.83	140280.800	4.5	176695.060	4.5
274.5380	42.00	-.23	16696.107	0.0	53120.937	0.0
274.5433	24.01	-.53	33694.470	5.5	70107.830	4.5
274.5483	25.01	-.09	49889.860	3.0	86302.550	3.0
274.5494	25.02	-3.83	140557.460	4.5	176970.010	5.5
274.5541	25.00	-.25	30425.710	1.5	66837.640	2.5
274.5548	9.02	-2.14	391047.540	.5	427459.370	.5
274.5555	24.00	-1.60	24056.110	5.0	60467.850	5.0
274.5610	63.00	-.82	0.000	0.0	36421.779	0.0
274.5641	29.01	-4.85	71531.500	3.0	107942.100	4.0
274.5644	26.01	-2.27	62158.190	4.5	98568.750	3.5
274.5664	13.01	-2.50	110087.500	2.0	146497.800	3.0
274.5730	41.01	.24	9436.930	0.0	45857.117	0.0
274.5737	25.01	-1.25	52653.270	4.0	89062.600	5.0
274.5790	10.01	-4.62	280473.580	1.5	316882.210	2.5
274.5814	25.03	-4.06	212966.500	5.0	249374.800	6.0
274.5820	23.00	-3.64	0.000	1.5	36408.230	1.5
274.5841	15.01	-3.99	105550.450	2.0	141958.400	1.0
274.5842	10.01	-4.14	302192.920	4.5	338600.860	5.5
274.5860	40.01	-.02	725.918	0.0	37144.381	0.0
274.5884	23.01	-2.13	13490.840	2.0	49898.220	2.0
274.5937	26.02	-1.61	105906.230	2.0	142312.900	3.0
274.5952	24.00	-3.77	24277.060	0.0	60683.530	1.0
274.5962	26.00	-2.96	11976.239	4.0	48382.585	5.0
274.6001	28.01	-3.48	99132.780	5.5	135538.610	5.5
274.6020	27.00	-2.47	7442.410	3.5	43847.980	3.5
274.6092	26.01	-2.81	50142.930	2.5	86547.550	2.5
274.6098	26.01	-1.99	64087.500	2.5	100492.040	3.5
274.6104	26.02	-4.28	143320.850	6.0	179725.310	6.0
274.6122	25.01	-2.02	70546.020	4.0	106950.240	3.0
274.6134	24.01	-4.30	32355.940	3.5	68760.000	3.5
274.6134	9.02	-3.75	444957.110	1.5	481361.170	1.5
274.6139	28.01	-4.05	99154.810	4.5	135558.800	4.5
274.6151	26.01	-.67	42439.880	.5	78843.720	.5
274.6210	24.01	-.19	29952.080	.5	66355.130	1.5
274.6210	24.01	-.24	38315.000	2.5	74718.050	1.5
274.6213	24.01	-1.48	55023.300	2.5	91426.310	2.5
274.6238	10.00	-4.49	135888.717	1.0	172291.400	1.0
274.6238	10.00	-4.94	135888.717	1.0	172291.400	2.0
274.6275	25.01	-1.81	44745.460	2.0	81147.650	2.0
274.6300	42.01	.69	15244.271	0.0	51656.899	0.0
274.6349	26.01	-.36	50142.930	2.5	86544.140	1.5
274.6394	25.02	-3.86	140294.440	3.5	176695.060	4.5
274.6395	23.03	-1.67	227712.500	4.0	264113.100	4.0
274.6421	24.00	-3.85	24093.160	2.0	60493.420	3.0
274.6483	26.01	.19	8680.470	1.5	45079.910	2.5
274.6488	6.01	-.78	131724.370	.5	168123.740	1.5
274.6520	26.01	-.57	36252.960	2.5	72651.910	3.5
274.6576	26.01	-1.71	36126.410	1.5	72524.620	1.5
274.6585	10.00	-4.24	135888.717	1.0	172286.800	2.0
274.6619	25.01	-2.71	32818.100	0.0	69215.730	1.0
274.6620	72.00	-1.11	5565.369	0.0	41973.755	0.0
274.6668	24.00	-3.76	24286.540	1.0	60683.530	1.0
274.6680	73.00	-.16	5565.369	0.0	41972.959	0.0
274.6685	22.01	.43	31207.440	2.5	67604.200	3.5
274.6712	23.03	-1.05	220343.500	1.0	256739.900	0.0
274.6740	74.00	-.08	15324.929	0.0	51731.724	0.0
274.6741	28.00	-1.92	204.786	3.0	36600.805	2.0
274.6749	25.01	-2.46	31514.350	4.0	67910.260	4.0
274.6826	9.02	-3.44	431432.270	1.5	467827.160	1.5
274.6830	73.01	1.16	15647.559	0.0	52053.161	0.0
274.6836	28.01	-2.90	99559.330	2.5	135954.090	3.5
274.6869	23.02	-3.74	105320.180	1.5	141714.500	2.5
274.6910	41.00	-.24	1129.205	0.0	37533.747	0.0
274.6979	26.01	.06	8391.920	2.5	44784.780	2.5
274.6980	26.00	-1.99	6928.266	5.0	43321.120	6.0
274.6996	26.00	-2.12	7985.783	2.0	44378.420	1.0
274.7044	28.01	-4.27	93390.060	2.5	129782.070	3.5
274.7067	28.02	-2.64	97841.400	2.0	134233.100	2.0
274.7076	24.00	-3.69	24286.540	1.0	60678.120	1.0
274.7134	23.00	-8.67	2220.130	2.5	38610.940	3.5
274.7139	26.01	-.36	42334.860	2.5	78725.610	1.5
274.7160	90.01	-.70	0.000	0.0	36401.229	0.0
274.7276	6.01	-.53	131735.520	1.5	168124.450	2.5
274.7290	63.01	-1.64	1613.150	0.0	38012.656	0.0
274.7302	25.01	-4.26	52383.720	4.0	88772.300	5.0
274.7312	25.01	-.54	70497.440	4.0	106885.900	4.0
274.7313	26.00	-1.91	23783.617	5.0	60172.060	4.0
274.7328	25.01	-.10	49820.160	2.0	86208.400	1.0
274.7330	6.01	-1.48	131735.520	1.5	168123.740	1.5
274.7345	25.01	-1.33	51553.060	5.0	87941.080	4.0
274.7354	28.01	-4.15	72375.420	1.5	108763.320	.5
274.7435	26.01	-1.39	62945.120	3.5	99331.950	4.5
274.7436	26.01	-.52	72261.830	5.5	108648.640	6.5
274.7440	75.00	-.52	11534.025	0.0	47931.544	0.0
274.7456	28.01	-4.57	101144.630	3.5	137531.180	4.5
274.7457	8.01	-1.30	203942.210	.5	240328.750	.5
274.7459	23.01	-3.36	13511.710	1.0	49898.220	2.0
274.7460	25.01	-3.91	55696.500	4.0	92083.000	3.0
274.7463	23.01	-.30	19112.930	4.0	55499.380	5.0
274.7503	10.01	-4.11	302307.750	2.5	338693.680	3.5
274.7505	9.02	-3.43	444957.110	1.5	481343.010	.5
274.7510	77.00	-.37	19438.462	0.0	55835.054	0.0
274.7521	26.00	-4.32	11976.239	4.0	48361.920	4.0
274.7543	23.00	-4.12	553.020	4.5	36938.420	5.5
274.7549	24.00	-4.48	24056.110	5.0	60441.420	6.0
274.7556	26.00	-.84	17726.985	2.0	54112.203	2.0
274.7569	25.01	-3.42	43528.300	5.0	79913.350	4.0
274.7580	70.01	-.48	32182.351	0.0	68578.016	0.0
274.7610	78.00	-.20	13389.148	0.0	49784.415	0.0
274.7630	15.01	-2.73	65252.250	1.0	101636.490	1.0
274.7663	28.01	-1.79	99154.810	4.5	135538.610	5.5
274.7668	26.02	-2.69	105929.160	3.0	142312.900	3.0
274.7676	24.00	-4.61	24299.890	2.0	60683.530	1.0
274.7678	25.00	-3.15	30354.210	3.5	66737.820	3.5
274.7746	23.01	-4.30	106.630	2.0	36489.340	1.0
274.7768	25.01	-1.74	49291.310	3.0	85673.720	4.0
274.7777	25.00	-4.43	27201.540	2.5	63583.840	1.5
274.7782	24.01	-1.48	33521.230	3.5	69903.460	3.5
274.7783	28.01	-1.84	55417.830	3.5	91800.050	4.5
274.7790	25.00	-1.39	23719.520	1.5	60101.650	2.5
274.7807	28.01	-4.70	98276.700	4.5	134658.600	4.5
274.7830	63.00	-.52	0.000	0.0	36392.353	0.0
274.7850	25.01	-1.02	43131.400	2.0	79512.730	3.0
274.7850	73.00	-.72	11130.738	0.0	47522.826	0.0
274.7850	90.01	-.90	6936.547	0.0	43328.635	0.0
274.7876	9.02	-.17	376814.020	2.5	413195.000	2.5
274.7895	25.02	-3.23	94906.450	.5	131287.180	.5
274.7910	76.00	.20	14760.326	0.0	51151.620	0.0
274.7959	25.01	-.19	44899.820	3.0	81279.710	4.0
274.7972	26.02	-3.49	182480.720	2.0	218860.430	2.0
274.7974	10.00	-4.98	135888.717	1.0	172266.400	1.0
274.7975	26.01	-2.08	62065.570	3.5	98445.240	4.5
274.8001	25.01	-2.74	32836.400	1.0	69215.730	1.0
274.8030	70.01	-.97	34360.104	0.0	70749.809	0.0
274.8035	28.01	-4.52	101144.630	3.5	137523.510	3.5
274.8084	24.00	-2.57	24299.890	2.0	60678.120	1.0
274.8150	23.00	-3.84	323.420	3.5	36700.780	2.5
274.8219	25.01	-3.37	43536.900	4.0	79913.350	4.0
274.8243	24.01	-2.51	36272.660	4.5	72648.790	3.5
274.8245	24.00	-5.48	7810.820	1.0	44186.920	2.0
274.8260	79.00	-.36	9114.300	0.0	45500.959	0.0
274.8319	24.00	-5.36	7750.780	0.0	44125.900	1.0
274.8358	28.01	-4.82	101144.630	3.5	137519.230	2.5
274.8434	27.01	-2.73	24886.500	2.0	61260.100	2.0
274.8480	26.02	-3.72	82494.880	1.0	118867.870	1.0
274.8490	23.00	-4.05	553.020	4.5	36925.880	3.5
274.8490	42.00	-.48	11372.710	0.0	47756.324	0.0
274.8506	24.01	-1.02	68992.550	4.5	105365.200	4.5
274.8516	24.00	-3.55	7927.470	2.0	44299.980	2.0
274.8591	24.00	-1.16	24056.110	5.0	60427.630	5.0
274.8644	10.01	-3.20	302307.750	2.5	338678.570	3.5
274.8660	70.01	.11	31375.775	0.0	67757.139	0.0
274.8698	27.02	-4.57	91715.100	2.5	128085.200	2.5
274.8705	25.01	-.19	49820.160	2.0	86190.180	2.0
274.8717	25.02	-4.29	138605.800	6.5	174975.650	5.5
274.8780	73.00	0.00	3871.561	0.0	40251.337	0.0
274.8789	30.02	-4.18	260584.100	1.0	296953.000	2.0
274.8814	28.01	-2.58	98969.440	5.5	135338.010	5.5
274.8824	28.01	-3.01	79823.030	3.5	116191.470	2.5
274.8826	26.01	-4.43	72261.830	5.5	108630.240	5.5
274.8850	41.00	-.19	1532.493	0.0	37911.342	0.0
274.8850	74.00	-.30	4758.794	0.0	41137.643	0.0
274.8860	76.00	.17	15324.929	0.0	51703.646	0.0
274.8959	26.01	-3.43	36252.960	2.5	72619.610	2.5
274.8973	24.01	-.27	12032.720	1.5	48399.190	1.5
274.8975	26.01	-6.43	25805.320	4.5	62171.760	3.5
274.9024	30.02	-3.46	257678.700	2.0	294044.500	1.0
274.9038	22.00	-.75	8492.421	1.0	44858.030	1.0
274.9129	7.01	-1.70	190120.240	1.0	226484.640	2.0
274.9133	28.01	-1.71	100309.290	5.5	136673.640	4.5
274.9156	22.00	-6.77	8602.340	2.0	44966.390	1.0
274.9159	26.01	-2.01	25787.600	1.5	62151.610	2.5
274.9179	26.01	-.28	8680.470	1.5	45044.210	1.5
274.9180	76.00	-.03	12663.231	0.0	49037.714	0.0
274.9181	25.02	-2.99	84610.530	.5	120974.250	.5
274.9202	25.00	-.09	30419.610	2.5	66783.050	3.5
274.9212	15.01	-3.41	65273.180	2.0	101636.490	1.0
274.9243	27.02	-3.29	70934.100	2.5	107297.000	1.5
274.9306	26.01	-1.39	62083.170	4.5	98445.240	4.5
274.9318	26.01	.35	8391.920	2.5	44753.820	3.5
274.9320	77.00	-.45	17663.997	0.0	54036.627	0.0
274.9330	23.01	-2.36	18353.890	3.0	54715.630	2.0
274.9336	23.01	-1.41	20980.920	2.0	57342.590	2.0
274.9482	26.01	-.56	8846.760	.5	45206.490	.5
274.9486	23.01	.04	36919.230	3.0	73278.920	4.0
274.9492	26.01	-2.04	50187.950	3.5	86547.550	2.5
274.9530	90.01	-.90	4032.876	0.0	40402.728	0.0
274.9533	23.01	-2.53	16340.970	3.0	52700.030	2.0
274.9549	26.01	-.48	63465.190	1.5	99824.040	2.5
274.9557	26.01	-.64	63559.560	.5	99918.300	1.5
274.9569	25.01	-1.63	70527.320	5.0	106885.900	4.0
274.9683	26.00	-2.58	8154.713	1.0	44511.795	2.0
274.9697	25.01	-1.50	32858.840	2.0	69215.730	1.0
274.9734	30.02	-2.70	257678.700	2.0	294035.100	2.0
274.9799	23.01	-3.58	13542.680	3.0	49898.220	2.0
274.9803	24.01	-.29	38362.560	1.5	74718.050	1.5
274.9830	73.00	.57	9598.245	0.0	45964.129	0.0
274.9837	9.02	-3.08	445006.130	2.5	481361.170	1.5
274.9893	27.01	-2.19	24886.500	2.0	61240.800	3.0
274.9971	25.01	-2.56	53597.130	2.0	89950.400	3.0
274.9973	23.01	-.09	36673.510	2.0	73026.760	2.0
274.9984	10.01	-4.27	302247.780	3.5	338600.880	4.5
275.0001	26.01	-1.45	25805.320	4.5	62156.190	4.5
275.0014	25.03	-1.91	152858.200	3.0	189210.900	4.0
275.0069	26.02	-4.19	142855.590	4.0	179207.570	5.0
275.0122	25.01	-.66	31514.350	4.0	67865.630	4.0
275.0124	27.00	-4.41	4690.180	2.5	41041.430	3.5
275.0141	26.00	-.57	415.932	3.0	36766.950	3.0
275.0154	28.01	-4.29	100609.010	2.5	136959.860	2.5
275.0163	9.02	-1.61	390080.300	1.5	426431.030	.5
275.0196	17.02	-1.74	209042.100	.5	245392.400	1.5
275.0220	64.01	-.07	3387.616	0.0	39748.344	0.0
275.0410	73.01	.62	11775.998	0.0	48134.214	0.0
275.0446	19.02	-1.89	201165.000	3.5	237512.000	2.5
275.0472	28.01	-2.18	68156.570	1.5	104503.220	2.5
275.0480	70.01	.67	21293.585	0.0	57650.875	0.0
275.0533	23.01	-3.58	16421.510	4.0	52767.360	3.0
275.0533	26.01	-4.55	23317.600	2.5	59663.450	1.5
275.0550	24.00	-1.89	24282.340	4.0	60627.960	4.0
275.0598	23.01	-3.33	16533.000	5.0	52877.990	5.0
275.0602	21.01	-2.22	28021.210	2.0	64366.150	2.0
275.0607	23.00	-3.93	553.020	4.5	36897.880	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
275.0615	25.00	-1.82	27201.540	2.5	63546.300	3.5
275.0626	24.01	-.89	55081.700	1.5	91426.310	2.5
275.0693	26.00	-1.09	17927.378	1.0	54271.110	1.0
275.0719	24.01	-.19	12148.000	2.5	48491.390	2.5
275.0723	24.00	-3.76	24286.540	1.0	60629.870	2.0
275.0816	24.01	-2.78	30307.600	1.5	66649.710	1.5
275.0841	28.01	-4.75	99040.750	1.5	135382.530	1.5
275.0858	28.01	-4.25	100332.090	4.5	136673.640	4.5
275.0872	26.00	-.43	17550.180	3.0	53891.540	3.0
275.0890	58.01	-.01	5565.369	0.0	41917.241	0.0
275.0905	26.01	-2.39	46967.470	2.5	83308.400	2.5
275.0911	26.01	-1.89	25981.650	3.5	62322.500	3.5
275.0925	22.00	-5.81	0.000	2.0	36340.670	2.0
275.0963	28.01	-4.16	97273.830	2.5	133613.990	1.5
275.0984	25.01	-2.46	70546.020	4.0	106885.900	4.0
275.0989	26.01	-3.44	50142.930	2.5	86482.750	3.5
275.1024	23.01	-2.05	32420.040	0.0	68759.400	1.0
275.1060	24.01	-1.86	31531.620	1.5	67870.500	1.5
275.1069	26.02	-3.29	83358.880	2.0	119697.640	2.0
275.1071	26.02	-2.89	82382.870	3.0	118721.600	2.0
275.1079	26.02	-3.85	142855.590	4.0	179194.220	4.0
275.1081	28.02	-2.84	97996.300	3.0	134334.900	3.0
275.1086	25.02	-1.90	143345.070	3.5	179683.610	4.5
275.1122	26.01	-.91	25787.600	1.5	62125.660	1.5
275.1138	28.01	-4.22	98276.700	4.5	134614.550	5.5
275.1150	76.00	-.21	12663.231	0.0	49011.667	0.0
275.1160	25.02	-4.79	195415.200	4.5	231752.760	5.5
275.1209	26.02	-3.55	84671.870	3.0	121008.780	3.0
275.1215	9.02	-4.25	431432.270	1.5	467769.110	.5
275.1241	17.03	-.51	215389.300	1.0	251725.800	1.0
275.1246	24.01	-1.68	31531.620	1.5	67868.050	2.5
275.1286	29.02	-3.03	89045.900	3.5	125381.800	2.5
275.1290	25.00	-2.33	27248.000	1.5	63583.840	1.5
275.1333	26.02	-3.00	83646.980	1.0	119982.260	1.0
275.1346	30.02	-1.49	221343.600	2.0	257678.700	2.0
275.1383	26.01	-2.68	50212.930	2.5	86547.550	2.5
275.1421	25.02	-3.61	94397.200	3.5	130731.310	3.5
275.1436	26.01	-2.49	38164.240	2.5	74498.150	1.5
275.1450	70.01	-.33	30085.255	0.0	66429.728	0.0
275.1468	24.00	-4.42	24282.340	4.0	60615.840	3.0
275.1470	42.00	.31	11775.998	0.0	48120.207	0.0
275.1529	23.03	-.18	255463.300	2.0	291796.000	1.0
275.1583	25.01	-1.56	49427.320	4.0	85759.300	4.0
275.1589	24.00	-5.49	7927.470	2.0	44259.360	3.0
275.1613	25.01	-1.77	31514.350	4.0	67845.930	5.0
275.1641	26.01	-1.66	50212.930	2.5	86544.140	1.5
275.1664	27.01	-3.17	10708.100	3.0	47039.000	3.0
275.1672	25.03	-4.65	130969.500	3.0	167300.300	3.0
275.1688	10.01	-4.09	281332.550	.5	317663.130	1.5
275.1729	22.01	.57	31490.820	3.5	67820.870	4.5
275.1734	24.00	-3.79	24299.890	2.0	60629.870	2.0
275.1744	9.02	-.95	376814.020	2.5	413143.860	3.5
275.1797	20.02	-.23	346732.190	1.0	383061.330	2.0
275.1800	26.00	-2.94	12968.552	2.0	49297.660	1.0
275.1810	72.01	.05	8307.725	0.0	44647.443	0.0
275.1855	24.01	-.31	12303.980	3.5	48632.360	3.5
275.1862	24.01	-1.59	31531.620	1.5	67859.910	.5
275.1898	28.01	-4.15	100609.010	2.5	136936.820	3.5
275.1901	22.00	-5.97	7255.369	2.0	43583.140	3.0
275.1936	24.00	-1.30	24200.230	6.0	60527.550	6.0
275.1946	26.02	-4.78	84369.920	2.0	120697.100	1.0
275.1961	25.01	-1.52	43131.400	2.0	79458.380	2.0
275.1992	10.01	-4.44	277325.600	1.5	313652.170	1.5
275.2041	24.00	-3.93	24303.940	3.0	60629.870	2.0
275.2047	25.02	-4.26	139944.400	3.5	176270.250	2.5
275.2064	27.00	-1.40	16778.160	2.5	53103.780	3.5
275.2071	27.00	-1.74	16470.600	1.5	52796.130	2.5
275.2101	26.01	-1.62	50157.610	4.5	86482.750	3.5
275.2165	26.01	-.53	64425.460	2.5	100749.750	2.5
275.2166	26.01	-.52	42401.330	1.5	78725.610	1.5
275.2170	63.01	-1.54	1613.150	0.0	37948.115	0.0
275.2170	90.01	-.62	1451.835	0.0	37786.800	0.0
275.2186	24.00	-2.47	24303.940	3.0	60627.960	4.0
275.2196	23.00	-3.71	137.380	2.5	36461.260	2.5
275.2196	23.00	-3.90	137.380	2.5	36461.260	3.5
275.2208	25.01	-1.95	55759.270	3.0	92083.000	3.0
275.2210	40.01	-.09	241.973	0.0	36576.410	0.0
275.2255	25.00	-1.60	23818.870	.5	60141.980	.5
275.2270	27.01	-2.68	27469.200	5.0	63792.100	4.0
275.2289	28.01	-3.45	79823.030	3.5	116145.690	3.5
275.2300	73.00	-.07	10566.135	0.0	46899.384	0.0
275.2317	25.00	-2.26	27201.540	2.5	63523.820	2.5
275.2362	24.01	-.81	38396.360	.5	74718.050	1.5
275.2433	25.01	-1.56	44899.820	3.0	81220.580	3.0
275.2439	26.01	-3.06	48039.230	2.5	84359.900	1.5
275.2448	8.02	-2.12	290956.620	1.0	327277.180	2.0
275.2484	28.01	-2.87	99559.330	2.5	135879.410	3.5
275.2490	73.01	.29	2581.041	0.0	38911.782	0.0
275.2587	25.01	-4.17	35004.430	3.0	71323.150	2.0
275.2604	25.03	-4.13	212665.300	4.0	248983.800	5.0
275.2626	25.00	-1.62	30419.610	2.5	66737.820	3.5
275.2663	28.01	-2.82	76402.030	2.5	112719.750	3.5
275.2753	23.01	-4.20	16340.970	3.0	52657.510	4.0
275.2780	80.00	-.92	37425.089	0.0	73752.002	0.0
275.2783	24.01	-1.04	32854.460	4.5	69170.600	5.5
275.2797	24.00	-3.89	24299.890	2.0	60615.840	3.0
275.2799	9.02	-1.45	376879.070	3.5	413195.000	2.5
275.2841	28.01	-3.33	101247.370	2.5	137562.740	3.5
275.2850	28.01	-4.48	77736.790	4.5	114052.040	3.5
275.2850	75.00	-.79	11534.025	0.0	47860.014	0.0
275.2863	24.00	-5.01	7810.820	1.0	44125.900	1.0
275.2873	26.02	-3.56	114339.950	4.0	150654.900	3.0
275.2920	22.01	.17	32767.020	3.5	69081.350	4.5
275.2965	23.01	-2.72	14461.730	3.0	50775.470	2.0
275.3030	26.01	-.60	50076.100	1.5	86388.980	.5
275.3050	75.00	-.30	14518.354	0.0	50841.704	0.0
275.3059	30.02	-3.70	257962.500	2.0	294275.000	3.0
275.3104	24.00	-3.19	24303.940	3.0	60615.840	3.0
275.3140	41.01	.82	15324.929	0.0	51647.092	0.0
275.3176	24.00	-3.78	21856.940	3.0	58167.890	4.0
275.3180	69.01	-1.58	161.315	0.0	36482.950	0.0
275.3185	27.01	-.34	50035.900	3.0	86346.730	3.0
275.3188	25.01	-.21	48333.060	5.0	84643.860	6.0
275.3198	26.02	-3.48	82410.940	2.0	118721.600	2.0
275.3220	26.02	-4.14	182852.050	7.0	219162.420	6.0
275.3229	9.02	-2.04	390120.770	.5	426431.030	.5
275.3279	26.00	-1.04	19788.248	4.0	56097.850	3.0
275.3284	27.00	-3.22	13795.520	2.5	50105.050	1.5
275.3286	28.01	-2.02	57080.550	3.5	93390.060	2.5
275.3286	26.01	.50	26352.800	4.5	62662.300	5.5
275.3333	25.01	-4.24	44745.460	2.0	81054.350	2.0
275.3408	23.01	-3.97	12545.150	4.0	48853.040	5.0
275.3409	23.01	.29	19191.500	6.0	55499.380	5.0
275.3409	10.01	-4.71	277344.290	2.5	313652.170	1.5
275.3415	27.01	-5.14	27484.300	3.0	63792.100	4.0
275.3449	24.01	-2.48	54678.950	4.5	90986.310	3.5
275.3453	25.01	-.64	49427.320	4.0	85734.620	3.0
275.3540	25.01	-3.14	44745.460	2.0	81051.620	3.0
275.3640	75.01	.78	19035.175	0.0	55350.743	0.0
275.3651	24.01	-1.02	29952.080	.5	66256.770	.5
275.3685	26.00	-2.10	8154.713	1.0	44458.960	0.0
275.3689	24.01	-1.04	31083.110	1.5	67387.300	2.5
275.3720	76.00	-.17	14760.326	0.0	51074.839	0.0
275.3728	25.00	-1.73	23296.670	3.5	59600.350	2.5
275.3742	23.01	-4.40	13594.730	2.0	49898.220	2.0
275.3742	23.01	-.26	36919.230	3.0	73222.720	4.0
275.3750	26.02	-1.87	82382.870	3.0	118686.250	4.0
275.3754	26.01	-1.11	36126.410	1.5	72429.740	.5
275.3758	22.01	-3.44	31300.920	4.5	67604.200	3.5
275.3781	26.02	-4.69	114351.920	3.0	150654.900	3.0
275.3810	27.02	-3.97	91715.100	2.5	128017.700	3.5
275.3819	28.01	-4.18	99132.780	5.5	135435.260	4.5
275.3856	25.00	-2.10	27281.850	.5	63583.840	1.5
275.3860	78.00	-.47	10082.190	0.0	46394.857	0.0
275.3880	49.00	-.77	0.000	0.0	36312.403	0.0
275.3921	24.00	-4.54	24897.550	4.0	61198.680	3.0
275.3983	25.01	-.17	49889.860	3.0	86190.180	2.0
275.4008	28.01	-4.49	99340.550	3.5	135640.530	4.5
275.4016	24.00	-3.51	21847.880	2.0	58147.760	3.0
275.4033	26.00	-.87	7985.783	2.0	44285.436	2.0
275.4039	23.00	-8.77	2311.370	3.5	38610.940	3.5
275.4126	22.00	-6.69	0.000	2.0	36298.430	1.0
275.4143	30.02	-4.90	260623.100	4.0	296921.300	3.0
275.4144	28.01	-4.59	56075.260	2.5	92373.450	2.5
275.4170	71.01	.39	12340.601	0.0	48649.180	0.0
275.4204	25.01	-1.36	31514.350	4.0	67811.750	3.0
275.4249	24.01	-.40	31083.110	1.5	67379.920	1.5
275.4253	27.00	-1.66	16778.160	2.5	53074.920	1.5
275.4290	42.00	-.80	10646.793	0.0	46953.790	0.0
275.4326	26.02	-3.41	147161.360	4.0	183457.150	4.0
275.4361	26.02	-4.87	147161.360	4.0	183456.690	3.0
275.4401	26.01	-3.03	50187.950	3.5	86482.750	3.5
275.4427	26.00	-1.51	7728.058	3.0	44022.518	4.0
275.4449	25.01	-1.59	49465.130	3.0	85759.300	4.0
275.4500	27.02	-3.99	136290.100	3.5	172583.600	3.5
275.4500	27.02	-3.99	136290.100	3.5	172583.600	3.5
275.4520	41.01	-.89	403.288	0.0	36707.254	0.0
275.4572	28.01	-1.77	98969.440	5.5	135261.990	4.5
275.4590	32.00	.05	1371.178	0.0	37674.221	0.0
275.4624	25.02	-1.78	172451.230	1.5	208743.100	2.5
275.4652	30.02	-3.92	260584.100	1.0	296875.600	2.0
275.4704	24.00	-4.48	21856.940	3.0	58147.760	3.0
275.4760	28.01	-4.37	99340.550	3.5	135630.630	2.5
275.4816	24.00	-.37	24833.860	3.0	61123.200	4.0
275.4819	15.03	-.71	303350.000	3.0	339639.300	2.0
275.4853	28.01	-3.66	99340.550	3.5	135629.400	3.5
275.4868	18.01	-4.61	134241.650	2.5	170530.310	3.5
275.4873	28.01	-2.59	101247.370	2.5	137535.960	3.5
275.4888	23.00	-4.31	323.420	3.5	36611.810	2.5
275.4901	26.01	-.12	42237.050	3.5	78525.270	2.5
275.4920	78.00	-.07	10082.190	0.0	46380.885	0.0
275.4920	74.00	-.23	13227.833	0.0	49526.528	0.0
275.4926	9.02	-2.17	391257.420	2.5	427545.310	1.5
275.4928	28.01	-2.89	99340.550	3.5	135628.410	4.5
275.4963	24.00	-4.28	24897.550	4.0	61184.950	5.0
275.4990	26.01	-1.62	62158.190	4.5	98445.240	4.5
275.5005	24.01	-2.60	31219.490	4.5	67506.340	5.5
275.5053	26.00	-3.16	19621.004	5.0	55907.220	5.0
275.5090	26.01	-1.29	42439.880	.5	78725.610	1.5
275.5095	25.02	-4.51	109780.400	2.5	146066.070	1.5
275.5108	15.03	-1.61	303350.000	3.0	339635.500	3.0
275.5140	23.02	-2.51	61777.150	1.5	98062.220	1.5
275.5142	25.02	-4.15	140179.740	2.5	176464.780	3.5
275.5148	10.01	-3.10	292033.150	2.5	328318.120	3.5
275.5151	23.02	-2.74	109854.870	3.5	146139.800	2.5
275.5161	10.01	-4.55	292033.150	2.5	328317.950	2.5
275.5179	26.00	-.86	19621.004	5.0	55905.560	4.0
275.5196	24.01	-.72	33619.130	4.5	69903.460	3.5
275.5201	28.01	-2.50	76402.030	2.5	112686.300	2.5
275.5208	28.01	-.73	72985.650	1.5	109269.830	1.5
275.5210	75.00	-.74	13711.778	0.0	50006.652	0.0
275.5230	24.00	-1.59	8307.570	4.0	44591.460	5.0
275.5234	26.01	-2.61	30388.550	4.5	66672.390	3.5
275.5248	26.01	-2.64	38214.500	1.5	74498.150	1.5
275.5260	74.00	-.28	17018.737	0.0	53312.952	0.0
275.5290	41.00	.36	8711.012	0.0	45004.832	0.0
275.5369	28.01	-3.19	99340.550	3.5	135622.600	3.5
275.5370	42.00	-.78	10888.765	0.0	47181.531	0.0
275.5390	24.00	-4.19	24093.160	2.0	60374.940	2.0
275.5485	25.01	-4.45	55759.270	3.0	92039.800	2.0
275.5491	28.01	-2.97	99154.810	4.5	135435.260	4.5
275.5518	30.02	-3.69	257908.200	1.0	294188.300	2.0
275.5520	10.01	-4.73	291495.040	2.5	327775.110	3.5
275.5522	24.01	-2.12	31168.780	3.5	67448.820	4.5
275.5533	27.01	-1.78	27585.300	1.0	63865.200	1.0
275.5574	28.01	-2.53	101247.370	2.5	137526.730	2.5
275.5590	76.00	-.11	12663.231	0.0	48953.100	0.0
275.5593	23.00	-3.98	137.380	2.5	36416.490	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
275.5640	41.00	-.59	1532.493	0.0	37821.703	0.0
275.5667	24.00	-2.94	8095.210	3.0	44373.340	3.0
275.5688	26.01	-2.77	25805.320	4.5	62083.170	4.5
275.5690	26.00	-.26	17726.985	2.0	54004.820	3.0
275.5713	28.01	-3.73	99340.550	3.5	135618.080	2.5
275.5715	30.02	-3.11	257491.100	0.0	293768.600	1.0
275.5733	26.01	.46	7955.240	3.5	44232.510	4.5
275.5775	25.00	-1.13	30354.210	3.5	66630.920	4.5
275.5813	24.01	-1.45	31117.590	2.5	67393.800	3.5
275.5818	28.01	-3.35	101247.370	2.5	137523.510	3.5
275.5843	25.00	-1.85	27248.000	1.5	63523.820	2.5
275.5859	25.02	-2.54	97000.800	4.5	133276.400	4.5
275.5940	74.00	-1.21	4758.794	0.0	41044.054	0.0
275.5957	26.00	-3.55	12968.552	2.0	49242.872	3.0
275.5971	26.00	-3.75	12968.552	2.0	49242.680	2.0
275.6116	25.01	-4.97	43528.300	5.0	79800.520	4.0
275.6144	28.01	-3.26	101247.370	2.5	137519.230	2.5
275.6149	25.02	.69	172547.850	2.5	208819.640	3.5
275.6159	26.01	-.94	36252.960	2.5	72524.620	1.5
275.6184	8.02	-2.14	290956.620	1.0	327227.940	1.0
275.6220	23.00	-2.98	137.380	2.5	36408.230	1.5
275.6268	26.00	-2.11	415.932	3.0	36686.159	4.0
275.6291	26.02	-3.64	147161.360	4.0	183431.280	5.0
275.6297	23.00	-4.26	553.020	4.5	36822.860	3.5
275.6299	26.01	-1.92	50212.930	2.5	86482.750	3.5
275.6307	24.01	-.44	31117.590	2.5	67387.300	2.5
275.6324	25.01	-.33	49465.130	3.0	85734.620	3.0
275.6329	26.00	-1.10	888.132	1.0	37157.546	2.0
275.6369	23.01	-1.86	19902.600	0.0	56171.490	1.0
275.6382	28.01	-4.33	101258.010	1.5	137526.730	2.5
275.6391	30.02	-3.25	260584.100	1.0	296852.700	1.0
275.6399	25.00	-1.69	23549.200	2.5	59817.700	2.5
275.6447	18.01	-3.81	172213.800	1.5	208481.660	.5
275.6450	30.00	-1.10	32101.693	0.0	68380.240	0.0
275.6466	24.00	-1.23	24200.230	6.0	60467.850	5.0
275.6505	26.01	-.99	26055.400	2.5	62322.500	3.5
275.6584	23.01	.17	37150.570	4.0	73416.630	5.0
275.6602	23.01	-3.42	2968.220	4.0	39234.050	3.0
275.6612	25.03	-4.46	212399.300	3.0	248665.000	4.0
275.6618	10.01	-.83	246415.040	1.5	282680.650	.5
275.6681	9.02	-.05	376879.070	3.5	413143.860	3.5
275.6690	69.01	-.40	8711.012	0.0	44986.400	0.0
275.6692	28.01	-3.00	94067.140	1.5	130331.780	1.5
275.6715	26.01	-3.74	43620.980	1.5	79885.320	2.5
275.6756	24.00	-.27	24897.550	4.0	61161.350	5.0
275.6770	25.01	-3.39	43536.900	4.0	79800.520	4.0
275.6804	25.02	-4.53	138312.700	4.5	174575.870	3.5
275.6815	9.02	-4.24	430012.480	1.5	466275.500	2.5
275.6840	17.02	-3.38	185838.000	1.5	222100.700	1.5
275.6868	24.01	-1.12	31117.590	2.5	67379.920	1.5
275.6885	26.02	-4.46	182830.760	6.0	219092.860	5.0
275.6891	16.02	.13	170648.940	3.0	206910.970	3.0
275.6910	72.01	.11	17583.339	0.0	53855.832	0.0
275.6924	28.01	-3.92	70358.940	4.5	106620.530	3.5
275.6926	26.01	-8.14	25787.600	1.5	62049.170	2.5
275.6945	24.01	-1.06	31083.110	1.5	67344.420	2.5
275.6980	20.02	-1.27	346896.260	2.0	383157.110	3.0
275.7026	26.01	-1.59	25805.320	4.5	62065.570	3.5
275.7066	28.01	-3.84	101754.800	2.5	138014.530	2.5
275.7085	25.02	-.51	173063.550	5.5	209323.030	6.5
275.7087	24.00	-5.01	7927.470	2.0	44186.920	2.0
275.7151	26.00	-3.80	12968.552	2.0	49227.160	3.0
275.7221	25.02	-4.01	140207.090	2.5	176464.780	3.5
275.7260	41.01	.48	12179.286	0.0	48447.175	0.0
275.7260	73.01	.69	12582.573	0.0	48850.462	0.0
275.7317	26.00	-2.82	8154.713	1.0	44411.137	1.0
275.7329	18.01	-1.75	172335.520	2.5	208591.780	1.5
275.7373	22.00	-.52	8602.340	2.0	44858.030	1.0
275.7382	16.01	-2.93	127976.210	1.5	164231.780	2.5
275.7383	15.01	-1.87	103668.740	3.0	139924.300	2.0
275.7418	26.00	-1.57	11976.239	4.0	48231.330	5.0
275.7530	28.01	-3.40	93528.440	3.5	129782.070	3.5
275.7559	25.02	.80	172682.640	3.5	208935.880	4.5
275.7581	24.00	-3.93	21810.840	1.0	58063.800	2.0
275.7608	25.02	-3.99	97023.800	3.5	133276.400	4.5
275.7619	22.01	-.06	32697.940	2.5	68950.390	3.5
275.7676	25.01	-4.07	53698.700	2.0	89950.400	3.0
275.7707	24.01	-1.18	69170.600	5.5	105421.900	5.5
275.7715	24.01	-.33	12148.000	2.5	48399.190	1.5
275.7761	28.01	-1.70	56075.260	2.5	92325.850	3.5
275.7810	76.00	.14	13308.491	0.0	49569.147	0.0
275.7835	18.01	-4.61	173347.830	1.5	209597.450	1.5
275.7882	8.03	-1.15	510569.700	1.5	546818.700	1.5
275.7896	24.01	-2.02	34631.140	4.5	70879.950	5.5
275.7917	25.01	-1.82	31661.720	3.0	67910.260	4.0
275.7918	23.02	-3.79	105282.650	2.5	141531.170	1.5
275.7918	18.03	.42	268151.380	2.5	304399.900	3.5
275.7971	25.01	-1.66	44899.820	3.0	81147.650	2.0
275.7984	27.01	-3.46	28111.900	2.0	64359.560	3.0
275.8000	75.00	-.08	14518.354	0.0	50776.512	0.0
275.8057	22.00	-.03	12118.394	4.0	48365.090	3.0
275.8080	25.01	.02	49427.320	4.0	85673.720	4.0
275.8091	26.01	-1.35	62322.500	3.5	98568.750	3.5
275.8114	26.00	-1.98	24118.815	4.0	60364.760	3.0
275.8121	28.01	-4.71	99154.810	4.5	135400.670	3.5
275.8217	24.00	-.14	27597.220	3.0	63841.810	4.0
275.8217	8.03	-.20	510574.100	2.5	546818.700	1.5
275.8230	24.00	-.49	24833.860	3.0	61078.280	3.0
275.8230	77.00	-1.12	5726.684	0.0	41981.819	0.0
275.8231	25.01	-2.78	30684.810	1.0	66929.220	2.0
275.8237	22.00	-4.72	170.132	3.0	36414.470	3.0
275.8275	15.01	-2.22	103166.370	1.0	139410.200	2.0
275.8310	72.00	-.57	10485.478	0.0	46739.561	0.0
275.8310	73.00	-.32	1935.780	0.0	38189.863	0.0
275.8367	22.01	-.24	32602.510	1.5	68845.140	2.5
275.8370	25.02	-3.78	143097.000	3.5	179339.590	2.5
275.8436	25.01	-.57	49517.580	5.0	85759.300	4.0
275.8446	25.01	-1.66	49820.160	2.0	86061.750	3.0
275.8476	24.00	-.63	24200.230	6.0	60441.420	6.0
275.8493	23.01	-3.20	3162.800	5.0	39403.770	4.0
275.8498	27.01	-4.63	25147.200	4.0	61388.100	4.0
275.8509	9.02	-2.75	430012.480	1.5	466253.240	1.5
275.8530	23.01	-5.50	13490.840	2.0	49731.320	2.0
275.8536	27.00	-1.52	15774.040	1.5	52014.450	1.5
275.8583	24.01	-1.18	32603.730	2.5	68843.510	3.5
275.8590	28.01	-3.22	99340.550	3.5	135580.250	4.5
275.8610	41.00	.02	2097.096	0.0	38347.236	0.0
275.8630	42.01	-.25	11695.340	0.0	47945.218	0.0
275.8696	30.02	-2.01	257796.000	5.0	294034.300	4.0
275.8710	75.00	-.56	16534.792	0.0	52783.618	0.0
275.8780	41.01	-.01	10727.450	0.0	46975.357	0.0
275.8780	72.00	-1.41	0.000	0.0	36247.907	0.0
275.8810	28.02	-2.92	97996.300	3.0	134233.100	2.0
275.8810	40.01	-.23	0.000	0.0	36247.513	0.0
275.8818	23.01	-1.00	19112.930	4.0	55349.630	3.0
275.8820	76.00	-.13	11292.053	0.0	47539.434	0.0
275.8842	25.02	.90	172855.020	4.5	209091.410	5.5
275.8858	26.01	-3.05	30764.460	3.5	67000.630	2.5
275.8868	28.01	-.19	58493.210	2.5	94729.250	2.5
275.8871	23.01	-2.42	16421.510	4.0	52657.510	4.0
275.8885	24.00	-4.62	24282.340	4.0	60518.160	3.0
275.8885	24.00	-4.86	24282.340	4.0	60518.160	3.0
275.8926	22.01	-.42	32532.380	.5	68767.660	1.5
275.8939	25.00	-1.21	23549.200	2.5	59784.310	3.5
275.8960	24.01	.47	38269.670	3.5	74504.510	4.5
275.8973	23.01	-.26	36673.510	2.0	72908.170	3.0
275.8980	24.01	-2.09	48491.390	2.5	84725.960	3.5
275.9000	70.01	-.87	37344.432	0.0	73589.448	0.0
275.9047	8.03	-.45	510569.700	1.5	546803.400	.5
275.9060	73.01	.01	6775.232	0.0	43019.460	0.0
275.9083	23.01	-1.53	17910.980	4.0	54144.200	4.0
275.9171	26.00	-1.96	24574.655	4.0	60806.720	3.0
275.9216	23.01	-2.07	12621.570	5.0	48853.040	5.0
275.9320	77.00	-.44	12098.628	0.0	48339.441	0.0
275.9322	10.00	-4.47	134459.287	1.0	170689.370	0.0
275.9331	26.01	-3.70	2430.080	3.5	38660.040	3.5
275.9379	24.01	.21	31219.490	4.5	67448.820	4.5
275.9426	25.01	.17	70657.180	5.0	106885.900	4.0
275.9480	40.00	-1.60	1209.863	0.0	37448.575	0.0
275.9519	24.01	-1.42	32355.940	3.5	68583.440	2.5
275.9526	24.00	-2.15	24200.230	6.0	60427.630	5.0
275.9549	30.02	-3.41	258075.700	3.0	294302.800	4.0
275.9565	24.00	-2.58	8307.570	4.0	44534.460	4.0
275.9570	24.01	-1.10	31117.590	2.5	67344.420	2.5
275.9578	26.02	-4.28	82494.880	1.0	118721.600	2.0
275.9580	42.00	-.75	11775.998	0.0	48013.396	0.0
275.9599	23.01	-.27	36919.230	3.0	73145.680	3.0
275.9617	25.02	1.00	173063.550	5.5	209289.760	6.5
275.9648	30.02	-2.83	257962.500	2.0	294188.300	2.0
275.9660	24.00	-.32	24897.550	4.0	61123.200	4.0
275.9708	24.01	-.44	31168.780	3.5	67393.800	3.5
275.9791	25.02	1.10	173306.450	6.5	209530.380	7.5
275.9808	26.00	-1.02	8154.713	1.0	44378.420	1.0
275.9829	24.00	-.05	27703.840	4.0	63927.270	5.0
275.9896	24.00	-4.88	24833.860	3.0	61056.410	4.0
275.9900	30.02	-2.53	221343.600	2.0	257566.100	1.0
275.9910	77.00	-.53	12098.628	0.0	48331.694	0.0
275.9925	26.00	-2.97	18378.187	2.0	54600.350	3.0
275.9948	25.01	-1.95	70745.080	3.0	106966.940	2.0
275.9952	28.01	-3.00	79923.880	4.5	116145.690	3.5
275.9954	22.00	-8.60	8602.340	2.0	44824.130	2.0
275.9968	24.00	-3.45	24282.340	4.0	60503.940	4.0
276.0006	24.01	-1.55	34631.140	4.5	70852.240	3.5
276.0030	74.00	-.41	15002.299	0.0	51233.789	0.0
276.0040	24.01	.03	33418.110	2.5	69638.770	1.5
276.0100	39.00	-.75	483.945	0.0	36714.516	0.0
276.0120	23.01	-.54	13511.710	1.0	49731.320	2.0
276.0121	25.00	-3.82	25265.740	5.5	61485.340	4.5
276.0203	24.01	-1.36	31168.780	3.5	67387.300	2.5
276.0211	23.00	-7.66	2311.370	3.5	38529.780	4.5
276.0222	24.00	-4.17	24299.890	2.0	60518.160	3.0
276.0222	24.00	-4.00	24299.890	2.0	60518.160	3.0
276.0223	28.01	-2.00	99340.550	3.5	135558.800	4.5
276.0306	25.01	-.84	43696.190	3.0	79913.350	4.0
276.0323	23.01	-4.16	19132.690	2.0	55349.630	3.0
276.0348	24.01	-.28	31117.590	2.5	67334.200	3.5
276.0370	25.01	-4.59	30684.810	1.0	66901.140	2.0
276.0400	90.01	-.28	8549.697	0.0	44776.331	0.0
276.0401	24.00	-4.10	21847.880	2.0	58063.800	2.0
276.0425	27.01	-4.59	11321.500	2.0	47537.100	2.0
276.0459	23.00	-3.64	323.420	3.5	36538.580	4.5
276.0468	28.01	-4.05	100332.090	4.5	136547.130	3.5
276.0503	24.01	-.10	38269.670	3.5	74484.250	2.5
276.0516	28.01	-2.82	100332.090	4.5	136546.500	4.5
276.0530	42.01	-.06	26616.982	0.0	62841.910	0.0
276.0531	24.00	-4.72	24303.940	3.0	60518.160	3.0
276.0531	24.00	-3.69	24303.940	3.0	60518.160	3.0
276.0610	25.01	-3.83	30795.750	4.0	67008.930	3.0
276.0616	26.00	-2.15	17550.180	3.0	53763.280	3.0
276.0666	28.01	-2.14	32523.540	3.5	68735.980	2.5
276.0686	22.00	-5.55	7255.369	2.0	43467.550	2.0
276.0688	24.00	-7.04	0.000	3.0	36212.150	4.0
276.0707	29.01	-4.50	110363.400	2.0	146575.300	2.0
276.0709	23.01	.01	19191.500	6.0	55403.380	6.0
276.0732	25.01	-3.22	43528.300	5.0	79739.880	5.0
276.0740	74.01	.83	19115.832	0.0	55338.004	0.0
276.0743	26.01	-1.17	62083.170	4.5	98294.600	5.5
276.0770	24.00	-2.52	24282.340	4.0	60493.420	3.0
276.0780	70.01	-.41	34844.049	0.0	71065.697	0.0
276.0838	28.01	-4.39	100332.090	4.5	136542.280	3.5
276.0852	13.01	-2.32	110087.500	2.0	146297.500	1.0
276.0868	30.02	-3.70	257796.000	5.0	294005.800	5.0
276.0883	17.02	-1.04	209182.800	1.5	245392.400	1.5
276.0919	25.00	-3.78	17052.290	4.5	53261.420	3.5
276.0930	25.01	-4.92	30684.810	1.0	66893.790	1.0
276.0951	24.02	-4.33	65890.900	3.0	102099.600	4.0
276.0960	25.01	-1.33	49465.130	3.0	85673.720	4.0
276.0989	25.01	-2.71	32836.400	1.0	69044.610	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
276.1012	25.01	.31	48435.960	6.0	84643.860	6.0
276.1058	27.01	-2.45	47807.200	4.0	84014.500	5.0
276.1080	76.00	-.74	6049.314	0.0	42267.026	0.0
276.1167	24.01	-1.59	30864.610	2.5	67070.480	1.5
276.1175	25.02	-2.70	172613.870	2.5	208819.640	3.5
276.1188	26.01	-.27	64286.440	3.5	100492.040	3.5
276.1192	28.01	-1.81	101357.200	4.5	137562.740	3.5
276.1216	28.01	-2.26	99132.780	5.5	135338.010	5.5
276.1221	25.01	-1.09	70745.080	3.0	106950.240	3.0
276.1224	21.01	-2.17	28161.030	3.0	64366.150	2.0
276.1251	24.00	-4.33	8095.210	3.0	44299.980	2.0
276.1285	22.01	-1.15	8710.470	1.5	44914.800	1.5
276.1317	25.01	-1.83	31661.720	3.0	67865.630	4.0
276.1350	25.00	-1.77	25265.740	5.5	61469.210	5.5
276.1364	27.00	-1.52	4142.660	3.5	40345.950	2.5
276.1380	70.01	-.41	34844.049	0.0	71057.826	0.0
276.1388	25.01	-2.47	43536.900	4.0	79739.880	5.0
276.1420	58.01	-.54	0.000	0.0	36213.253	0.0
276.1420	76.00	-.31	4113.534	0.0	40326.787	0.0
276.1424	30.02	-2.75	257566.100	1.0	293768.600	1.0
276.1444	28.01	-2.04	99442.860	4.5	135645.100	5.5
276.1476	26.00	-3.25	19552.474	1.0	55754.290	2.0
276.1530	42.00	.13	12259.943	0.0	48471.753	0.0
276.1562	27.01	-2.48	27106.000	6.0	63306.700	5.0
276.1562	26.01	-3.21	43238.610	2.5	79439.300	3.5
276.1568	26.01	-2.73	30388.550	4.5	66589.170	4.5
276.1590	74.01	.27	8630.355	0.0	44841.378	0.0
276.1598	25.01	-4.80	72247.380	3.0	108447.600	2.0
276.1615	24.00	-4.86	24303.940	3.0	60503.940	4.0
276.1615	9.04	-.50	844112.000	2.5	880312.000	2.5
276.1615	9.04	-1.80	844112.000	2.5	880312.000	3.5
276.1622	25.00	-3.97	25285.430	4.5	61485.340	4.5
276.1630	72.00	-.16	4516.821	0.0	40727.320	0.0
276.1649	25.00	-2.44	25281.040	2.5	61480.600	3.5
276.1668	30.02	-4.78	258075.700	3.0	294275.000	3.0
276.1680	73.01	.10	967.890	0.0	37177.733	0.0
276.1702	26.02	-4.08	183456.690	3.0	219655.550	2.0
276.1735	24.00	-5.00	7927.470	2.0	44125.900	1.0
276.1777	24.00	-3.96	24093.160	2.0	60291.040	1.0
276.1780	50.00	-1.62	3387.616	0.0	39596.148	0.0
276.1781	28.01	-3.03	100475.820	3.5	136673.640	4.5
276.1781	26.00	-2.09	7985.783	2.0	44183.607	2.0
276.1793	28.01	-2.32	99442.860	4.5	135640.530	4.5
276.1798	25.00	-1.71	25287.740	3.5	61485.340	4.5
276.1810	26.01	-.84	8846.760	.5	45044.210	1.5
276.1827	27.00	-3.54	8460.810	2.5	44658.030	1.5
276.1829	27.01	-5.20	11651.310	2.0	47848.500	1.0
276.1900	23.02	-1.60	49327.740	2.5	85524.000	2.5
276.1910	40.01	-1.11	0.000	0.0	36206.828	0.0
276.1930	75.00	-.64	11534.025	0.0	47740.591	0.0
276.1977	25.02	-.09	172547.850	2.5	208743.100	2.5
276.1984	25.00	-1.03	25285.430	4.5	61480.600	3.5
276.2027	24.01	.18	69170.600	5.5	105365.200	4.5
276.2028	26.00	-2.05	7728.058	3.0	43922.652	3.0
276.2080	25.00	-4.09	27201.540	2.5	63395.450	3.5
276.2080	25.01	-.14	38366.070	2.0	74559.970	3.0
276.2083	26.02	-3.92	182810.660	5.0	219004.530	4.0
276.2083	26.01	-3.26	47674.780	1.5	83868.650	2.5
276.2085	20.00	-1.50	15157.901	0.0	51351.740	1.0
276.2109	24.00	-2.41	24299.890	2.0	60493.420	3.0
276.2134	29.01	-4.32	110363.400	2.0	146556.600	3.0
276.2139	25.02	-3.63	140776.880	5.5	176970.010	5.5
276.2160	25.00	-2.08	25287.740	3.5	61480.600	3.5
276.2171	23.01	-.57	36489.340	1.0	72682.060	2.0
276.2200	28.01	-3.83	100332.090	4.5	136524.420	4.5
276.2220	58.01	.26	8307.725	0.0	44510.489	0.0
276.2229	22.01	-1.67	8710.470	1.5	44902.420	2.5
276.2235	18.02	.43	207233.090	2.0	243424.970	3.0
276.2271	23.01	-3.03	19112.930	4.0	55304.340	4.0
276.2287	25.02	-2.36	143148.400	1.5	179339.590	2.5
276.2294	15.01	-1.87	101636.490	1.0	137827.600	1.0
276.2310	44.00	-.67	7985.094	0.0	44186.679	0.0
276.2340	74.00	-1.11	0.000	0.0	36201.192	0.0
276.2347	26.01	-.47	42334.860	2.5	78525.270	2.5
276.2364	25.00	-2.38	25281.040	2.5	61471.230	2.5
276.2365	26.02	-3.76	88663.870	4.0	124854.040	3.0
276.2370	26.01	-7.35	25981.650	3.5	62171.760	3.5
276.2394	23.03	-2.52	227712.500	4.0	263902.300	3.0
276.2418	24.00	-2.29	24303.940	3.0	60493.420	3.0
276.2442	26.01	-1.78	26055.400	2.5	62244.570	1.5
276.2455	13.01	-2.62	110087.500	2.0	146276.500	3.0
276.2482	23.01	-5.73	13542.680	3.0	49731.320	2.0
276.2516	25.02	-4.00	94707.200	4.5	130895.390	4.5
276.2530	25.01	-2.50	43370.370	3.0	79558.380	4.0
276.2557	25.01	-1.26	32856.950	3.0	69044.610	2.0
276.2568	26.01	-7.43	25787.600	1.5	61975.110	1.5
276.2576	24.01	.07	12303.980	3.5	48491.390	2.5
276.2642	28.01	-3.05	99442.860	4.5	135629.400	3.5
276.2666	24.01	-2.29	38269.670	3.5	74455.900	4.5
276.2680	23.00	-9.26	2424.890	4.5	38610.940	3.5
276.2690	72.00	-.88	5565.369	0.0	41761.974	0.0
276.2700	42.00	-.35	12259.943	0.0	48456.417	0.0
276.2701	25.01	-2.80	32858.840	2.0	69044.610	2.0
276.2713	23.01	-1.94	12545.150	4.0	48730.760	4.0
276.2718	28.01	-2.45	99442.860	4.5	135628.410	4.5
276.2721	24.00	-3.75	24282.340	4.0	60467.850	5.0
276.2745	22.01	-3.43	9363.710	.5	45548.900	1.5
276.2764	23.01	-2.89	36489.340	1.0	72674.280	2.0
276.2772	13.02	-1.29	165786.320	2.5	201971.160	2.5
276.2772	13.02	.01	165786.320	2.5	201971.160	3.5
276.2773	26.00	-.63	17927.378	1.0	54112.203	2.0
276.2774	24.01	-.10	31168.780	3.5	67353.600	4.5
276.2821	24.00	-4.06	21810.840	1.0	57995.040	1.0
276.2826	25.00	-2.14	23296.670	3.5	59480.800	2.5
276.2838	25.02	-4.72	140280.800	4.5	176464.780	3.5
276.2845	25.02	-3.81	97271.760	5.5	133455.640	5.5
276.2853	25.00	-2.13	25285.430	4.5	61469.210	5.5
276.2863	13.02	-.14	165787.510	1.5	201971.160	2.5
276.2875	25.00	-1.39	25287.740	3.5	61471.230	2.5
276.2884	22.01	-.76	32767.020	3.5	68950.390	3.5
276.2897	28.01	-2.77	99154.810	4.5	135338.010	5.5
276.2900	58.01	-.36	6291.287	0.0	42485.141	0.0
276.2911	26.00	-.89	24574.655	4.0	60757.680	4.0
276.2922	10.01	-.82	246192.450	2.5	282375.330	1.5
276.3030	40.00	-.36	4355.506	0.0	40547.657	0.0
276.3030	42.00	-.47	11050.080	0.0	47242.231	0.0
276.3065	23.01	-2.47	13542.680	3.0	49723.680	4.0
276.3067	24.00	.27	27816.880	5.0	63997.860	6.0
276.3086	24.00	-1.38	24897.550	4.0	61078.280	3.0
276.3090	46.00	-1.15	0.000	0.0	36191.365	0.0
276.3093	26.00	-3.06	6928.266	5.0	43108.899	4.0
276.3107	26.00	-1.09	7985.783	2.0	44166.240	3.0
276.3138	26.00	-2.62	24574.655	4.0	60754.710	4.0
276.3147	25.02	-2.27	172755.950	3.5	208935.880	4.5
276.3149	25.01	-2.36	43370.370	3.0	79550.280	3.0
276.3162	28.01	-3.47	99442.860	4.5	135622.600	3.5
276.3172	25.01	-1.35	49882.150	4.0	86061.750	3.0
276.3236	28.01	-4.47	101357.200	4.5	137535.960	3.5
276.3246	28.01	-4.26	101357.200	4.5	137535.830	5.5
276.3270	76.00	.08	8630.355	0.0	44819.363	0.0
276.3300	75.00	-.72	11695.340	0.0	47883.955	0.0
276.3349	25.02	-.38	172855.020	4.5	209032.300	5.5
276.3356	28.02	-2.92	98238.200	4.0	134415.400	4.0
276.3370	73.01	-.62	0.000	0.0	36187.698	0.0
276.3380	41.00	-.45	2742.356	0.0	38929.923	0.0
276.3406	26.01	-3.10	25981.650	3.5	62158.190	4.5
276.3420	44.00	-.67	1129.205	0.0	37316.249	0.0
276.3439	28.01	-1.94	100332.090	4.5	136508.200	5.5
276.3448	10.03	-4.69	488215.000	.5	524391.000	.5
276.3475	24.01	-1.76	31168.780	3.5	67344.420	2.5
276.3498	26.01	-4.32	2837.940	2.5	39013.280	1.5
276.3520	18.01	-2.42	174409.830	1.5	210584.880	1.5
276.3576	24.01	-1.26	31219.490	4.5	67393.800	3.5
276.3589	25.01	-2.63	43370.370	3.0	79544.510	2.0
276.3602	28.01	-4.49	101357.200	4.5	137531.180	4.5
276.3613	25.02	.58	172569.270	1.5	208743.100	2.5
276.3620	42.01	.57	15082.956	0.0	51267.381	0.0
276.3620	90.01	-.50	6210.629	0.0	42395.054	0.0
276.3628	25.01	-.18	43339.100	2.0	79512.730	3.0
276.3641	25.00	-1.41	23296.670	3.5	59470.140	3.5
276.3662	28.01	-4.39	72375.420	1.5	108548.610	1.5
276.3662	17.01	-1.97	110295.800	4.0	146469.000	3.0
276.3668	26.01	.22	66411.700	6.5	102584.610	5.5
276.3753	17.01	-1.92	110297.000	3.0	146469.000	3.0
276.3761	25.01	-3.06	49889.860	3.0	86061.750	3.0
276.3790	75.00	-.08	14921.641	0.0	51103.840	0.0
276.3800	2.00	-1.94	159856.000	0.0	196038.068	0.0
276.3837	25.00	-1.53	23818.870	.5	59989.770	1.5
276.3865	22.01	-2.39	8744.270	2.5	44914.800	1.5
276.3865	22.00	-5.67	170.132	3.0	36340.670	2.0
276.3868	23.03	.10	255747.600	3.0	291918.100	2.0
276.3880	25.02	-3.59	140294.440	3.5	176464.780	3.5
276.3901	28.01	-4.60	97273.830	2.5	133443.890	2.5
276.3909	26.01	-1.86	25981.650	3.5	62151.610	2.5
276.3919	28.01	-4.44	101366.140	2.5	137535.960	3.5
276.3924	22.01	-3.36	4628.610	2.5	40798.370	3.5
276.3930	42.00	-.60	11775.998	0.0	47956.364	0.0
276.3940	76.00	-.14	10969.423	0.0	47149.658	0.0
276.3944	17.01	-2.42	110299.500	2.0	146469.000	3.0
276.3963	24.01	-.47	38315.000	2.5	74484.250	2.5
276.3980	26.01	-2.33	46967.470	2.5	83136.500	3.5
276.3985	25.01	-.52	49820.160	2.0	85989.120	2.0
276.4005	25.01	-1.20	53781.700	3.0	89950.400	3.0
276.4007	26.01	-3.06	47389.820	1.5	83558.500	.5
276.4027	25.00	-.33	30354.210	3.5	66522.620	4.5
276.4080	64.01	-.03	2823.013	0.0	39001.416	0.0
276.4081	25.01	-1.64	46903.260	2.0	83070.970	2.0
276.4095	20.02	-.09	346896.260	2.0	383063.780	3.0
276.4175	24.01	-3.12	38269.670	3.5	74436.140	2.5
276.4177	26.00	-4.48	12968.552	2.0	49135.003	3.0
276.4185	27.00	-1.17	3482.820	4.5	39649.160	3.5
276.4219	23.03	.33	256251.700	4.0	292417.600	3.0
276.4256	24.01	.01	31168.780	3.5	67334.200	3.5
276.4270	74.01	-.10	0.000	0.0	36175.916	0.0
276.4276	22.01	-.79	32602.510	1.5	68767.660	1.5
276.4282	20.02	-.98	346896.260	2.0	383061.330	2.0
276.4322	26.00	-2.16	17726.985	2.0	53891.540	3.0
276.4322	28.01	-3.06	78955.450	1.5	115120.000	2.5
276.4353	24.00	-4.97	8095.210	3.0	44259.360	3.0
276.4353	9.02	-3.82	395268.130	1.5	431432.270	1.5
276.4415	28.01	-1.75	99442.860	4.5	135606.200	5.5
276.4420	70.01	-.66	34844.049	0.0	71018.002	0.0
276.4560	41.01	-.95	725.918	0.0	36898.039	0.0
276.4578	30.02	-3.68	257962.500	2.0	294123.700	3.0
276.4587	25.01	-3.38	66542.260	5.0	102703.340	4.0
276.4593	9.03	-.54	519890.000	2.0	556051.000	1.0
276.4625	28.01	-4.32	101366.140	2.5	137526.730	2.5
276.4640	90.01	-.31	8952.985	0.0	45124.060	0.0
276.4647	18.01	-1.28	159706.460	.5	195866.760	1.5
276.4709	24.01	-3.28	51789.210	3.5	87948.700	4.5
276.4713	27.00	-1.96	16195.680	.5	52355.120	.5
276.4716	27.01	-3.33	9812.700	4.0	45972.100	3.0
276.4722	20.00	-1.15	15210.063	1.0	51369.380	2.0
276.4744	28.01	-3.41	100389.520	2.5	136548.550	2.5
276.4789	26.01	-1.67	25428.800	5.5	61587.240	5.5
276.4812	22.01	-.90	8744.270	2.5	44902.420	2.5
276.4853	28.01	-3.37	100389.520	2.5	136547.130	3.5
276.4929	23.01	-2.89	13741.610	3.0	49898.220	2.0
276.4955	24.01	-3.58	32603.730	2.5	68760.000	3.5
276.4965	25.01	-.49	49517.580	5.0	85673.720	4.0
276.4998	24.01	-.89	32836.840	3.5	68992.550	4.5
276.5040	76.00	.59	15324.929	0.0	51490.771	0.0
276.5054	9.02	-1.48	390834.600	2.5	426989.570	3.5
276.5088	25.01	-2.01	44899.820	3.0	81054.350	2.0
276.5116	24.01	-2.76	38269.670	3.5	74423.840	3.5
276.5120	90.01	-.88	4436.164	0.0	40600.960	0.0
276.5195	22.01	-2.00	9395.760	1.5	45548.900	1.5
276.5203	24.00	-1.23	25038.610	5.0	61191.640	6.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
276.5222	12.00	-1.71	21870.464	1.0	58023.246	2.0
276.5224	28.01	-2.88	100389.520	2.5	136542.280	3.5
276.5233	28.01	-3.66	78955.450	1.5	115108.090	2.5
276.5280	41.01	-.80	1209.863	0.0	37372.566	0.0
276.5297	25.01	-1.82	44899.820	3.0	81051.620	3.0
276.5321	24.00	-6.40	8095.210	3.0	44246.700	4.0
276.5365	9.02	-.86	453343.620	2.5	489494.530	3.5
276.5433	25.01	-.83	31661.720	3.0	67811.750	3.0
276.5447	24.01	-.17	31219.490	4.5	67369.330	5.5
276.5450	76.00	-.79	8630.355	0.0	44790.835	0.0
276.5495	26.01	-1.45	33501.320	3.5	69650.540	2.5
276.5613	24.01	-1.27	30864.610	2.5	67012.280	2.5
276.5620	24.00	-4.54	21810.840	1.0	57958.420	0.0
276.5635	25.01	-.53	43311.000	1.0	79458.380	2.0
276.5649	22.01	-.68	32697.940	2.5	68845.140	2.5
276.5657	30.02	-2.95	260805.900	2.0	296953.000	2.0
276.5673	23.01	-.15	12706.150	6.0	48853.040	5.0
276.5689	26.00	-3.32	11976.239	4.0	48122.913	3.0
276.5700	23.01	.68	37352.390	5.0	73498.930	6.0
276.5740	71.00	-.49	4113.534	0.0	40270.223	0.0
276.5795	24.00	-4.08	24282.340	4.0	60427.630	5.0
276.5848	25.01	-3.17	53805.800	4.0	89950.400	3.0
276.5873	24.01	-.04	38563.150	4.5	74707.420	5.5
276.5930	41.01	-.33	7420.492	0.0	43574.697	0.0
276.5951	23.01	.30	37150.570	4.0	73293.820	5.0
276.5970	26.00	-.83	23783.617	5.0	59926.620	5.0
276.6031	9.01	-2.27	235150.580	2.0	271292.790	3.0
276.6032	26.00	-1.77	20641.110	4.0	56783.306	3.0
276.6052	28.01	-4.97	99844.130	3.5	135986.060	3.5
276.6053	8.02	-2.92	329581.980	1.0	365723.900	1.0
276.6067	28.01	-4.03	100389.520	2.5	136531.260	1.5
276.6072	20.00	-1.62	15210.063	1.0	51351.740	1.0
276.6079	26.00	-3.07	12560.933	3.0	48702.518	4.0
276.6104	9.01	-2.41	235150.580	2.0	271291.840	2.0
276.6137	25.01	-2.00	70745.080	3.0	106885.900	4.0
276.6140	25.01	-4.68	72306.810	2.0	108447.600	2.0
276.6149	9.01	-2.63	235150.580	2.0	271291.250	1.0
276.6180	41.00	-.02	12017.970	0.0	48168.907	0.0
276.6186	27.01	-3.05	25317.720	1.0	61457.900	0.0
276.6189	26.01	-1.53	33466.500	4.5	69606.640	3.5
276.6212	27.00	-.18	17233.680	3.5	53373.530	3.5
276.6260	42.00	-.23	11050.080	0.0	47199.972	0.0
276.6346	24.01	-2.04	32854.460	4.5	68992.550	4.5
276.6356	24.00	-.70	27703.840	4.0	63841.810	4.0
276.6361	10.00	-3.58	134459.287	1.0	170597.190	2.0
276.6365	23.00	-5.53	323.420	3.5	36461.260	2.5
276.6365	23.00	-3.55	323.420	3.5	36461.260	3.5
276.6366	25.01	-2.19	66542.260	5.0	102680.090	5.0
276.6371	29.00	-1.36	13727.833	0.0	49376.274	0.0
276.6378	24.00	-.43	24940.610	2.0	61078.280	3.0
276.6384	25.02	-3.55	140557.460	4.5	176695.060	4.5
276.6385	27.00	-1.73	4690.180	2.5	40827.770	1.5
276.6390	75.00	.35	26939.612	0.0	63087.805	0.0
276.6400	28.01	-3.95	99442.860	4.5	135580.250	4.5
276.6430	25.02	.10	172682.640	3.5	208819.640	3.5
276.6461	23.01	-.33	13594.730	2.0	49731.320	2.0
276.6475	26.01	-1.50	62158.190	4.5	98294.600	5.5
276.6479	15.01	-.85	103668.740	3.0	139805.100	3.0
276.6483	30.02	-2.86	257908.200	1.0	294044.500	1.0
276.6514	29.01	-3.22	85388.770	2.0	121524.670	3.0
276.6539	24.01	.33	12496.790	4.5	48632.360	3.5
276.6551	26.00	-1.76	19390.165	6.0	55525.580	5.0
276.6651	24.01	-.16	31219.490	4.5	67353.600	4.5
276.6660	27.01	-.13	49348.200	4.0	85482.190	4.0
276.6684	28.01	-2.96	79823.030	3.5	115956.710	2.5
276.6720	42.00	-.64	11372.710	0.0	47516.592	0.0
276.6779	25.01	-1.10	49820.160	2.0	85952.600	3.0
276.6810	25.02	-3.87	140563.030	3.5	176695.060	4.5
276.6810	69.01	-1.82	0.000	0.0	36142.706	0.0
276.6836	27.01	-2.76	27484.300	3.0	63616.000	2.0
276.6843	30.02	-2.08	258171.200	5.0	294302.800	4.0
276.6910	26.00	-1.23	8154.713	1.0	44285.436	2.0
276.6950	25.03	-4.29	131170.100	4.0	167300.300	3.0
276.6960	72.00	-.48	5565.369	0.0	41706.116	0.0
276.6982	25.02	-3.10	143209.800	2.5	179339.590	2.5
276.7025	25.02	-3.48	172613.870	2.5	208743.100	2.5
276.7026	28.01	-3.08	99132.780	5.5	135261.990	4.5
276.7092	23.01	-1.34	37150.570	4.0	73278.920	4.0
276.7100	3.01	-.78	561749.000	0.0	597887.918	0.0
276.7120	76.00	-.21	10969.423	0.0	47108.080	0.0
276.7203	30.02	-4.00	257908.200	1.0	294035.100	2.0
276.7217	24.00	-1.99	24833.860	3.0	60960.580	4.0
276.7220	42.00	-.81	10646.793	0.0	46784.144	0.0
276.7265	24.01	-.63	39684.000	3.5	75810.100	4.5
276.7291	10.00	-3.99	134459.287	1.0	170585.040	1.0
276.7345	23.02	-2.94	63315.050	3.5	99440.100	2.5
276.7377	10.01	-4.36	302425.870	1.5	338550.510	.5
276.7386	23.01	-1.94	16533.000	5.0	52657.510	4.0
276.7387	30.02	-2.56	258178.300	4.0	294302.800	4.0
276.7402	28.01	-4.02	99340.550	3.5	135464.860	3.5
276.7430	26.01	-1.34	42401.330	1.5	78525.270	2.5
276.7471	23.02	-2.45	109854.870	3.5	145978.270	2.5
276.7501	26.01	.52	26170.190	5.5	62293.200	6.5
276.7521	26.01	.07	42114.790	4.5	78237.540	3.5
276.7522	26.01	-1.13	62322.500	3.5	98445.240	4.5
276.7522	24.00	.08	25038.610	5.0	61161.350	5.0
276.7523	26.00	-1.25	7376.762	4.0	43499.485	4.0
276.7550	28.00	-3.05	14728.847	0.0	50851.220	1.0
276.7602	24.01	-.14	38362.560	1.5	74484.250	2.5
276.7609	15.01	-3.20	101636.490	1.0	137758.100	0.0
276.7638	26.01	-2.36	66463.590	5.5	102584.810	5.5
276.7642	24.01	-2.26	32355.940	3.5	68477.110	4.5
276.7645	24.01	-2.36	38315.000	2.5	74436.140	2.5
276.7650	77.00	-.54	15970.189	0.0	52101.925	0.0
276.7655	28.01	-4.77	99340.550	3.5	135461.550	2.5
276.7671	25.01	-3.83	52718.800	0.0	88839.600	1.0
276.7730	45.00	-1.49	2581.041	0.0	38711.733	0.0
276.7740	75.00	-.20	11534.025	0.0	47664.586	0.0
276.7787	25.01	-.58	43339.100	2.0	79458.380	2.0
276.7801	10.00	-4.35	134459.287	1.0	170578.390	1.0
276.7806	25.01	.38	52653.270	4.0	88772.300	5.0
276.7832	17.01	-4.68	146330.000	1.0	182448.700	2.0
276.7845	25.01	.02	49517.580	5.0	85636.100	6.0
276.7870	81.00	-.33	0.000	0.0	36128.864	0.0
276.7897	26.02	-1.51	105929.160	3.0	142047.000	4.0
276.7938	26.00	-2.19	19788.248	4.0	55905.560	4.0
276.7942	18.01	-1.82	174409.830	1.5	210527.100	2.5
276.8011	26.01	-8.86	26055.400	2.5	62171.760	3.5
276.8042	28.01	-4.49	99844.130	3.5	135960.080	4.5
276.8043	28.01	-3.24	99442.860	4.5	135558.800	4.5
276.8045	25.01	-1.12	49427.320	4.0	85543.230	5.0
276.8060	23.01	-1.92	36673.510	2.0	72789.230	3.0
276.8084	30.02	-4.15	260805.900	2.0	296921.300	3.0
276.8090	73.01	-.57	3145.643	0.0	39271.636	0.0
276.8094	18.01	-3.87	172213.800	1.5	208329.080	.5
276.8123	17.01	-2.45	146333.800	2.0	182448.700	2.0
276.8130	41.01	-.34	403.288	0.0	36528.759	0.0
276.8137	24.01	-.49	31219.490	4.5	67334.200	3.5
276.8140	23.01	-.64	13609.000	4.0	49723.680	4.0
276.8239	22.01	-.87	31490.820	3.5	67604.200	3.5
276.8283	27.00	-2.38	7442.410	3.5	43555.220	3.5
276.8299	30.02	-3.57	258075.700	3.0	294188.300	2.0
276.8328	26.01	-2.36	36126.410	1.5	72238.630	2.5
276.8339	12.00	-2.19	21911.178	2.0	58023.246	2.0
276.8426	26.00	-3.25	17550.180	3.0	53661.130	3.0
276.8453	25.01	.08	39808.140	3.0	75918.730	2.0
276.8459	24.00	-.64	24897.550	4.0	61008.070	5.0
276.8468	24.00	-.60	27816.880	5.0	63927.270	5.0
276.8471	25.01	-.82	48317.850	4.0	84428.210	5.0
276.8506	23.03	-.67	227712.500	4.0	263822.400	4.0
276.8510	64.01	-1.02	3387.616	0.0	39508.128	0.0
276.8545	26.02	-4.59	183456.690	3.0	219566.080	3.0
276.8560	23.01	-.23	12621.570	5.0	48730.760	4.0
276.8561	22.01	-2.84	9363.710	.5	45472.890	.5
276.8580	26.02	-3.81	183457.150	4.0	219566.080	3.0
276.8587	24.01	.35	38315.000	2.5	74423.840	3.5
276.8630	28.01	-.34	57420.160	2.5	93528.440	3.5
276.8648	10.01	-2.67	281720.280	1.5	317828.320	.5
276.8678	27.00	-2.61	8460.810	2.5	44568.470	2.5
276.8688	23.01	-.79	36919.230	3.0	73026.760	2.0
276.8715	28.01	-2.41	99154.810	4.5	135261.990	4.5
276.8720	17.01	-.89	149798.300	2.0	185905.400	1.0
276.8730	40.01	-.51	1290.520	0.0	37408.162	0.0
276.8850	90.01	-.24	6129.972	0.0	42246.049	0.0
276.8850	75.00	-.33	11695.340	0.0	47811.417	0.0
276.8855	25.01	-.55	39813.380	2.0	75918.730	2.0
276.8857	26.01	-4.05	33501.320	3.5	69606.640	3.5
276.8886	9.02	-1.93	391626.910	3.5	427731.850	2.5
276.8890	23.00	-7.80	2424.890	4.5	38529.780	4.5
276.8898	25.01	-1.37	31661.720	3.0	67766.510	2.0
276.8915	23.01	-.57	37041.110	2.0	73145.680	3.0
276.8929	14.02	-.78	214532.170	1.0	250636.550	2.0
276.8933	25.01	-2.54	43696.190	3.0	79800.520	4.0
276.8935	26.01	-.90	8680.470	1.5	44784.780	2.5
276.8965	28.01	-3.51	99340.550	3.5	135444.470	3.5
276.8980	74.00	-1.19	1613.150	0.0	37727.531	0.0
276.8986	16.01	-2.59	128233.070	2.5	164336.710	3.5
276.9023	18.01	-4.79	174409.830	1.5	210512.980	1.5
276.9058	27.01	-1.33	27484.300	3.0	63587.000	3.0
276.9059	25.02	-.51	172547.850	2.5	208650.540	3.5
276.9068	26.00	-2.82	24574.655	4.0	60677.230	5.0
276.9136	25.02	-2.56	143127.000	.5	179228.690	1.5
276.9140	25.01	-3.98	67766.510	2.0	103868.140	1.0
276.9149	26.01	-1.02	25981.650	3.5	62083.170	4.5
276.9175	22.01	-2.05	30836.520	1.5	66937.700	2.5
276.9186	23.02	-3.70	105320.180	1.5	141421.220	.5
276.9261	25.00	-1.48	30354.210	3.5	66454.270	3.5
276.9265	10.03	-3.64	488917.000	1.5	525017.000	2.5
276.9269	10.01	-4.33	280797.260	2.5	316897.210	3.5
276.9285	24.01	.27	54625.760	2.5	90725.500	3.5
276.9285	25.01	-2.22	37811.570	1.0	73911.310	1.0
276.9293	26.00	-1.17	19390.165	6.0	55489.810	6.0
276.9319	17.02	.13	205946.900	2.5	242046.200	3.5
276.9322	25.01	-.32	49889.860	3.0	85989.120	2.0
276.9326	26.01	-1.31	36252.960	2.5	72352.170	3.5
276.9358	26.01	-.33	25428.800	5.5	61527.590	6.5
276.9405	25.00	-1.26	23719.520	1.5	59817.700	2.5
276.9410	25.02	-4.99	138234.790	1.5	174332.910	1.5
276.9434	30.02	-2.09	260623.100	4.0	296720.900	3.0
276.9519	30.02	-3.36	258178.300	4.0	294275.000	3.0
276.9519	28.02	-3.74	98238.200	4.0	134334.900	3.0
276.9556	26.01	-2.40	26055.400	2.5	62151.610	2.5
276.9570	41.01	-.29	10162.848	0.0	46269.536	0.0
276.9591	28.01	-2.22	99442.860	4.5	135538.610	5.5
276.9637	25.01	.07	48333.060	5.0	84428.210	5.0
276.9648	24.01	-2.17	48399.190	1.5	84494.200	2.5
276.9657	27.00	-2.58	8460.810	2.5	44555.710	1.5
276.9670	29.01	-.33	71919.930	3.0	108014.660	3.0
276.9671	28.01	-4.21	99340.550	3.5	135435.260	4.5
276.9672	26.00	-2.03	6928.266	5.0	43022.969	4.0
276.9693	24.01	-.11	54418.080	.5	90512.500	1.5
276.9730	23.01	-.87	19112.930	4.0	55206.870	5.0
276.9739	18.01	-1.78	172829.580	1.5	208923.410	2.5
276.9740	74.00	-.52	4758.794	0.0	40863.266	0.0
276.9756	24.01	-3.25	48632.360	3.5	84725.960	3.5
276.9756	28.01	-4.31	99559.330	2.5	135652.930	1.5
276.9756	27.01	-4.02	25147.200	4.0	61240.800	3.0
276.9760	42.01	1.03	26939.612	0.0	63043.823	0.0
276.9769	25.02	-2.72	85173.880	1.5	121267.320	2.5
276.9810	64.01	-.12	3387.616	0.0	39491.175	0.0
276.9840	78.00	-1.36	6533.259	0.0	42636.427	0.0
276.9843	25.00	-2.27	30411.740	.5	66504.210	1.5
276.9845	26.01	-.08	67516.370	5.5	103608.820	4.5
276.9867	25.01	-1.65	39826.570	1.0	75918.730	2.0
276.9880	76.00	.07	12905.203	0.0	49007.850	0.0
276.9901	24.00	-4.68	8095.210	3.0	44186.920	2.0
276.9908	18.01	-.97	172829.580	1.5	208921.200	1.5
276.9918	25.01	-1.89	72010.750	4.0	108102.250	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
276.9925	24.01	.05	54499.700	1.5	90591.100	2.5
276.9950	51.00	-.06	9759.560	0.0	45861.295	0.0
277.0040	30.02	-2.86	257678.700	2.0	293768.600	1.0
277.0056	28.00	-2.88	25753.578	4.0	61843.280	5.0
277.0060	7.01	-4.22	174212.030	2.0	210301.680	3.0
277.0099	24.01	-3.02	51669.750	2.5	87758.880	3.5
277.0100	76.00	.04	14760.326	0.0	50860.106	0.0
277.0156	24.00	-2.50	24286.540	1.0	60374.940	2.0
277.0170	64.01	-.31	3064.986	0.0	39163.854	0.0
277.0182	24.01	-2.75	33418.110	2.5	69506.160	3.5
277.0245	25.00	-2.93	27201.540	2.5	63288.780	3.5
277.0286	26.01	-4.87	60270.370	3.5	96357.070	3.5
277.0287	26.01	-1.68	36126.410	1.5	72213.100	.5
277.0357	25.02	-3.75	97000.800	4.5	133086.570	4.5
277.0420	75.00	-.14	11534.025	0.0	47629.635	0.0
277.0447	25.00	-1.18	30419.610	2.5	66504.210	1.5
277.0448	24.00	-1.04	25038.610	5.0	61123.200	4.0
277.0460	72.01	-.29	12824.546	0.0	48919.635	0.0
277.0499	26.01	-2.01	25981.650	3.5	62065.570	3.5
277.0503	26.01	-1.42	25428.800	5.5	61512.670	4.5
277.0575	10.01	-1.51	246597.710	.5	282680.650	.5
277.0639	17.03	-.52	215389.300	1.0	251471.400	0.0
277.0647	30.02	-2.70	257962.500	2.0	294044.500	1.0
277.0652	23.01	-2.09	20089.560	1.0	56171.490	1.0
277.0681	24.01	-3.47	51584.440	1.5	87666.000	2.5
277.0694	26.00	-1.23	17726.985	2.0	53808.370	1.0
277.0710	76.00	-.06	5081.424	0.0	41173.256	0.0
277.0734	25.02	.15	172855.020	4.5	208935.880	4.5
277.0750	28.01	-3.52	100592.980	3.5	136673.640	4.5
277.0772	20.00	-.88	15315.943	2.0	51396.320	3.0
277.0778	25.02	-3.12	143148.400	1.5	179228.690	1.5
277.0820	90.01	-.94	1451.835	0.0	37542.234	0.0
277.0824	27.01	-4.04	27585.300	1.0	63665.000	1.0
277.0850	26.00	-5.89	0.000	4.0	36079.353	3.0
277.0860	30.00	-.86	32343.666	0.0	68433.544	0.0
277.0880	74.00	-.46	2903.671	0.0	38993.289	0.0
277.0886	28.00	-3.29	25753.578	4.0	61832.470	4.0
277.0916	25.00	-1.54	30425.710	1.5	66504.210	1.5
277.0945	22.01	-1.99	32767.020	3.5	68845.140	2.5
277.0980	64.01	-1.66	564.603	0.0	36652.918	0.0
277.0984	23.01	-1.62	13490.840	2.0	49568.450	3.0
277.1021	22.01	-2.73	9395.760	1.5	45472.890	.5
277.1040	69.01	-.53	8872.327	0.0	44959.861	0.0
277.1066	25.01	-.59	49291.310	3.0	85367.850	2.0
277.1181	24.00	-2.80	24299.890	2.0	60374.940	2.0
277.1181	26.01	-1.59	30388.550	4.5	66463.590	5.5
277.1192	10.01	-4.44	302475.610	.5	338550.510	.5
277.1224	24.00	-4.44	20517.400	2.0	56591.880	2.0
277.1241	26.02	-3.41	86847.110	2.0	122921.370	1.0
277.1246	30.02	-3.34	260878.800	3.0	296953.000	2.0
277.1268	23.01	-.61	37205.010	3.0	73278.920	4.0
277.1275	20.02	-.99	242547.190	2.0	278621.010	1.0
277.1277	25.02	-4.99	138362.800	3.5	174436.590	2.5
277.1294	24.01	-2.16	38362.560	1.5	74436.140	2.5
277.1330	70.01	-.28	34602.076	0.0	70685.834	0.0
277.1357	56.01	-1.03	21952.422	0.0	58035.828	0.0
277.1359	28.01	-3.75	100475.820	3.5	136548.550	2.5
277.1360	42.00	-.85	10888.765	0.0	46972.132	0.0
277.1369	30.02	-3.11	257962.500	2.0	294035.100	2.0
277.1400	41.01	1.05	20970.955	0.0	57053.801	0.0
277.1401	23.01	-.17	36954.580	1.0	73026.760	2.0
277.1403	23.01	.25	37150.570	4.0	73222.720	4.0
277.1430	24.02	-2.71	66027.800	4.0	102099.600	4.0
277.1430	25.00	-2.03	17052.290	4.5	53124.090	3.5
277.1468	28.01	-2.77	100475.820	3.5	136547.130	3.5
277.1469	28.01	-2.20	99559.330	2.5	135630.630	2.5
277.1492	24.00	-2.45	24303.940	3.0	60374.940	2.0
277.1495	24.00	-3.95	20520.920	3.0	56591.880	2.0
277.1510	45.00	-1.19	2581.041	0.0	38662.455	0.0
277.1516	28.01	-3.33	100475.820	3.5	136546.500	4.5
277.1534	25.01	-.19	49882.150	4.0	85952.600	3.0
277.1534	23.02	-1.98	49805.290	3.5	85875.740	3.5
277.1549	26.01	-2.51	26055.400	2.5	62125.660	1.5
277.1554	15.01	-1.18	103340.010	2.0	139410.200	2.0
277.1563	28.01	-2.06	99559.330	2.5	135629.400	3.5
277.1578	26.01	-2.58	47389.820	1.5	83459.700	1.5
277.1590	22.01	-1.87	32697.940	2.5	68767.660	1.5
277.1592	30.02	-3.55	260805.900	2.0	296875.600	2.0
277.1595	25.01	-3.93	67766.510	2.0	103836.170	2.0
277.1610	77.00	-.97	7017.204	0.0	43097.316	0.0
277.1649	25.02	-.40	172682.640	3.5	208751.600	4.5
277.1650	41.01	.12	13631.121	0.0	49710.713	0.0
277.1663	27.00	-4.60	14036.280	1.5	50105.050	1.5
277.1670	78.00	-.85	725.918	0.0	36805.249	0.0
277.1759	26.01	-7.13	25981.650	3.5	62049.170	2.5
277.1807	17.01	-.06	149798.300	2.0	185865.200	3.0
277.1808	24.01	-1.40	34813.060	5.5	70879.950	5.5
277.1832	26.01	-2.01	64425.460	2.5	100492.040	3.5
277.1841	28.01	-4.61	100475.820	3.5	136542.280	3.5
277.1851	24.01	.54	54784.670	3.5	90851.000	4.5
277.1893	25.01	-3.73	43484.500	2.0	79550.280	3.0
277.1894	24.00	-4.06	8307.570	4.0	44373.340	3.0
277.1903	18.01	-4.35	173347.830	1.5	209413.480	1.5
277.2010	28.01	-2.88	99559.330	2.5	135623.590	1.5
277.2011	23.01	.35	37352.390	5.0	73416.630	5.0
277.2026	25.00	-3.73	23296.670	3.5	59360.720	2.5
277.2042	25.01	-2.39	43528.300	5.0	79592.140	6.0
277.2054	25.02	-2.96	172755.950	3.5	208819.640	3.5
277.2075	26.00	-2.47	6928.266	5.0	42991.680	5.0
277.2075	25.01	-1.51	37847.900	2.0	73911.310	1.0
277.2086	28.01	-1.44	99559.330	2.5	135622.600	3.5
277.2091	30.02	-4.26	258239.600	4.0	294302.800	4.0
277.2094	25.02	-3.82	140207.090	2.5	176270.250	2.5
277.2099	8.02	-1.07	365723.900	1.0	401787.000	2.0
277.2104	24.00	-2.33	24897.550	4.0	60960.580	4.0
277.2111	26.00	-1.48	704.003	2.0	36766.950	3.0
277.2124	25.02	-2.92	97023.800	3.5	133086.570	4.5
277.2127	25.01	-.42	49889.860	3.0	85952.600	3.0
277.2141	28.01	-3.47	53037.930	2.5	89100.490	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
277.2156	25.01	-1.77	66643.010	4.0	102705.370	3.0
277.2204	25.01	-3.95	53017.160	1.0	89078.900	2.0
277.2222	27.02	-4.32	72341.900	1.5	108403.400	1.5
277.2249	10.01	-3.50	281720.280	1.5	317781.420	2.5
277.2293	28.01	-1.68	99559.330	2.5	135619.910	1.5
277.2302	25.02	-1.31	172682.640	3.5	208743.100	2.5
277.2312	25.01	-2.76	66643.010	4.0	102703.340	4.0
277.2320	72.01	-.25	14276.381	0.0	50347.253	0.0
277.2328	28.01	-3.42	99340.550	3.5	135400.670	3.5
277.2337	25.01	-2.80	43484.500	2.0	79544.510	2.0
277.2341	24.01	-3.19	33418.110	2.5	69478.060	2.5
277.2411	25.02	-3.69	97000.800	4.5	133059.840	3.5
277.2433	28.01	-1.35	99559.330	2.5	135618.080	2.5
277.2460	77.00	.31	12985.861	0.0	49054.912	0.0
277.2470	24.01	-2.29	51943.040	4.5	88001.320	5.5
277.2486	28.01	-4.50	97799.660	1.5	133857.730	.5
277.2522	28.01	-2.30	100490.950	1.5	136548.550	2.5
277.2530	29.01	-4.91	112424.500	2.0	148482.000	3.0
277.2625	25.01	-2.57	43484.500	2.0	79540.760	1.0
277.2698	15.04	-.27	391101.700	.5	427157.000	.5
277.2724	26.01	-1.41	8391.920	2.5	44446.890	3.5
277.2731	18.01	-4.98	174409.830	1.5	210464.710	2.5
277.2769	28.01	-2.24	100619.260	4.5	136673.640	4.5
277.2842	20.00	-1.62	15315.943	2.0	51369.380	2.0
277.2857	26.00	-1.05	24118.815	4.0	60172.060	4.0
277.2986	27.00	-4.12	13795.520	2.5	49847.080	2.5
277.3018	25.00	-1.66	23549.200	2.5	59600.350	2.5
277.3020	72.00	-.86	2339.068	0.0	38400.835	0.0
277.3029	26.02	-4.76	147406.140	5.0	183457.150	4.0
277.3032	23.01	-2.77	16340.970	3.0	52391.940	3.0
277.3043	25.01	-1.79	31760.930	2.0	67811.750	3.0
277.3056	26.02	-4.00	83646.980	1.0	119697.640	2.0
277.3070	76.00	.08	14760.326	0.0	50821.442	0.0
277.3110	75.00	-.05	17099.394	0.0	53159.990	0.0
277.3169	24.01	-.48	38269.670	3.5	74318.860	2.5
277.3200	41.00	.12	2742.356	0.0	38801.782	0.0
277.3214	28.01	-2.06	100475.820	3.5	136524.420	4.5
277.3240	78.00	-.45	13389.148	0.0	49448.054	0.0
277.3254	24.01	-1.59	34631.140	4.5	70679.220	4.5
277.3260	30.02	-2.51	258075.700	3.0	294123.700	3.0
277.3295	26.02	-1.35	109570.840	2.0	145618.390	2.0
277.3296	24.01	-.57	30307.600	1.5	66355.130	1.5
277.3318	28.01	-2.77	79823.030	3.5	115870.280	2.5
277.3353	30.02	-2.51	260805.900	2.0	296852.700	1.0
277.3360	72.01	.21	6291.287	0.0	42348.633	0.0
277.3367	9.02	-3.07	395385.660	2.5	431432.270	1.5
277.3389	25.01	-2.67	36274.290	2.0	72320.620	1.0
277.3414	9.04	-1.80	844266.000	3.5	880312.000	2.5
277.3414	9.04	-.37	844266.000	3.5	880312.000	3.5
277.3581	28.01	-2.80	100078.780	1.5	136122.610	2.5
277.3654	25.00	-2.49	23296.670	3.5	59339.550	3.5
277.3665	26.01	-2.54	36126.410	1.5	72169.150	1.5
277.3672	24.01	-1.92	31351.150	2.5	67393.800	3.5
277.3681	22.02	-1.95	41703.650	2.0	77746.180	3.0
277.3683	30.02	-2.93	260878.800	3.0	296921.300	3.0
277.3696	27.00	-2.26	17233.680	3.5	53276.020	4.5
277.3699	17.01	-2.01	146330.000	1.0	182372.300	1.0
277.3780	42.01	.45	15566.901	0.0	51618.787	0.0
277.3800	69.01	-1.71	0.000	0.0	36051.626	0.0
277.3800	25.00	-2.59	30354.210	3.5	66395.190	2.5
277.3823	26.02	-3.91	183431.280	5.0	219471.970	4.0
277.3852	28.01	-1.97	100490.950	1.5	136531.260	1.5
277.3863	27.01	-3.24	27469.200	5.0	63509.370	4.0
277.3897	26.00	-1.00	19390.165	6.0	55429.890	5.0
277.3960	90.01	.26	13147.176	0.0	49196.722	0.0
277.3991	17.01	-1.26	146333.800	2.0	182372.300	1.0
277.4000	78.00	-1.09	10082.190	0.0	46131.217	0.0
277.4000	74.00	-.23	4758.794	0.0	40807.821	0.0
277.4020	72.01	-.28	8307.725	0.0	44356.492	0.0
277.4020	76.00	.04	14276.381	0.0	50325.148	0.0
277.4032	22.01	-2.16	30958.700	2.5	66996.670	3.5
277.4040	40.00	-.56	564.603	0.0	36613.110	0.0
277.4098	9.02	-3.51	351330.800	1.5	387367.920	2.5
277.4101	25.01	-2.09	66643.010	4.0	102680.090	5.0
277.4112	25.01	-4.18	67766.510	2.0	103803.440	3.0
277.4122	17.01	-1.64	110297.000	3.0	146333.800	2.0
277.4125	24.00	-1.05	24833.860	3.0	60870.630	4.0
277.4132	25.02	-2.94	172613.870	2.5	208650.540	3.5
277.4151	23.01	-3.55	30267.460	2.0	66303.880	3.0
277.4161	26.00	-2.83	17726.985	2.0	53763.280	3.0
277.4172	24.01	-2.76	31351.150	2.5	67387.300	2.5
277.4181	25.02	-3.46	97023.800	3.5	133059.840	3.5
277.4188	18.01	-2.87	172213.800	1.5	208249.740	1.5
277.4199	20.00	-2.79	15315.943	2.0	51351.740	1.0
277.4204	25.01	-.93	46903.260	2.0	82939.000	1.0
277.4230	30.02	-2.19	258239.600	4.0	294275.000	3.0
277.4275	23.01	-.35	12545.150	4.0	48579.960	3.0
277.4287	25.00	-.34	30419.610	2.5	66454.270	3.5
277.4315	17.01	-2.94	110299.500	2.0	146333.800	2.0
277.4321	24.00	-7.98	0.000	3.0	36034.220	3.0
277.4376	24.01	.28	69388.400	6.5	105421.900	5.5
277.4380	76.00	-.10	12905.203	0.0	48949.292	0.0
277.4390	42.01	.53	15566.901	0.0	51610.860	0.0
277.4434	25.01	-1.00	46903.260	2.0	82936.010	3.0
277.4435	24.01	-1.40	39684.000	3.5	75716.740	3.5
277.4452	25.01	-2.46	36274.290	2.0	72306.810	2.0
277.4480	74.00	-.06	6129.972	0.0	42172.762	0.0
277.4493	26.02	-2.66	82410.940	2.0	118442.920	3.0
277.4507	17.01	-3.37	110302.000	1.0	146333.800	2.0
277.4509	23.01	-.43	36919.230	3.0	72951.000	4.0
277.4552	27.01	-1.64	48555.900	5.0	84587.120	4.0
277.4580	22.01	-4.62	9518.050	2.5	45548.900	1.5
277.4580	77.00	-.54	15970.189	0.0	52011.680	0.0
277.4586	27.01	-4.17	25317.720	1.0	61348.500	1.0
277.4592	27.01	-2.94	27585.300	1.0	63616.000	2.0
277.4607	17.01	-1.93	110299.500	2.0	146330.000	1.0
277.4683	26.01	-.73	26932.740	.5	62962.260	1.5
277.4697	18.01	-4.01	173347.830	1.5	209377.170	2.5
277.4713	27.00	-7.60	5075.830	1.5	41104.960	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
277.4717	23.01	-.10	19112.930	4.0	55142.010	3.0
277.4723	26.00	-3.02	24335.764	2.0	60364.760	3.0
277.4730	26.01	-4.96	2430.080	3.5	38458.990	4.5
277.4731	26.00	-4.02	8154.713	1.0	44183.607	2.0
277.4737	25.01	-2.48	66676.560	2.0	102705.370	3.0
277.4741	24.01	-2.58	31351.150	2.5	67379.920	1.5
277.4761	23.01	-2.68	36489.340	1.0	72517.840	1.0
277.4800	17.01	-4.91	110302.000	1.0	146330.000	1.0
277.4811	25.02	.11	173063.550	5.5	209091.410	5.5
277.4831	22.00	-4.10	386.874	4.0	36414.470	3.0
277.4864	25.01	-1.83	51553.060	5.0	87580.230	4.0
277.4880	73.00	.15	15324.929	0.0	51362.523	0.0
277.4900	25.01	-1.33	70940.240	2.0	106966.940	2.0
277.4900	76.00	-.30	10969.423	0.0	47006.758	0.0
277.4903	27.01	-.29	50913.800	2.0	86940.460	2.0
277.4931	19.02	-2.14	207421.900	2.5	243448.200	1.5
277.4935	28.01	-2.40	100490.950	1.5	136517.200	.5
277.4954	26.00	-1.09	24338.766	3.0	60364.760	3.0
277.4956	27.00	-1.81	5075.830	1.5	41101.800	.5
277.4972	23.01	-.72	13542.680	3.0	49568.450	3.0
277.4981	25.01	.05	49517.580	5.0	85543.230	5.0
277.4983	23.00	-6.68	2220.130	2.5	38245.750	3.5
277.5020	26.02	-3.19	147406.140	5.0	183431.280	5.0
277.5023	30.02	-4.94	258277.700	3.0	294302.800	4.0
277.5026	27.01	-3.65	27484.300	3.0	63509.370	4.0
277.5036	24.00	-2.29	27816.880	5.0	63841.810	4.0
277.5039	17.02	-4.56	185838.000	1.5	221862.900	.5
277.5049	10.00	-4.09	135888.717	1.0	171913.480	0.0
277.5076	25.01	-2.86	67811.750	3.0	103836.170	2.0
277.5110	73.01	.09	5242.739	0.0	41277.347	0.0
277.5162	28.01	-.40	58705.950	1.5	94729.250	2.5
277.5191	9.02	-4.28	351236.350	.5	387259.280	1.5
277.5211	16.02	-.93	170648.940	3.0	206671.610	2.0
277.5237	25.01	-2.42	70940.240	2.0	106962.560	1.0
277.5262	28.01	-4.61	99442.860	4.5	135464.860	3.5
277.5270	72.01	-.38	11856.655	0.0	47889.185	0.0
277.5281	28.01	-4.08	101754.800	2.5	137776.550	3.5
277.5285	28.02	-4.48	79250.800	4.0	115272.500	5.0
277.5288	25.01	-2.37	70497.440	4.0	106519.100	5.0
277.5317	24.00	-4.31	25177.390	4.0	61198.680	3.0
277.5321	25.01	.28	65567.070	2.0	101588.300	3.0
277.5338	26.01	-4.01	2837.940	2.5	38858.960	2.5
277.5350	73.01	.75	18067.285	0.0	54098.777	0.0
277.5370	27.02	-2.37	70934.100	2.5	106954.700	2.5
277.5370	49.00	-2.04	0.000	0.0	36031.232	0.0
277.5387	25.01	-.17	49427.320	4.0	85447.700	5.0
277.5400	42.01	1.33	13389.148	0.0	49419.990	0.0
277.5468	27.00	-4.15	8460.810	2.5	44480.140	2.5
277.5499	25.01	-2.77	66686.450	3.0	102705.370	3.0
277.5502	25.02	-4.05	143209.800	2.5	179228.690	1.5
277.5508	25.01	-2.80	30523.450	6.0	66542.260	5.0
277.5521	25.01	-1.22	53781.700	3.0	89800.340	4.0
277.5521	25.01	-1.52	65482.660	3.0	101501.300	3.0
277.5550	77.00	-.16	9759.560	0.0	45788.455	0.0
277.5573	27.00	-1.01	16778.160	2.5	52796.130	2.5
277.5593	23.01	-1.45	37205.010	3.0	73222.720	4.0
277.5633	25.01	-.01	65482.660	3.0	101499.840	2.0
277.5647	25.01	.00	38542.960	3.0	74559.970	3.0
277.5656	25.01	-2.20	66686.450	3.0	102703.340	4.0
277.5658	24.00	-.54	25106.340	3.0	61123.200	4.0
277.5680	25.02	.22	173306.450	6.5	209323.030	6.5
277.5696	25.01	-2.98	65482.660	3.0	101499.030	4.0
277.5708	23.01	-2.64	17910.980	4.0	53927.190	3.0
277.5773	23.01	-.33	19191.500	6.0	55206.870	5.0
277.5780	26.02	-3.33	183456.690	3.0	219471.970	4.0
277.5813	23.01	-1.52	20156.640	0.0	56171.490	1.0
277.5815	26.02	-3.02	183457.150	4.0	219471.970	4.0
277.5838	25.01	-1.16	46903.260	2.0	82917.780	2.0
277.5880	24.00	-2.77	24277.060	0.0	60291.040	1.0
277.5880	73.00	-.71	0.000	0.0	36024.612	0.0
277.5968	25.02	-4.54	138234.790	1.5	174247.630	.5
277.5971	24.01	-.24	54499.700	1.5	90512.500	1.5
277.5979	24.01	-1.57	47227.500	3.5	83240.200	4.5
277.5994	23.00	-6.02	2311.370	3.5	38323.870	4.5
277.6124	25.01	-.44	69044.610	2.0	105055.430	2.0
277.6174	26.01	-1.63	26055.400	2.5	62065.570	3.5
277.6175	24.01	-3.96	51584.440	1.5	87594.600	1.5
277.6187	25.01	-1.60	70940.240	2.0	106950.240	3.0
277.6238	18.03	-.27	250219.450	.5	286228.800	1.5
277.6239	23.01	-4.60	19132.690	2.0	55142.010	3.0
277.6280	70.01	.02	34602.076	0.0	70621.498	0.0
277.6299	23.01	-.11	36673.510	2.0	72682.060	2.0
277.6349	17.01	-1.64	146330.000	1.0	182337.900	0.0
277.6375	24.00	-4.01	25177.390	4.0	61184.950	5.0
277.6444	24.01	-3.52	32836.840	3.5	68843.510	3.5
277.6500	74.01	1.18	14760.326	0.0	50776.894	0.0
277.6522	24.01	-1.50	51943.040	4.5	87948.700	4.5
277.6528	25.01	-.90	31760.930	2.0	67766.510	2.0
277.6587	12.00	-2.71	21850.405	0.0	57855.214	1.0
277.6600	25.02	-3.49	97271.760	5.5	133276.400	4.5
277.6611	24.00	-3.52	24286.540	1.0	60291.040	1.0
277.6643	28.01	-3.19	79823.030	3.5	115827.120	3.5
277.6645	9.02	-3.20	351519.420	2.5	387523.470	3.5
277.6660	24.01	-.38	38315.000	2.5	74318.860	2.5
277.6710	73.01	.57	17099.394	0.0	53113.238	0.0
277.6741	24.01	-2.46	48491.390	2.5	84494.200	2.5
277.6767	26.00	-1.82	19788.248	4.0	55790.720	3.0
277.6789	25.00	-2.87	30354.210	3.5	66356.400	4.5
277.6801	28.01	-3.87	56371.410	3.5	92373.450	2.5
277.6827	26.01	-3.40	31999.120	3.5	68000.820	4.5
277.6850	26.01	-1.36	62293.200	6.5	98294.600	5.5
277.6898	21.01	-1.47	27443.650	2.0	63444.430	3.0
277.6899	23.01	-3.15	36673.510	2.0	72674.280	2.0
277.6907	24.01	-1.23	47040.540	2.5	83041.200	3.5
277.6910	76.00	-.87	2661.698	0.0	38672.948	0.0
277.6920	26.01	-.53	42237.050	3.5	78237.540	3.5
277.6928	24.00	-5.75	8307.570	4.0	44307.960	5.0
277.7057	16.01	-2.66	128233.070	2.5	164231.780	2.5
277.7082	28.02	-2.89	97841.400	2.0	133839.800	1.0
277.7153	23.01	-2.61	30306.400	3.0	66303.880	3.0
277.7158	25.01	-1.65	47073.560	3.0	83070.970	2.0
277.7166	30.02	-2.70	258277.700	3.0	294275.000	3.0
277.7205	30.02	-2.32	260878.800	3.0	296875.600	2.0
277.7247	24.01	-2.81	51669.750	2.5	87666.000	2.5
277.7273	26.02	-3.58	86847.110	2.0	122843.030	1.0
277.7294	25.02	-2.62	172755.950	3.5	208751.600	4.5
277.7295	26.01	-2.00	66589.170	4.5	102584.810	5.5
277.7310	24.01	-2.55	38509.070	3.5	74504.510	4.5
277.7330	25.01	-2.73	70527.320	5.0	106522.500	6.0
277.7335	23.01	-.68	37150.570	4.0	73145.680	3.0
277.7379	25.01	-.30	53805.800	4.0	89800.340	4.0
277.7381	25.02	-3.90	143345.070	3.5	179339.590	2.5
277.7392	25.01	-2.36	70517.720	3.0	106512.100	4.0
277.7430	77.00	-.41	11775.998	0.0	47780.506	0.0
277.7439	26.01	-8.03	26055.400	2.5	62049.170	2.5
277.7455	25.00	-1.30	23296.670	3.5	59290.230	3.5
277.7477	24.01	-1.62	31351.150	2.5	67344.420	2.5
277.7527	28.01	-3.65	72375.420	1.5	108368.050	2.5
277.7545	28.01	-3.36	99442.860	4.5	135435.260	4.5
277.7553	25.02	-4.67	138340.620	2.5	174332.910	1.5
277.7556	25.01	-.65	48435.960	6.0	84428.210	5.0
277.7586	26.01	-5.03	3117.480	1.5	39109.340	.5
277.7592	25.01	-3.86	70527.320	5.0	106519.100	5.0
277.7595	25.01	-4.19	30684.810	1.0	66676.560	2.0
277.7599	25.01	-4.74	67811.750	3.0	103803.440	3.0
277.7641	24.00	-2.55	24299.890	2.0	60291.040	1.0
277.7649	10.02	.08	353148.000	3.0	389139.050	3.0
277.7658	24.00	-.63	24093.160	2.0	60084.090	1.0
277.7684	25.02	-4.65	143161.500	4.5	179152.090	3.5
277.7704	26.00	-4.10	11976.239	4.0	47966.571	3.0
277.7710	75.00	-.38	17180.052	0.0	53180.930	0.0
277.7740	42.00	-.11	11775.998	0.0	47776.488	0.0
277.7752	23.01	-.21	13741.610	3.0	49731.320	2.0
277.7780	25.01	-.47	48317.850	4.0	84307.200	4.0
277.7803	24.01	-2.21	32854.460	4.5	68843.510	3.5
277.7812	23.01	-.24	36919.230	3.0	72908.170	3.0
277.7821	26.01	-1.85	30388.550	4.5	66377.370	3.5
277.7860	42.01	-.24	11937.313	0.0	47936.247	0.0
277.7884	26.01	-2.05	26170.190	5.5	62158.190	4.5
277.7924	25.01	-3.55	43557.030	1.0	79544.510	2.0
277.7933	24.01	-.50	31083.110	1.5	67070.480	1.5
277.7950	25.02	-4.37	172755.950	3.5	208743.100	2.5
277.8023	9.03	-.45	502411.000	1.0	538397.200	2.0
277.8040	90.01	-1.62	1774.465	0.0	37771.067	0.0
277.8060	45.00	-.86	7743.122	0.0	43739.465	0.0
277.8064	26.01	-2.88	36252.960	2.5	72238.630	2.5
277.8066	23.01	-1.70	37041.110	2.0	73026.760	2.0
277.8066	24.00	-2.63	24833.860	3.0	60819.500	3.0
277.8071	24.01	.52	39824.520	4.5	75810.100	4.5
277.8073	23.00	-3.27	553.020	4.5	36538.580	4.5
277.8096	23.01	-2.65	30318.630	4.0	66303.880	3.0
277.8123	23.03	-2.18	256781.800	1.0	292766.700	2.0
277.8135	12.00	-2.23	21870.464	1.0	57855.214	1.0
277.8161	23.01	-1.54	13609.000	4.0	49593.410	5.0
277.8167	26.02	-3.65	183431.280	5.0	219415.610	5.0
277.8169	7.01	-3.51	178273.380	0.0	214257.690	1.0
277.8180	26.00	-2.09	20874.482	3.0	56858.650	2.0
277.8196	24.00	-.27	25177.390	4.0	61161.350	5.0
277.8214	25.01	-3.86	43557.030	1.0	79540.760	1.0
277.8221	26.00	-.77	6928.266	5.0	42911.897	5.0
277.8246	25.02	-.08	173306.450	6.5	209289.760	6.5
277.8247	27.00	-3.82	7442.410	3.5	43425.710	2.5
277.8266	24.01	-.85	31351.150	2.5	67334.200	3.5
277.8306	26.01	-.10	68000.820	4.5	103983.350	3.5
277.8342	23.01	-5.07	13741.610	3.0	49723.680	4.0
277.8439	24.01	-1.84	44307.440	.5	80288.250	1.5
277.8476	28.01	-4.98	100609.010	2.5	136589.350	3.5
277.8482	25.00	-3.88	30354.210	3.5	66334.470	3.5
277.8496	23.00	-5.74	2424.890	4.5	38404.960	5.5
277.8500	75.00	-.58	14115.066	0.0	50105.708	0.0
277.8504	22.01	-.85	30836.520	1.5	66816.490	1.5
277.8524	24.01	-1.89	32603.730	2.5	68583.440	2.5
277.8525	17.01	-1.02	146469.000	3.0	182448.700	2.0
277.8532	26.01	-4.72	72650.630	4.5	108630.240	5.5
277.8533	28.02	-2.61	98238.200	4.0	134217.800	5.0
277.8579	22.01	-.71	30958.700	2.5	66937.700	2.5
277.8603	25.00	-1.63	23549.200	2.5	59527.890	1.5
277.8690	74.01	.69	16454.134	0.0	52442.315	0.0
277.8710	90.01	-.43	9598.245	0.0	45586.167	0.0
277.8730	24.01	-2.61	33521.230	3.5	69498.270	4.5
277.8760	64.00	-.59	161.315	0.0	36148.590	0.0
277.8772	15.03	-.53	303659.000	4.0	339635.500	3.0
277.8806	25.01	-.86	69044.610	2.0	105020.670	1.0
277.8812	27.00	-.59	15184.040	2.5	51160.030	2.5
277.8820	73.01	.63	13469.806	0.0	49456.304	0.0
277.8824	25.01	-4.33	43536.900	4.0	79512.730	3.0
277.8828	24.01	-1.10	46905.520	1.5	82881.300	2.5
277.8843	25.00	-1.31	30419.610	2.5	66395.190	2.5
277.8864	26.02	-1.40	89697.520	3.0	125672.830	2.0
277.8874	24.01	-2.65	38509.070	3.5	74484.250	2.5
277.8925	26.00	-2.36	24574.655	4.0	60549.180	5.0
277.8936	24.01	-.74	39742.360	2.5	75716.740	3.5
277.8954	25.01	-.62	48333.060	5.0	84307.200	4.0
277.8973	25.01	-2.97	53597.130	2.0	89571.030	3.0
277.8987	23.01	-4.78	13594.730	2.0	49568.450	3.0
277.8990	25.01	-.63	37811.570	1.0	73785.250	2.0
277.9036	25.01	-1.02	36274.290	2.0	72247.380	3.0
277.9036	25.01	-2.21	70546.020	4.0	106519.100	5.0
277.9036	24.00	-1.90	24897.550	4.0	60870.630	4.0
277.9100	73.00	-1.10	3871.561	0.0	39854.433	0.0
277.9124	24.00	-.62	25106.340	3.0	61078.280	3.0
277.9140	64.01	-1.05	2823.013	0.0	38805.367	0.0
277.9182	25.02	-3.74	97000.800	4.5	132971.990	3.5
277.9189	30.02	-2.31	260981.900	3.0	296953.000	2.0
277.9241	23.01	-2.19	16421.510	4.0	52391.940	3.0
277.9282	28.01	-2.00	57420.160	2.5	93390.060	2.5
277.9297	26.01	.03	26352.800	4.5	62322.500	3.5
277.9300	24.01	-2.05	51789.210	3.5	87758.880	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
277.9314	25.00	-.60	30425.710	1.5	66395.190	2.5
277.9316	24.00	-.89	25038.610	5.0	61008.070	5.0
277.9360	41.00	-.85	1129.205	0.0	37108.711	0.0
277.9362	28.01	-3.12	67694.640	2.5	103663.500	1.5
277.9370	72.00	-.50	2339.068	0.0	38318.445	0.0
277.9371	25.02	.03	173063.550	5.5	209032.300	5.5
277.9372	26.01	-4.70	60270.370	3.5	96239.100	4.5
277.9437	25.02	-.32	172682.640	3.5	208650.540	3.5
277.9478	26.02	-2.50	82382.870	3.0	118350.240	4.0
277.9480	42.00	-.43	11050.080	0.0	47028.033	0.0
277.9515	26.02	-4.72	90423.680	2.0	126390.570	1.0
277.9530	17.01	-.37	149798.300	2.0	185765.000	2.0
277.9540	45.00	-.37	10243.505	0.0	46220.681	0.0
277.9550	69.01	-1.23	0.000	0.0	35977.047	0.0
277.9577	25.01	-3.39	70546.020	4.0	106512.100	4.0
277.9589	28.01	-3.21	52205.950	3.5	88171.880	4.5
277.9634	24.01	-.03	54625.760	2.5	90591.100	2.5
277.9651	27.01	-.57	50381.600	3.0	86346.730	3.0
277.9690	25.02	-1.16	172855.020	4.5	208819.640	3.5
277.9700	73.00	-.69	9678.902	0.0	45654.007	0.0
277.9720	74.00	.27	16292.819	0.0	52267.665	0.0
277.9756	25.01	-2.70	30679.240	5.0	66643.010	4.0
277.9810	50.00	-.04	8549.697	0.0	44523.379	0.0
277.9815	24.01	-2.01	55023.300	2.5	90986.310	3.5
277.9869	27.00	-2.16	17233.680	3.5	53195.980	2.5
277.9901	10.02	-.39	353177.160	2.0	389139.050	3.0
277.9905	26.01	-.80	37227.320	.5	73189.160	1.5
277.9988	25.00	-.73	23296.670	3.5	59257.440	4.5
278.0010	58.01	-.72	2500.383	0.0	38471.477	0.0
278.0025	10.01	-1.22	246415.040	1.5	282375.330	1.5
278.0036	26.01	-1.05	37227.320	.5	73187.460	.5
278.0040	42.01	.97	12824.546	0.0	48795.251	0.0
278.0045	25.00	-2.34	25265.740	5.5	61225.770	5.5
278.0050	25.01	-4.78	30684.810	1.0	66644.780	1.0
278.0062	25.00	-1.27	25265.740	5.5	61225.550	6.5
278.0090	23.01	-1.85	13609.000	4.0	49568.450	3.0
278.0094	30.02	-2.56	258075.700	3.0	294035.100	2.0
278.0155	30.02	-4.56	258075.700	3.0	294034.300	4.0
278.0165	24.01	-2.16	38315.000	2.5	74273.480	1.5
278.0176	23.02	-3.91	110181.470	2.5	146139.800	2.5
278.0194	26.01	-3.75	27314.930	3.5	63273.030	2.5
278.0217	28.01	-4.00	99442.860	4.5	135400.670	3.5
278.0220	25.01	-2.08	36364.300	1.0	72322.070	0.0
278.0220	33.00	.84	18551.230	0.0	54519.607	0.0
278.0227	24.01	-2.88	51584.440	1.5	87542.120	.5
278.0240	41.01	.14	4113.534	0.0	40081.652	0.0
278.0280	74.00	.13	19438.462	0.0	55406.062	0.0
278.0292	24.01	-1.04	33521.230	3.5	69478.060	2.5
278.0325	15.01	-2.57	106001.990	1.0	141958.400	1.0
278.0332	25.01	-2.92	36364.300	1.0	72320.620	1.0
278.0333	24.01	-.00	38362.560	1.5	74318.860	2.5
278.0340	27.00	-5.78	7442.410	3.5	43398.620	3.5
278.0340	73.01	-.54	967.890	0.0	36934.714	0.0
278.0390	28.01	-3.09	100592.980	3.5	136548.550	2.5
278.0437	24.00	-2.79	24286.540	1.0	60241.500	0.0
278.0470	25.01	-2.37	53805.800	4.0	89760.330	5.0
278.0477	28.01	-1.59	56371.410	3.5	92325.850	3.5
278.0500	28.01	-2.11	100592.980	3.5	136547.130	3.5
278.0520	83.00	-.32	11292.053	0.0	47256.549	0.0
278.0531	26.00	-2.57	11976.239	4.0	47929.981	4.0
278.0543	28.01	-3.80	99559.330	2.5	135512.920	2.5
278.0548	28.01	-2.09	100592.980	3.5	136546.500	4.5
278.0574	22.01	-3.04	4628.610	2.5	40581.800	2.5
278.0588	17.01	-.85	149952.400	1.0	185905.400	1.0
278.0597	24.01	-1.13	31117.590	2.5	67070.480	1.5
278.0682	24.00	-4.38	8307.570	4.0	44259.360	3.0
278.0693	26.00	-.78	20641.110	4.0	56592.760	4.0
278.0815	24.00	-4.68	25106.340	3.0	61056.410	4.0
278.0854	18.01	-3.80	172816.210	.5	208765.770	.5
278.0875	28.01	-3.92	100592.980	3.5	136542.280	3.5
278.0884	26.00	-2.56	7376.762	4.0	43325.946	3.0
278.0885	24.01	-.35	30307.600	1.5	66256.770	.5
278.0901	28.01	-4.52	56424.490	1.5	92373.450	2.5
278.0961	25.02	-4.78	97023.800	3.5	132971.990	3.5
278.1009	16.01	-2.56	128233.070	2.5	164180.630	3.5
278.1014	28.02	-3.42	103306.100	3.0	139253.600	2.0
278.1066	24.01	-.28	38509.070	3.5	74455.900	4.5
278.1145	24.00	-.54	25177.390	4.0	61123.200	4.0
278.1154	25.00	-2.42	25265.740	5.5	61211.430	4.5
278.1176	30.02	-2.30	258178.300	4.0	294123.700	3.0
278.1176	9.03	-.02	502652.400	2.0	538597.800	3.0
278.1282	12.00	-2.01	21911.178	2.0	57855.214	1.0
278.1290	77.00	-.27	6291.287	0.0	42245.826	0.0
278.1347	22.01	-3.37	16515.790	.5	52458.980	1.5
278.1370	73.00	-.40	9598.245	0.0	45551.750	0.0
278.1374	10.01	-2.82	281720.280	1.5	317663.130	1.5
278.1400	25.01	-1.19	36364.300	1.0	72306.810	2.0
278.1400	64.01	-.05	3064.986	0.0	39018.103	0.0
278.1409	28.02	-4.19	82172.900	3.0	118115.300	2.0
278.1410	27.01	-3.13	25317.720	1.0	61260.100	2.0
278.1417	25.02	-3.03	143209.800	2.5	179152.090	3.5
278.1417	10.00	-4.85	135888.717	1.0	171831.000	0.0
278.1430	75.00	-.22	14115.066	0.0	50067.795	0.0
278.1441	10.00	-3.85	135888.717	1.0	171830.700	1.0
278.1484	23.01	.20	37352.390	5.0	73293.820	5.0
278.1489	24.01	-2.37	38563.150	4.5	74504.510	4.5
278.1530	24.01	-.00	54784.670	3.5	90725.500	3.5
278.1543	23.01	-.88	37205.010	3.0	73145.680	3.0
278.1559	26.02	-3.84	89697.520	3.0	125637.980	3.0
278.1568	25.00	-1.32	25285.430	4.5	61225.770	5.5
278.1609	24.01	-1.14	46823.640	.5	82763.450	1.5
278.1626	10.00	-3.45	135888.717	1.0	171828.300	2.0
278.1641	30.02	-3.26	260981.900	3.0	296921.300	3.0
278.1662	24.00	-6.94	8307.570	4.0	44246.700	4.0
278.1737	25.00	-1.41	27201.540	2.5	63139.700	2.5
278.1764	25.01	-2.59	67865.630	4.0	103803.440	3.0
278.1790	73.00	-.84	10888.765	0.0	46836.842	0.0
278.1799	25.01	-1.66	37847.900	2.0	73785.250	2.0
278.1837	26.00	-7.22	7985.783	2.0	43922.652	3.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
278.1890	63.01	-.84	1613.150	0.0	37559.934	0.0
278.1890	58.01	-1.04	967.890	0.0	36914.674	0.0
278.1905	8.02	-2.51	366594.010	2.0	402530.000	3.0
278.1919	25.01	-3.95	35004.430	3.0	70940.240	2.0
278.1933	25.01	.11	65565.680	4.0	101501.300	3.0
278.1989	9.02	.05	380250.520	2.5	416185.420	2.5
278.1990	58.01	-.35	6533.259	0.0	42478.751	0.0
278.2029	23.00	-6.97	2311.370	3.5	38245.750	3.5
278.2048	26.00	-3.00	17726.985	2.0	53661.130	3.0
278.2051	25.01	-3.89	37851.150	3.0	73785.250	2.0
278.2064	28.01	-3.95	99559.330	2.5	135493.260	1.5
278.2085	27.00	-5.45	8460.810	2.5	44394.470	3.5
278.2099	10.00	-4.13	135888.717	1.0	171822.200	1.0
278.2109	25.01	-2.03	65565.680	4.0	101499.030	4.0
278.2116	23.02	-3.14	61578.740	.5	97512.000	1.5
278.2143	25.01	-.45	37847.900	2.0	73780.810	3.0
278.2144	30.02	-2.14	260988.400	4.0	296921.300	3.0
278.2150	24.01	-1.42	39877.280	3.5	75810.100	4.5
278.2186	26.01	-2.75	47626.140	.5	83558.500	.5
278.2245	25.00	-3.05	23549.200	2.5	59480.800	2.5
278.2257	28.01	-1.61	100592.980	3.5	136524.420	4.5
278.2257	27.00	-4.23	4690.180	2.5	40621.620	1.5
278.2298	22.01	-.43	30836.520	1.5	66767.430	.5
278.2348	21.01	-.13	27443.650	2.0	63373.910	2.0
278.2349	24.01	-1.51	33418.110	2.5	69348.360	1.5
278.2359	25.01	-1.98	49517.580	5.0	85447.700	5.0
278.2360	41.00	.55	9275.615	0.0	45216.327	0.0
278.2395	25.01	-2.58	37851.150	3.0	73780.810	3.0
278.2407	24.00	-1.35	20519.600	6.0	56449.100	6.0
278.2433	24.01	-.57	31083.110	1.5	67012.280	2.5
278.2472	25.00	-4.84	18531.640	3.5	54460.300	2.5
278.2477	17.03	-.03	216468.100	2.0	252396.700	2.0
278.2486	9.02	-4.31	351330.800	1.5	387259.280	1.5
278.2534	28.01	-3.96	100619.260	4.5	136547.130	3.5
278.2550	76.00	-.31	4113.534	0.0	40051.792	0.0
278.2582	28.01	-2.75	100619.260	4.5	136546.500	4.5
278.2595	24.01	-.39	38509.070	3.5	74436.140	2.5
278.2637	23.01	-.03	37352.390	5.0	73278.920	4.0
278.2653	25.01	-3.81	70231.070	2.0	106157.400	3.0
278.2678	25.00	-2.53	25285.430	4.5	61211.430	4.5
278.2724	21.01	-1.83	27602.320	3.0	63527.730	4.0
278.2743	24.00	-2.44	20523.940	5.0	56449.100	6.0
278.2767	24.01	-2.35	51669.750	2.5	87594.600	1.5
278.2857	25.00	-1.08	25287.740	3.5	61211.430	4.5
278.2862	24.01	.02	69498.270	4.5	105421.900	5.5
278.2862	25.01	-2.16	65565.680	4.0	101489.310	5.0
278.2898	24.01	-1.96	32836.840	3.5	68760.000	3.5
278.2905	25.01	-2.63	72247.380	3.0	108170.450	2.0
278.2909	28.01	-4.22	100619.260	4.5	136542.280	3.5
278.2918	18.03	-.88	268151.380	2.5	304074.290	2.5
278.2941	28.01	-3.45	52205.950	3.5	88128.560	2.5
278.2979	25.01	-2.76	53597.130	2.0	89519.250	2.0
278.2991	24.00	-1.52	25038.610	5.0	60960.580	4.0
278.2992	24.00	-1.78	24897.550	4.0	60819.500	3.0
278.3030	45.00	-1.02	3226.301	0.0	39158.361	0.0
278.3032	28.01	-2.82	99340.550	3.5	135261.990	4.5
278.3037	10.02	-.84	353148.000	3.0	389069.370	2.0
278.3060	90.01	-.85	4436.164	0.0	40367.836	0.0
278.3066	19.02	-1.95	209461.300	.5	245382.300	.5
278.3070	25.00	-.90	23549.200	2.5	59470.140	3.5
278.3073	28.01	-4.12	94067.140	1.5	129988.050	2.5
278.3084	26.01	-2.70	25805.320	4.5	61726.090	3.5
278.3120	74.00	.43	19438.462	0.0	55369.360	0.0
278.3166	26.01	-8.33	26055.400	2.5	61975.110	1.5
278.3194	24.01	-2.35	48399.190	1.5	84318.540	1.5
278.3253	26.01	-2.52	47389.820	1.5	83308.400	2.5
278.3284	25.02	-4.37	140776.880	5.5	176695.060	4.5
278.3315	9.02	-1.04	380250.520	2.5	416168.300	1.5
278.3360	25.02	-2.87	85173.880	1.5	121091.080	1.5
278.3391	26.01	-1.79	36126.410	1.5	72043.210	1.5
278.3438	26.01	-2.78	36252.960	2.5	72169.150	1.5
278.3482	26.01	-2.15	64834.120	1.5	100749.750	2.5
278.3490	90.01	-.66	7743.122	0.0	43669.244	0.0
278.3523	12.02	-1.66	534197.700	1.0	570112.800	0.0
278.3531	30.02	-4.32	260805.900	2.0	296720.900	3.0
278.3542	25.00	-1.66	30419.610	2.5	66334.470	3.5
278.3546	26.00	-3.56	12560.933	3.0	48475.740	3.0
278.3549	24.01	-2.70	38509.070	3.5	74423.840	3.5
278.3562	15.04	.03	391242.400	1.5	427157.000	.5
278.3570	75.00	.06	11695.340	0.0	47620.429	0.0
278.3573	25.01	-.96	49820.160	2.0	85734.620	3.0
278.3587	22.01	-1.42	29544.370	2.5	65458.650	3.5
278.3616	28.01	-4.85	78955.450	1.5	114869.350	1.5
278.3625	23.02	-4.52	105282.650	2.5	141196.430	2.5
278.3687	26.01	.20	26170.190	5.5	62083.170	4.5
278.3690	72.00	-.73	6533.259	0.0	42456.799	0.0
278.3712	18.02	-.67	207233.090	2.0	243145.760	2.0
278.3719	25.00	-2.61	27201.540	2.5	63114.110	1.5
278.3822	9.01	-3.01	253312.480	1.0	289223.730	1.0
278.3847	24.01	-.71	38362.560	1.5	74273.480	1.5
278.3872	30.02	-2.38	258277.700	3.0	294188.300	2.0
278.3880	76.01	.43	7823.779	0.0	43744.868	0.0
278.3951	10.00	-4.47	135888.717	1.0	171798.300	1.0
278.3965	17.02	-1.14	209042.100	.5	244951.500	.5
278.3965	8.01	-3.28	229946.600	2.5	265856.000	2.5
278.3966	26.01	-2.08	31364.470	1.5	67273.860	1.5
278.4009	26.00	-.89	20874.482	3.0	56783.306	3.0
278.4055	23.00	-5.71	553.020	4.5	36461.260	3.5
278.4079	26.01	-3.21	30764.460	3.5	66672.390	3.5
278.4126	25.02	-4.52	140557.460	4.5	176464.780	3.5
278.4212	25.01	-.21	39813.380	2.0	75719.590	1.0
278.4264	24.01	-3.73	32854.460	4.5	68760.000	3.5
278.4265	28.01	-2.64	99559.330	2.5	135464.860	3.5
278.4274	26.01	-1.88	31368.450	.5	67273.860	1.5
278.4294	28.01	-3.66	100619.260	4.5	136524.420	4.5
278.4313	24.01	-.74	32855.090	2.5	68760.000	3.5
278.4327	22.01	-4.00	8997.690	3.5	44902.420	2.5
278.4328	23.01	-6.03	16340.970	3.0	52245.680	2.0
278.4339	26.00	-3.04	19621.004	5.0	55525.580	5.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
278.4442	28.01	-3.31	79923.880	4.5	115827.120	3.5
278.4463	10.00	-4.21	135888.717	1.0	171791.700	2.0
278.4469	18.03	.26	268171.380	1.5	304074.290	2.5
278.4483	25.01	-1.38	49465.130	3.0	85367.850	2.0
278.4486	26.01	-1.65	42334.860	2.5	78237.540	3.5
278.4500	25.01	-4.78	55115.800	2.0	91018.300	3.0
278.4522	28.01	-2.92	99559.330	2.5	135461.550	2.5
278.4625	24.00	-1.60	25177.390	4.0	61078.280	3.0
278.4634	22.01	-2.05	4897.600	3.5	40798.370	3.5
278.4635	9.02	-2.16	430474.750	2.5	466275.500	2.5
278.4647	26.02	-4.62	143320.850	6.0	179221.450	7.0
278.4660	70.01	-.22	33311.556	0.0	69222.583	0.0
278.4773	23.00	-6.71	2424.890	4.5	38323.870	4.5
278.4814	24.01	-2.66	51789.210	3.5	87687.660	4.5
278.4814	9.02	-3.91	390834.600	2.5	426733.040	2.5
278.4849	25.03	-3.77	152858.200	3.0	188756.200	3.0
278.4859	24.00	-9.45	0.000	3.0	35897.870	2.0
278.4959	25.02	-.16	172855.020	4.5	208751.600	4.5
278.4970	73.01	.19	5565.369	0.0	41472.399	0.0
278.4972	26.01	-3.02	26932.740	.5	62829.160	.5
278.4980	90.01	-.73	7259.177	0.0	43166.078	0.0
278.4990	42.01	.92	16857.422	0.0	52764.194	0.0
278.5020	26.01	-4.58	3117.480	1.5	39013.280	1.5
278.5030	50.00	-.54	8549.697	0.0	44455.953	0.0
278.5041	23.00	-5.72	2220.130	2.5	38115.650	3.5
278.5053	25.01	-1.52	34761.810	5.0	70657.180	5.0
278.5070	28.01	-4.07	99442.860	4.5	135338.010	5.5
278.5070	69.01	-1.10	161.315	0.0	36067.055	0.0
278.5106	24.01	-.47	31117.590	2.5	67012.280	2.5
278.5114	25.02	-4.76	172755.950	3.5	208650.540	3.5
278.5183	30.02	-3.83	260981.900	3.0	296875.600	2.0
278.5209	26.01	.20	41968.110	5.5	77861.470	4.5
278.5210	39.01	.03	23632.653	0.0	59536.588	0.0
278.5210	75.00	-.28	14115.066	0.0	50019.001	0.0
278.5220	77.00	.05	10485.478	0.0	46389.285	0.0
278.5223	25.01	-1.46	67910.260	4.0	103803.440	3.0
278.5235	25.01	-.61	39826.570	1.0	75719.590	1.0
278.5243	26.00	-2.91	18378.187	2.0	54271.110	1.0
278.5256	24.01	-3.24	38563.150	4.5	74455.900	4.5
278.5258	25.01	-1.59	36427.890	0.0	72320.620	1.0
278.5261	10.01	-4.18	280989.530	1.5	316882.210	2.5
278.5280	56.00	-2.01	0.000	0.0	35903.033	0.0
278.5297	24.01	-1.40	39824.520	4.5	75716.740	3.5
278.5298	10.02	-.04	353177.160	2.0	389069.370	2.0
278.5338	25.00	-1.98	27248.000	1.5	63139.700	2.5
278.5415	25.01	-3.58	30795.750	4.0	66686.450	3.0
278.5436	10.01	-4.77	313461.970	4.5	349352.400	4.5
278.5438	10.01	-4.64	313461.990	5.5	349352.400	4.5
278.5476	16.02	-.72	174036.190	1.0	209926.100	1.0
278.5501	27.01	-2.40	27902.500	4.0	63792.100	4.0
278.5552	28.01	-1.92	100619.260	4.5	136508.200	5.5
278.5566	25.01	-1.81	71078.180	1.0	106966.940	2.0
278.5590	39.01	-.34	24519.886	0.0	60418.924	0.0
278.5640	8.01	-4.40	229968.200	1.5	265856.000	2.5
278.5650	44.00	-.38	9114.300	0.0	45012.564	0.0
278.5664	26.02	-3.76	98661.880	1.0	134549.380	1.0
278.5700	24.01	.30	33619.130	4.5	69506.160	3.5
278.5723	24.01	-1.00	54625.760	2.5	90512.500	1.5
278.5749	17.01	-.88	150019.000	0.0	185905.400	1.0
278.5790	26.01	-2.96	31387.980	2.5	67273.860	1.5
278.5797	27.01	-3.82	11651.310	2.0	47537.100	2.0
278.5816	23.01	-.47	37531.090	4.0	73416.630	5.0
278.5847	28.01	-3.28	99559.330	2.5	135444.470	3.5
278.5880	74.00	-.20	18873.860	0.0	54769.161	0.0
278.5895	27.00	-1.18	16470.600	1.5	52355.120	.5
278.5906	25.01	-1.76	71078.180	1.0	106962.560	1.0
278.5928	30.02	-3.75	258239.600	4.0	294123.700	3.0
278.5959	9.03	.26	502970.400	3.0	538854.100	4.0
278.5974	24.00	-4.75	26787.500	3.0	62671.000	4.0
278.6008	22.01	-.77	31113.610	3.5	66996.670	3.5
278.6044	27.01	-1.68	27484.300	3.0	63366.900	2.0
278.6086	28.00	-1.22	13521.352	2.0	49403.420	1.0
278.6140	75.00	-.33	21616.215	0.0	57508.166	0.0
278.6162	10.02	-.89	353177.160	2.0	389058.240	1.0
278.6169	26.00	-3.38	17927.378	1.0	53808.370	1.0
278.6182	25.00	-1.76	23719.520	1.5	59600.350	2.5
278.6192	17.02	-.63	186220.000	.5	222100.700	1.5
278.6266	25.00	-1.06	27201.540	2.5	63081.280	2.5
278.6300	72.01	-.19	15163.614	0.0	51053.504	0.0
278.6310	76.00	-.26	5081.424	0.0	40971.185	0.0
278.6313	24.01	-2.31	33619.130	4.5	69498.270	4.5
278.6322	24.00	-4.85	25177.390	4.0	61056.410	4.0
278.6332	24.00	-3.28	24940.610	2.0	60819.500	3.0
278.6335	18.01	-3.01	172816.210	.5	208695.070	1.5
278.6340	26.01	-3.12	62689.960	2.5	98568.750	3.5
278.6363	9.02	-3.26	430474.750	2.5	466253.240	1.5
278.6379	9.02	-1.12	380307.130	1.5	416185.420	2.5
278.6383	25.01	-2.49	71078.180	1.0	106956.420	0.0
278.6467	25.01	-.01	49882.150	4.0	85759.300	4.0
278.6470	24.01	-.02	38396.360	.5	74273.480	1.5
278.6487	24.02	-1.94	66222.700	5.0	102099.600	4.0
278.6495	24.01	-2.01	51789.210	3.5	87666.000	2.5
278.6560	75.00	-.32	14921.641	0.0	50808.182	0.0
278.6717	25.02	-4.69	97023.800	3.5	132897.740	2.5
278.6770	73.01	-.59	2581.041	0.0	38464.878	0.0
278.6800	76.00	-1.25	2661.698	0.0	38545.149	0.0
278.6839	24.00	.71	23933.900	4.0	59806.270	5.0
278.6842	25.02	-1.25	173063.550	5.5	208935.880	4.5
278.6842	25.01	-1.38	53698.700	2.0	89571.030	3.0
278.6852	10.01	-4.33	313480.200	3.5	349352.400	4.5
278.6855	10.01	-2.92	313480.240	4.5	349352.400	4.5
278.6860	40.00	-.35	5000.766	0.0	40883.444	0.0
278.6870	10.02	-.81	353197.400	1.0	389069.370	2.0
278.6888	25.01	-4.68	31022.050	0.0	66893.790	1.0
278.6909	25.01	-2.17	46903.260	2.0	82774.730	1.0
278.6924	10.01	-4.66	281025.940	2.5	316897.210	3.5
278.6997	23.01	-.10	37352.390	5.0	73222.720	4.0
278.7015	27.00	-2.21	17233.680	3.5	53103.780	3.5
278.7023	23.01	-.71	36919.230	3.0	72789.230	3.0
278.7066	25.01	-.96	49889.860	3.0	85759.300	4.0
278.7116	26.00	-1.91	19621.004	5.0	55489.810	6.0
278.7130	24.01	-.61	46823.640	.5	82694.260	.5
278.7130	90.01	-.68	6210.629	0.0	42089.831	0.0
278.7143	25.02	-3.85	100001.300	2.5	135869.760	3.5
278.7246	23.01	-1.97	36425.070	4.0	72292.200	4.0
278.7251	23.01	-.25	37041.110	2.0	72908.170	3.0
278.7253	26.01	-1.14	42658.230	3.5	78525.270	2.5
278.7260	25.00	-2.59	23549.200	2.5	59416.150	1.5
278.7261	24.01	-3.36	69498.270	4.5	105365.200	4.5
278.7321	24.01	-1.14	34813.060	5.5	70679.220	4.5
278.7321	10.01	-3.36	292451.780	1.5	328317.950	2.5
278.7325	25.00	-2.47	27248.000	1.5	63114.110	1.5
278.7355	25.01	-3.56	72306.810	2.0	108172.540	1.0
278.7359	24.00	-4.96	26796.280	2.0	62661.960	3.0
278.7387	25.01	-4.81	70657.180	5.0	106522.500	6.0
278.7454	9.02	-.63	389525.550	1.5	425390.010	.5
278.7456	26.02	-4.79	143883.740	5.0	179748.170	5.0
278.7463	23.01	-3.39	32040.760	2.0	67905.100	3.0
278.7516	26.02	-3.53	82382.870	3.0	118246.520	3.0
278.7517	25.01	-2.69	72306.810	2.0	108170.450	2.0
278.7559	30.02	-4.24	258171.200	5.0	294034.300	4.0
278.7565	25.01	-4.32	30679.240	5.0	66542.260	5.0
278.7602	24.01	.14	30864.610	2.5	66727.160	2.5
278.7610	25.01	-1.37	47073.560	3.0	82936.010	3.0
278.7651	25.01	-1.93	70657.180	5.0	106519.100	5.0
278.7657	24.01	-4.09	48632.360	3.5	84494.200	2.5
278.7680	64.00	-.38	483.945	0.0	36356.068	0.0
278.7690	73.00	.12	9194.957	0.0	45066.951	0.0
278.7709	9.02	-.13	380307.130	1.5	416168.300	1.5
278.7735	10.02	-.42	353197.400	1.0	389058.240	1.0
278.7746	24.01	-1.22	38563.150	4.5	74423.840	3.5
278.7799	25.02	-2.34	100001.300	2.5	135861.320	1.5
278.7812	25.00	-4.51	17451.520	2.5	53311.370	1.5
278.7816	27.01	-2.09	27484.300	3.0	63344.100	3.0
278.7830	42.00	.07	12259.943	0.0	48130.136	0.0
278.7860	9.02	-1.96	431967.930	.5	467827.160	1.5
278.7875	24.01	-.05	69506.160	3.5	105365.200	4.5
278.7908	24.01	-1.42	38563.150	4.5	74421.760	5.5
278.7933	26.00	-2.58	11976.239	4.0	47834.529	5.0
278.7954	26.00	-4.47	11976.239	4.0	47834.260	3.0
278.7960	70.01	-1.00	30085.255	0.0	65953.775	0.0
278.7961	24.01	-.44	46905.520	1.5	82763.450	1.5
278.7972	22.01	-.22	30958.700	2.5	66816.490	1.5
278.7980	74.00	-1.01	3306.958	0.0	39175.221	0.0
278.7982	25.02	-1.84	100001.300	2.5	135858.960	2.5
278.8102	26.00	.04	6928.266	5.0	42784.387	6.0
278.8111	30.02	-4.39	258178.300	4.0	294034.300	4.0
278.8136	24.01	-3.89	31531.620	1.5	67387.300	2.5
278.8199	25.01	-2.12	72247.380	3.0	108102.250	3.0
278.8236	26.02	-1.35	89783.590	4.0	125637.980	3.0
278.8236	24.02	-2.77	65890.900	3.0	101745.300	3.0
278.8248	24.00	-3.31	25106.340	3.0	60960.580	4.0
278.8351	27.00	-4.49	7442.410	3.5	43295.320	4.5
278.8386	25.01	-1.91	49882.150	4.0	85734.620	3.0
278.8407	23.01	-3.54	30306.400	3.0	66158.600	4.0
278.8428	25.01	-3.84	72320.620	1.0	108172.540	1.0
278.8516	18.01	-5.00	173347.830	1.5	209198.630	2.5
278.8541	25.01	-3.72	72322.070	0.0	108172.540	1.0
278.8555	9.03	-.34	502411.000	1.0	538261.300	1.0
278.8591	25.01	-3.56	72320.620	1.0	108170.450	2.0
278.8673	25.00	-1.85	23719.520	1.5	59568.290	.5
278.8693	26.02	-4.78	87901.870	3.0	123750.390	3.0
278.8694	9.02	-4.17	351519.420	2.5	387367.920	2.5
278.8694	12.02	-2.00	431530.000	1.0	467378.500	1.0
278.8791	25.01	-2.63	30795.750	4.0	66643.010	4.0
278.8871	22.01	-3.34	16625.250	1.5	52471.480	2.5
278.8889	30.02	-3.89	258277.700	3.0	294123.700	3.0
278.8897	24.00	-3.31	23512.000	1.0	59357.900	2.0
278.8902	20.02	-.87	347344.370	5.0	383190.200	5.0
278.8931	20.02	-2.59	347344.370	5.0	383189.820	4.0
278.8940	24.01	-3.73	51669.750	2.5	87515.100	3.5
278.8940	42.00	-.32	12259.943	0.0	48115.860	0.0
278.8960	18.03	.13	250906.600	1.5	286751.680	2.5
278.8982	24.01	-1.72	38269.670	3.5	74114.480	3.5
278.8982	26.01	-3.74	27620.390	2.5	63465.190	1.5
278.8985	25.01	-1.66	49889.860	3.0	85734.620	3.0
278.9019	23.01	-2.84	36673.510	2.0	72517.840	1.0
278.9027	25.01	-1.64	47073.560	3.0	82917.780	2.0
278.9070	74.00	.34	19519.120	0.0	55373.365	0.0
278.9084	24.01	-.47	31168.780	3.5	67012.280	2.5
278.9150	73.01	.87	17018.737	0.0	52871.954	0.0
278.9180	24.00	-2.43	20519.600	6.0	56361.860	5.0
278.9191	21.01	.02	27602.320	3.0	63444.430	3.0
278.9192	30.02	-4.32	260878.800	3.0	296720.900	3.0
278.9193	25.00	-1.76	17282.000	3.5	53124.090	3.5
278.9197	26.02	-4.89	147614.650	2.0	183456.690	3.0
278.9234	26.02	-4.85	143883.740	5.0	179725.310	6.0
278.9252	28.01	-2.62	99559.330	2.5	135400.670	3.5
278.9270	75.00	-.56	13711.778	0.0	49563.452	0.0
278.9297	24.01	-.35	47040.540	2.5	82881.300	2.5
278.9299	25.01	.19	65658.300	5.0	101499.030	4.0
278.9351	25.00	-4.22	17451.520	2.5	53291.580	2.5
278.9352	24.01	.16	50667.330	3.5	86507.380	2.5
278.9358	23.01	-2.44	30318.630	4.0	66158.600	4.0
278.9363	9.02	.36	406908.950	1.5	442748.850	2.5
278.9379	25.01	-.94	69215.730	1.0	105055.430	2.0
278.9398	24.01	.39	39877.280	3.5	75716.740	3.5
278.9411	10.01	-3.76	302839.280	2.5	338678.570	3.5
278.9457	30.02	-4.68	264237.400	1.0	300076.100	2.0
278.9480	26.01	-3.38	36126.410	1.5	71964.810	2.5
278.9488	28.02	-3.14	82277.000	1.0	118115.300	2.0
278.9488	24.02	-4.32	118055.200	1.0	153893.500	2.0
278.9498	24.00	-2.31	20523.690	4.0	56361.860	5.0
278.9500	72.01	.28	17260.709	0.0	53109.427	0.0
278.9518	24.00	-1.51	20523.940	5.0	56361.860	5.0
278.9550	27.01	-1.94	27469.200	5.0	63306.700	5.0
278.9581	17.02	-2.37	182076.000	1.5	217913.100	1.5
278.9607	26.01	-3.87	62293.200	6.5	98129.980	6.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
278.9678	26.00	-3.33	11976.239	4.0	47812.104	4.0
278.9680	74.00	-1.55	4758.794	0.0	40605.199	0.0
278.9700	26.02	-1.97	82410.940	2.0	118246.520	3.0
278.9726	25.00	-1.49	23549.200	2.5	59384.450	1.5
278.9730	72.01	.46	17583.339	0.0	53429.102	0.0
278.9770	73.00	-.42	12179.286	0.0	48024.535	0.0
278.9772	25.01	-3.06	34910.430	4.0	70745.080	3.0
278.9776	30.02	-2.74	258171.200	5.0	294005.600	5.0
278.9844	22.01	-3.97	16625.250	1.5	52458.980	1.5
278.9857	26.01	-2.82	47626.140	.5	83459.700	1.5
278.9878	26.00	-2.25	24338.766	3.0	60172.060	4.0
278.9879	25.00	-1.87	27248.000	1.5	63081.280	2.5
278.9976	25.01	-2.34	46903.260	2.0	82735.290	2.0
278.9977	24.00	-2.63	25038.610	5.0	60870.630	4.0
278.9982	25.01	-.31	37851.150	3.0	73683.110	4.0
279.0004	25.01	-4.40	53597.130	2.0	89428.800	3.0
279.0010	42.00	-.46	16615.449	0.0	52457.614	0.0
279.0056	25.01	-2.01	65658.300	5.0	101489.310	5.0
279.0072	26.01	-.71	64087.500	2.5	99918.300	1.5
279.0081	24.00	-1.77	25177.390	4.0	61008.070	5.0
279.0134	22.00	-4.66	170.132	3.0	36000.144	4.0
279.0140	40.00	.04	5000.766	0.0	40841.261	0.0
279.0180	26.01	-1.89	48039.230	2.5	83868.650	2.5
279.0252	23.01	-1.46	20343.000	2.0	56171.490	1.0
279.0278	24.00	.84	24056.110	5.0	59884.270	6.0
279.0310	28.01	-4.66	98467.250	3.5	134294.990	2.5
279.0310	42.00	-.29	11372.710	0.0	47211.022	0.0
279.0329	30.02	-3.82	258178.300	4.0	294005.600	5.0
279.0352	25.00	-1.75	17282.000	3.5	53109.210	2.5
279.0356	24.01	-3.29	48491.390	2.5	84318.540	1.5
279.0381	23.01	-5.14	13741.610	3.0	49568.450	3.0
279.0500	3.01	-1.79	561749.000	0.0	597584.872	0.0
279.0520	26.00	-2.07	19621.004	5.0	55446.060	4.0
279.0542	12.01	-3.86	69804.950	.5	105629.720	1.5
279.0546	26.01	-3.45	30764.460	3.5	66589.170	4.5
279.0557	28.01	-3.06	51045.460	4.5	86870.030	4.5
279.0570	41.01	-.07	10485.478	0.0	46320.451	0.0
279.0595	22.01	-.04	31113.610	3.5	66937.700	2.5
279.0645	24.01	.03	50687.630	2.5	86511.080	1.5
279.0660	22.00	-2.61	11639.804	3.0	47463.060	4.0
279.0664	28.01	-4.98	99559.330	2.5	135382.530	1.5
279.0710	73.00	-1.11	3871.561	0.0	39704.736	0.0
279.0711	28.02	-2.50	121412.200	2.0	157234.800	1.0
279.0721	28.01	-2.37	101740.270	3.5	137562.740	3.5
279.0723	25.01	-3.55	53017.160	1.0	88839.600	1.0
279.0750	26.01	-4.75	2837.940	2.5	38660.040	3.5
279.0777	23.01	-3.25	37205.010	3.0	73026.760	2.0
279.0777	12.01	.28	35669.310	.5	71491.060	1.5
279.0787	25.01	-3.54	70342.580	3.0	106164.200	4.0
279.0820	26.02	-4.15	147635.950	3.0	183457.150	4.0
279.0846	23.00	-8.38	2424.890	4.5	38245.750	3.5
279.0871	25.01	-.61	53698.700	2.0	89519.250	2.0
279.0900	76.00	-.16	15082.956	0.0	50913.692	0.0
279.0919	25.00	-1.15	23296.670	3.5	59116.600	2.5
279.0933	24.01	-.87	50687.630	2.5	86507.380	2.5
279.0940	26.00	-1.37	21038.987	2.0	56858.650	2.0
279.0940	75.00	-.20	15647.559	0.0	51477.781	0.0
279.0977	27.01	-2.83	49348.200	4.0	85167.380	3.0
279.0981	28.01	-2.53	99442.860	4.5	135261.990	4.5
279.0981	28.01	-3.40	98467.250	3.5	134286.380	4.5
279.0994	26.01	-8.94	26352.800	4.5	62171.760	3.5
279.1009	27.00	-1.27	16195.680	.5	52014.450	1.5
279.1010	90.01	-.81	6613.917	0.0	42443.240	0.0
279.1084	25.00	-.96	17052.290	4.5	52870.100	3.5
279.1117	12.01	-4.16	69804.950	.5	105622.340	.5
279.1160	45.00	-1.73	3226.301	0.0	39053.699	0.0
279.1183	25.01	-.94	43696.190	3.0	79512.730	3.0
279.1200	39.00	-1.91	0.000	0.0	35826.884	0.0
279.1208	9.02	-4.14	430474.750	2.5	466190.970	3.5
279.1238	24.01	-1.88	51943.040	4.5	87758.880	3.5
279.1241	30.02	-3.12	264237.400	1.0	300053.200	2.0
279.1282	28.01	-2.65	79923.880	4.5	115739.150	4.5
279.1290	75.00	.02	16212.162	0.0	52037.891	0.0
279.1317	25.01	-4.82	70342.580	3.0	106157.400	3.0
279.1318	25.02	-4.70	97271.760	5.5	133086.570	4.5
279.1348	6.01	-2.96	195752.580	1.5	231567.000	.5
279.1355	28.01	-4.50	97799.660	1.5	133613.990	1.5
279.1370	73.01	.10	5242.739	0.0	41067.442	0.0
279.1404	24.01	-.35	47227.500	3.5	83041.200	3.5
279.1475	24.01	-2.31	31531.620	1.5	67344.420	2.5
279.1490	17.01	-.99	149952.400	1.0	185765.000	2.0
279.1500	23.01	-2.01	11295.510	0.0	47107.980	1.0
279.1507	23.00	-6.47	2311.370	3.5	38123.760	4.5
279.1510	57.01	.37	21938.845	0.0	57761.751	0.0
279.1514	28.02	-4.29	78482.900	1.0	114295.200	0.0
279.1526	20.02	-2.40	347344.370	5.0	383156.510	4.0
279.1540	42.01	.30	29843.282	0.0	65665.803	0.0
279.1574	25.00	-1.39	23549.200	2.5	59360.720	2.5
279.1587	20.02	-.62	243930.440	1.0	279741.800	2.0
279.1630	27.00	-3.05	14036.280	1.5	49847.080	2.5
279.1670	73.00	-.79	5968.656	0.0	41789.509	0.0
279.1709	24.01	-2.20	38509.070	3.5	74318.860	2.5
279.1740	41.01	.30	9759.560	0.0	45579.515	0.0
279.1748	25.01	-2.73	46903.260	2.0	82712.550	3.0
279.1749	25.01	-2.25	65658.300	5.0	101467.580	6.0
279.1764	24.01	-3.10	48399.190	1.5	84208.280	.5
279.1780	26.00	-1.20	19621.004	5.0	55429.890	5.0
279.1802	29.01	-.41	115569.200	5.0	151377.800	6.0
279.1820	25.00	-3.45	23719.520	1.5	59527.890	1.5
279.1835	26.02	-4.30	166222.200	4.0	202030.380	3.0
279.1861	25.00	-2.15	23719.520	1.5	59527.360	.5
279.1864	26.00	-2.32	24118.815	4.0	59926.620	5.0
279.1881	26.02	-4.51	144085.970	4.0	179893.560	5.0
279.1888	25.01	-3.99	55371.300	3.0	91178.800	4.0
279.1910	25.02	-4.75	100054.100	.5	135861.320	1.5
279.1924	24.00	-3.64	24277.060	0.0	60084.090	1.0
279.1925	25.02	-2.23	143345.070	3.5	179152.090	3.5
279.1942	28.02	-4.71	78303.100	2.0	114109.900	3.0
279.1950	74.00	.26	12098.628	0.0	47915.888	0.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
279.1951	20.02	-1.83	347383.510	4.0	383190.200	5.0
279.1960	64.01	-.06	3387.616	0.0	39204.748	0.0
279.1969	23.00	-6.37	2153.200	1.5	37959.660	2.5
279.1971	24.01	-.97	54784.670	3.5	90591.100	2.5
279.1981	20.02	-.90	347383.510	4.0	383189.820	4.0
279.1988	28.00	-3.41	13521.352	2.0	49327.560	3.0
279.1997	8.02	-2.63	365723.900	1.0	401530.000	2.0
279.2018	10.01	-.28	246192.450	2.5	281998.280	2.5
279.2040	40.00	-.79	0.000	0.0	35816.106	0.0
279.2052	26.01	-3.21	26352.800	4.5	62158.190	4.5
279.2054	24.00	+1.08	24200.230	6.0	60005.600	5.0
279.2087	25.01	-1.07	69215.730	1.0	105020.670	1.0
279.2134	28.01	-.97	98467.250	3.5	134271.590	4.5
279.2139	23.00	-4.79	2311.370	3.5	38115.650	3.5
279.2143	25.01	-2.83	66901.140	2.0	102705.370	3.0
279.2150	69.01	-1.41	161.315	0.0	35976.010	0.0
279.2176	24.01	.39	33694.470	5.5	69498.270	4.5
279.2230	10.01	-4.62	302890.570	2.5	338693.680	3.5
279.2231	29.01	-2.22	115569.200	5.0	151372.300	5.0
279.2291	25.02	-3.89	109841.120	3.5	145643.450	2.5
279.2308	26.02	-4.42	79840.120	7.0	115642.230	7.0
279.2319	10.00	-3.11	134041.840	2.0	169843.820	2.0
279.2381	9.02	-1.70	431967.930	.5	467769.110	.5
279.2396	26.00	-1.69	12560.933	3.0	48361.920	4.0
279.2431	27.00	-1.84	7442.410	3.5	43242.950	2.5
279.2439	23.01	.06	37150.570	4.0	72951.000	4.0
279.2444	25.02	-3.60	85173.880	1.5	120974.250	.5
279.2513	24.01	-.95	38315.000	2.5	74114.480	3.5
279.2581	6.01	-3.36	195752.580	1.5	231551.200	1.5
279.2628	18.01	-2.69	172213.800	1.5	208011.810	1.5
279.2640	44.00	-.70	7985.094	0.0	43793.505	0.0
279.2660	10.00	-3.97	134041.840	2.0	169839.450	1.0
279.2664	24.00	-3.01	24286.540	1.0	60084.090	1.0
279.2692	22.01	-3.69	4628.610	2.5	40425.800	1.5
279.2700	74.00	-.48	2903.671	0.0	38711.312	0.0
279.2722	23.02	-3.66	110181.470	2.5	145978.270	2.5
279.2778	24.01	-1.64	34631.140	4.5	70427.220	3.5
279.2784	24.00	-1.91	24833.860	3.0	60629.670	2.0
279.2805	23.00	-5.50	2424.890	4.5	38220.630	5.5
279.2809	28.01	-4.04	101740.270	3.5	137535.960	3.5
279.2822	25.02	-.68	172855.020	4.5	208650.540	3.5
279.2828	25.01	-3.80	72306.810	2.0	108102.250	3.0
279.2839	26.02	-4.31	87901.870	3.0	123697.180	2.0
279.2871	25.00	-2.03	30354.210	3.5	66149.100	3.5
279.2877	28.01	-.84	98467.250	3.5	134262.070	3.5
279.2886	30.02	-2.79	258239.600	4.0	294034.300	4.0
279.2960	42.00	-.37	11372.710	0.0	47177.018	0.0
279.3050	41.01	-.32	3468.273	0.0	39271.427	0.0
279.3073	28.02	-4.97	78303.100	2.0	114095.400	1.0
279.3130	25.01	-1.55	49882.150	4.0	85673.720	4.0
279.3226	25.00	-1.83	23549.200	2.5	59339.550	3.5
279.3229	23.01	-3.00	18353.890	3.0	54144.200	4.0
279.3233	26.01	-1.41	36252.960	2.5	72043.210	1.5
279.3237	9.02	.10	406904.380	.5	442694.580	1.5
279.3245	26.00	-4.65	24574.655	4.0	60364.760	3.0
279.3270	78.00	-.37	13389.148	0.0	49189.482	0.0
279.3280	70.01	-.58	33472.871	0.0	69273.077	0.0
279.3305	25.01	-.55	53781.700	3.0	89571.030	3.0
279.3313	22.01	-2.89	31207.440	2.5	66996.670	3.5
279.3330	24.01	-2.91	31083.110	1.5	66872.120	.5
279.3347	28.01	-1.08	98467.250	3.5	134256.050	2.5
279.3507	24.01	-.72	46905.520	1.5	82692.260	.5
279.3529	28.01	-4.57	101740.270	3.5	137526.730	2.5
279.3594	9.02	-.59	406908.950	1.5	442694.580	1.5
279.3596	28.01	-4.48	98467.250	3.5	134252.850	3.5
279.3616	6.01	-2.75	195765.850	2.5	231551.200	1.5
279.3635	24.01	-1.11	30864.610	2.5	66649.710	1.5
279.3646	25.02	-1.58	173306.450	6.5	209091.410	5.5
279.3667	27.01	-.45	49697.500	4.0	85482.190	4.0
279.3705	25.01	-.94	34761.810	5.0	70546.020	4.0
279.3706	24.00	-2.40	24299.890	2.0	60084.090	1.0
279.3721	9.03	-.69	502411.000	1.0	538195.000	0.0
279.3732	25.01	-.61	49889.860	3.0	85673.720	4.0
279.3785	24.00	-.95	25177.390	4.0	60960.580	4.0
279.3788	10.01	-4.82	281998.280	2.5	317781.420	2.5
279.3793	26.01	-.40	64040.960	3.5	99824.040	2.5
279.3804	26.01	-1.73	62662.300	5.5	98445.240	4.5
279.3846	27.02	-3.55	72270.500	3.5	108052.900	2.5
279.3860	73.01	-.60	3145.643	0.0	38938.417	0.0
279.3865	26.00	-1.18	20641.110	4.0	56423.276	4.0
279.3879	24.00	-2.00	24833.860	3.0	60615.840	3.0
279.3884	26.01	-.52	25805.320	4.5	61587.240	5.5
279.3895	25.01	-1.98	43131.400	2.0	78913.170	2.0
279.3909	27.01	-4.26	27585.300	1.0	63366.900	2.0
279.3940	32.00	-.33	16292.819	0.0	52084.568	0.0
279.3980	26.02	-3.54	82382.870	3.0	118163.560	2.0
279.3990	76.00	.06	11292.053	0.0	47083.162	0.0
279.4020	29.01	-2.21	115639.020	2.0	151419.200	3.0
279.4176	8.02	-1.81	293865.260	1.0	329643.430	0.0
279.4190	76.00	.37	14760.326	0.0	50548.873	0.0
279.4216	28.01	-2.37	72985.650	1.5	108763.320	.5
279.4219	10.01	-.75	246597.710	.5	282375.330	1.5
279.4252	9.03	.28	469644.200	2.0	505421.400	3.0
279.4260	90.01	-.32	9598.245	0.0	45385.895	0.0
279.4294	23.01	-1.19	37369.010	2.0	73145.680	3.0
279.4334	25.01	-4.55	66929.220	2.0	102705.370	3.0
279.4337	25.02	-1.22	100085.200	1.5	135861.320	1.5
279.4361	6.01	-4.50	195752.580	1.5	231528.390	2.5
279.4363	27.00	-3.22	18389.570	1.5	54165.350	1.5
279.4404	24.01	-.49	47464.940	4.5	83240.200	4.5
279.4440	70.01	-.80	34844.049	0.0	70629.394	0.0
279.4467	23.01	-1.99	36673.510	2.0	72447.960	3.0
279.4487	17.02	-3.84	182076.000	1.5	217850.200	2.5
279.4521	25.02	-2.58	100085.200	1.5	135858.960	2.5
279.4533	20.02	-2.37	347383.510	4.0	383157.110	3.0
279.4580	20.02	-2.63	347383.510	4.0	383156.510	4.0
279.4591	28.01	-1.89	67880.160	2.5	103653.030	3.5
279.4597	10.00	-3.38	134041.840	2.0	169814.630	2.0
279.4598	20.02	-4.77	347417.050	3.0	383189.820	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
279.4622	28.01	-.74	73903.250	.5	109675.720	.5
279.4660	64.01	-.71	2823.013	0.0	38605.541	0.0
279.4691	21.01	-1.02	27602.320	3.0	63373.910	2.0
279.4703	26.00	-2.52	7728.058	3.0	43499.485	4.0
279.4713	30.02	-2.96	264237.400	1.0	300008.700	1.0
279.4766	28.01	-4.38	100078.780	1.5	135849.410	2.5
279.4799	25.03	-2.05	152986.000	2.0	188756.200	3.0
279.4801	24.01	-3.96	51584.440	1.5	87354.620	1.5
279.4817	25.00	.57	0.000	2.5	35769.970	3.5
279.4916	17.02	-1.45	209182.800	1.5	244951.500	.5
279.4945	22.01	.06	29544.370	2.5	65312.710	2.5
279.4979	24.01	-2.95	34631.140	4.5	70399.040	5.5
279.5007	26.00	-3.39	0.000	4.0	35767.546	4.0
279.5023	23.01	-1.24	37259.420	1.0	73026.760	2.0
279.5052	28.01	-3.54	100309.290	5.5	136076.260	4.5
279.5080	70.01	-.86	37344.432	0.0	73121.583	0.0
279.5087	9.02	-1.31	432060.640	1.5	467827.160	1.5
279.5096	10.00	-3.81	134818.640	0.0	170585.040	1.0
279.5110	25.01	-2.74	33278.390	3.0	69044.610	2.0
279.5112	30.02	-4.47	258239.600	4.0	294005.800	5.0
279.5130	40.00	-1.32	564.603	0.0	36341.114	0.0
279.5140	41.01	.21	13389.148	0.0	49165.531	0.0
279.5166	25.01	.44	34761.810	5.0	70527.320	5.0
279.5188	25.01	-1.64	53805.800	4.0	89571.030	3.0
279.5200	73.01	.54	12582.573	0.0	48358.188	0.0
279.5223	29.01	-1.72	115639.020	2.0	151403.800	2.0
279.5261	24.00	-2.93	25106.340	3.0	60870.630	4.0
279.5288	18.01	-1.85	174820.930	.5	210584.880	1.5
279.5332	29.01	-1.07	115639.020	2.0	151402.400	3.0
279.5337	24.01	-2.84	34631.140	4.5	70394.460	4.5
279.5375	23.01	-3.85	36919.230	3.0	72682.060	2.0
279.5383	23.01	.24	37531.090	4.0	73293.820	5.0
279.5398	6.01	-3.24	195765.850	2.5	231528.390	2.5
279.5399	18.01	-2.04	172829.580	1.5	208592.110	.5
279.5416	29.01	-4.79	111124.000	1.0	146886.310	1.0
279.5425	25.01	-1.78	43696.190	3.0	79458.380	2.0
279.5425	18.01	-2.48	172829.580	1.5	208591.780	1.5
279.5496	25.00	-2.31	23719.520	1.5	59480.800	2.5
279.5528	12.01	.10	0.000	.5	35760.880	1.5
279.5541	26.00	-1.87	7376.762	4.0	43137.472	3.0
279.5544	23.01	-1.55	19902.600	0.0	55663.270	1.0
279.5616	10.00	-3.53	134818.640	0.0	170578.390	1.0
279.5675	10.03	-4.17	488917.000	1.5	524676.000	1.5
279.5703	24.00	-2.36	20520.920	3.0	56279.560	4.0
279.5729	23.01	-1.25	37520.610	3.0	73278.920	4.0
279.5751	6.01	-4.65	195765.850	2.5	231523.670	3.5
279.5764	26.01	-2.05	30764.460	3.5	66522.320	2.5
279.5784	23.01	-.55	37150.570	4.0	72908.170	3.0
279.5800	30.02	-4.07	258277.700	3.0	294035.100	2.0
279.5812	27.00	-4.65	7442.410	3.5	43199.650	2.5
279.5813	24.00	.93	24200.230	6.0	59957.460	7.0
279.5816	25.01	-.62	47073.560	3.0	82830.750	4.0
279.5855	9.02	-1.97	390976.350	1.5	426733.040	2.5
279.5860	41.00	-1.24	1532.493	0.0	37299.663	0.0
279.5862	30.02	-3.89	258277.700	3.0	294034.300	4.0
279.5876	29.01	-2.34	115662.770	4.0	151419.200	3.0
279.5919	24.00	-1.67	20523.690	4.0	56279.560	4.0
279.5939	24.00	-2.29	20523.940	5.0	56279.560	4.0
279.5960	10.00	-2.77	134041.840	2.0	169797.190	3.0
279.5983	23.01	-1.48	36919.230	3.0	72674.280	2.0
279.6090	69.01	-1.69	0.000	0.0	35764.228	0.0
279.6109	25.01	.11	38806.530	4.0	74559.970	3.0
279.6110	76.00	-.82	12905.203	0.0	48669.175	0.0
279.6120	27.01	-2.17	28111.900	2.0	63865.200	1.0
279.6150	74.00	-1.25	4758.794	0.0	40522.254	0.0
279.6173	26.02	-4.06	82410.940	2.0	118163.560	2.0
279.6227	27.00	-1.81	5075.830	1.5	40827.770	1.5
279.6322	20.02	-1.51	347344.370	5.0	383095.100	5.0
279.6340	73.00	-.54	1935.780	0.0	37696.810	0.0
279.6346	20.02	.29	347344.370	5.0	383094.790	6.0
279.6366	24.00	-1.02	24056.110	5.0	59806.270	5.0
279.6367	22.00	-2.63	11531.760	2.0	47281.900	3.0
279.6424	25.00	-1.96	23818.870	.5	59568.290	.5
279.6460	77.00	-.08	15970.189	0.0	51729.685	0.0
279.6525	23.01	-.06	37041.110	2.0	72789.230	3.0
279.6548	23.01	.28	37531.090	4.0	73278.920	4.0
279.6560	73.00	-.51	9920.875	0.0	45679.092	0.0
279.6609	29.01	-4.62	95565.650	4.0	131312.700	3.0
279.6630	45.00	-.30	10888.765	0.0	46646.087	0.0
279.6630	71.01	.60	17180.052	0.0	52937.374	0.0
279.6633	25.01	-2.52	34910.430	4.0	70657.180	5.0
279.6638	26.01	-.81	42114.790	4.5	77861.470	4.5
279.6644	24.01	-2.97	32836.840	3.5	68583.440	2.5
279.6645	17.02	-.30	205938.500	1.5	241685.100	2.5
279.6687	26.02	-4.00	89697.520	3.0	125443.580	4.0
279.6692	23.01	.21	37205.010	3.0	72951.000	4.0
279.6730	76.00	-.64	2661.698	0.0	38417.742	0.0
279.6780	42.00	-.05	23955.283	0.0	59710.687	0.0
279.6786	9.03	-.23	502652.400	2.0	538397.200	2.0
279.6799	24.01	-2.08	51943.040	4.5	87687.660	4.5
279.6809	27.01	-2.92	10708.100	3.0	46452.600	2.0
279.6813	26.01	-2.84	25981.650	3.5	61726.090	3.5
279.6823	26.00	-2.44	21038.987	2.0	56783.306	3.0
279.6835	28.01	-4.75	100332.090	4.5	136076.260	4.5
279.6849	26.02	-3.24	97041.380	3.0	132785.360	4.0
279.6872	26.00	-3.23	12560.933	3.0	48304.623	2.0
279.6885	24.01	-3.52	51669.750	2.5	87413.270	2.5
279.6900	40.01	-.09	5646.026	0.0	41399.896	0.0
279.6926	27.02	-4.59	91715.100	2.5	127458.100	1.5
279.6930	64.01	.30	3387.616	0.0	39141.103	0.0
279.6935	25.00	-4.34	17568.480	1.5	53311.370	1.5
279.6950	28.02	-1.91	121412.200	2.0	157154.900	2.0
279.6953	6.01	-2.57	195785.740	3.5	231528.390	2.5
279.7007	10.01	-4.72	292033.150	2.5	327775.110	3.5
279.7011	23.01	-.35	16340.970	3.0	52082.680	4.0
279.7020	90.01	-1.41	1774.465	0.0	37526.801	0.0
279.7039	26.00	-1.94	20641.110	4.0	56382.664	5.0
279.7045	26.01	-5.07	3117.480	1.5	38858.960	2.5
279.7046	15.01	-2.29	103668.740	3.0	139410.200	2.0
279.7074	27.00	-4.70	8460.810	2.5	44201.920	2.5
279.7077	27.00	-1.07	15184.040	2.5	50925.110	1.5
279.7080	25.00	-.96	23549.200	2.5	59290.230	3.5
279.7104	18.03	-.27	250219.450	.5	285960.170	.5
279.7110	25.01	-2.94	35004.430	3.0	70745.080	3.0
279.7156	20.02	-1.38	347417.050	3.0	383157.110	3.0
279.7190	29.01	-3.80	115662.770	4.0	151402.400	3.0
279.7198	23.00	-5.29	2220.130	2.5	37959.660	2.5
279.7200	74.00	-.52	13711.778	0.0	49461.814	0.0
279.7203	20.02	.04	347417.050	3.0	383156.510	4.0
279.7211	26.01	-.15	63948.840	4.5	99688.200	3.5
279.7239	30.02	-3.06	260981.900	3.0	296720.900	3.0
279.7274	29.01	-2.73	114511.440	1.0	150250.000	2.0
279.7277	24.01	-3.01	32844.920	1.5	68583.440	2.5
279.7286	29.01	-1.19	115665.400	1.0	151403.800	2.0
279.7301	17.02	-1.15	205946.900	2.5	241685.100	2.5
279.7307	6.01	-3.35	195785.740	3.5	231523.870	3.5
279.7348	16.01	-3.71	128599.110	3.5	164336.710	3.5
279.7350	77.00	-.33	5726.684	0.0	41474.803	0.0
279.7353	25.01	-1.92	53781.700	3.0	89519.250	2.0
279.7356	24.00	-1.92	24940.610	2.0	60678.120	1.0
279.7370	26.00	-3.39	19788.248	4.0	55525.580	5.0
279.7379	16.02	-1.12	174036.190	1.0	209773.400	0.0
279.7402	25.01	-.57	39826.570	1.0	75563.490	0.0
279.7432	26.01	-2.33	64087.500	2.5	99824.040	2.5
279.7452	29.01	-1.17	115639.020	2.0	151375.300	2.0
279.7477	28.01	-4.11	100010.170	.5	135746.130	1.5
279.7487	16.01	-1.73	128599.110	3.5	164334.940	4.5
279.7503	25.01	-2.46	34761.810	5.0	70497.440	4.0
279.7544	28.01	-4.53	98122.630	.5	133657.730	.5
279.7564	23.02	-3.71	61777.150	1.5	97512.000	1.5
279.7567	25.01	.27	65754.500	6.0	101489.310	5.0
279.7629	26.00	-2.11	18378.187	2.0	54112.203	2.0
279.7649	28.01	-2.47	98561.220	2.5	134294.990	2.5
279.7690	41.01	.36	11292.053	0.0	47035.827	0.0
279.7700	77.00	-.22	2823.013	0.0	38566.660	0.0
279.7740	90.01	-1.09	4436.164	0.0	40179.300	0.0
279.7760	73.01	.26	967.890	0.0	36710.770	0.0
279.7776	26.00	-1.83	7376.762	4.0	43108.899	4.0
279.7784	23.01	-.25	16421.510	4.0	52153.550	5.0
279.7855	26.02	-3.85	183431.280	5.0	219162.420	6.0
279.7889	29.02	-4.44	86133.000	.5	121863.700	1.5
279.7911	24.00	-2.96	21856.940	3.0	57587.360	4.0
279.7912	24.00	-4.03	24897.550	4.0	60627.960	4.0
279.7915	26.01	-1.27	26352.800	4.5	62083.170	4.5
279.7923	22.01	-2.20	31207.440	2.5	66937.700	2.5
279.7929	12.01	-.42	35760.880	1.5	71491.060	1.5
279.7930	42.00	.11	11372.710	0.0	47113.418	0.0
279.7934	26.02	-2.50	89907.850	4.0	125637.980	3.0
279.7978	24.01	-4.80	51584.440	1.5	87314.000	.5
279.7980	69.01	-1.89	161.315	0.0	35901.385	0.0
279.7984	25.00	-1.96	30419.610	2.5	66149.100	3.5
279.7995	28.00	-1.87	14728.847	0.0	50458.187	1.0
279.7998	12.01	.53	35760.880	1.5	71490.190	2.5
279.8003	23.01	-2.51	30267.460	2.0	65996.700	3.0
279.8025	8.02	-1.63	366801.040	3.0	402530.000	3.0
279.8073	24.01	-2.56	32855.090	2.5	68583.440	2.5
279.8100	75.00	-.27	17180.052	0.0	52918.589	0.0
279.8141	23.01	-.44	36954.580	1.0	72682.060	2.0
279.8180	77.00	-.70	4032.876	0.0	39770.391	0.0
279.8210	70.01	-.24	30085.255	0.0	65822.387	0.0
279.8263	23.01	-1.88	13542.680	3.0	49268.610	4.0
279.8269	25.00	.46	0.000	2.5	35725.850	2.5
279.8269	25.02	-.86	173306.450	6.5	209034.300	5.5
279.8270	10.01	-4.22	281171.380	2.5	316897.210	3.5
279.8270	90.01	-.74	7904.437	0.0	43640.803	0.0
279.8328	26.00	-3.70	17550.180	3.0	53275.270	2.0
279.8389	9.02	-2.86	390834.600	2.5	426558.910	1.5
279.8398	22.01	.24	29734.450	3.5	65458.650	3.5
279.8472	24.00	-3.68	24282.340	4.0	60005.600	5.0
279.8484	25.00	-4.71	17568.480	1.5	53291.580	2.5
279.8499	24.01	-.36	47040.540	2.5	82763.450	1.5
279.8519	23.00	-7.00	2112.320	.5	37834.980	1.5
279.8560	57.01	.39	22422.791	0.0	58155.454	0.0
279.8593	14.02	-1.65	204828.060	3.0	240549.770	2.0
279.8649	28.00	-1.78	879.813	2.0	36600.805	2.0
279.8684	22.02	-3.55	41703.650	2.0	77424.200	3.0
279.8732	23.01	-3.19	13490.840	2.0	49210.780	3.0
279.8751	23.01	-.66	36954.580	1.0	72674.280	2.0
279.8751	23.01	-.13	16533.000	5.0	52252.700	6.0
279.8780	24.01	-.73	31351.150	2.5	67070.480	1.5
279.8828	23.02	-3.21	49805.290	3.5	85524.000	2.5
279.8828	10.01	-4.06	302831.800	.5	338550.510	.5
279.8829	15.03	-1.55	257520.200	1.0	293238.900	2.0
279.8861	24.00	-1.97	24897.550	4.0	60615.840	3.0
279.8862	26.00	-1.92	20874.482	3.0	56592.760	4.0
279.8897	22.02	-1.18	41703.650	2.0	77421.480	2.0
279.8910	41.01	-.18	7823.779	0.0	43551.973	0.0
279.8923	24.02	-2.05	66027.800	4.0	101745.300	3.0
279.8923	27.01	-3.16	11321.500	2.0	47039.000	3.0
279.8958	26.00	-3.08	11976.239	4.0	47693.289	3.0
279.8984	8.02	-3.15	293865.260	1.0	329581.980	1.0
279.9030	74.01	.89	15082.956	0.0	50809.618	0.0
279.9110	90.01	-1.21	4113.534	0.0	39839.175	0.0
279.9150	40.01	-.27	5726.684	0.0	41451.815	0.0
279.9205	11.01	-1.43	297252.520	3.0	332966.420	2.0
279.9205	11.01	-1.43	297252.520	3.0	332966.420	2.0
279.9206	26.00	-4.74	23110.925	3.0	58824.810	2.0
279.9219	7.01	-3.61	174212.030	2.0	209925.760	2.0
279.9242	26.00	-4.57	22996.661	4.0	58710.090	3.0
279.9252	15.03	-2.01	257520.200	1.0	293233.500	1.0
279.9263	24.00	-1.51	25106.340	3.0	60819.500	3.0
279.9269	25.01	-3.76	65754.500	6.0	101467.580	6.0
279.9294	26.01	-1.28	26352.800	4.5	62065.570	3.5
279.9310	22.00	-8.37	6598.749	2.0	42311.310	3.0
279.9360	41.00	-.95	2097.096	0.0	37819.547	0.0
279.9362	28.02	-3.30	83033.800	2.0	118745.700	3.0
279.9366	26.01	-1.63	36252.960	2.5	71964.810	2.5
279.9386	20.02	.20	347383.510	4.0	383095.100	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
279.9391	28.01	-3.18	57080.550	3.5	92792.080	3.5
279.9432	27.02	-3.63	72341.900	1.5	108052.900	2.5
279.9447	23.01	-.47	13490.840	2.0	49201.660	2.0
279.9495	6.01	-2.40	195813.660	4.5	231523.870	3.5
279.9519	29.01	-2.03	115665.400	1.0	151375.300	2.0
279.9548	29.01	-.50	115662.770	4.0	151372.300	5.0
279.9578	24.00	-3.62	21847.880	2.0	57557.030	3.0
279.9588	25.00	-2.14	23818.870	.5	59527.890	1.5
279.9621	25.02	-1.77	100001.300	2.5	135709.900	2.5
279.9629	25.00	-3.52	23818.870	.5	59527.360	.5
279.9631	9.02	-2.08	432060.640	1.5	467769.110	.5
279.9664	29.01	-.61	117747.450	3.0	153455.500	4.0
279.9719	26.01	-2.02	25805.320	4.5	61512.670	4.5
279.9740	77.00	-.34	16534.792	0.0	52252.394	0.0
279.9800	10.00	-3.23	134041.840	2.0	169748.150	1.0
279.9839	25.00	-.03	17052.290	4.5	52758.110	4.5
279.9843	27.00	-4.68	14399.280	.5	50105.050	1.5
279.9908	26.02	-4.68	166187.500	6.0	201892.440	5.0
279.9920	74.00	-.74	3306.958	0.0	39022.264	0.0
280.0047	23.01	-.53	37205.010	3.0	72908.170	3.0
280.0050	70.01	-.33	28633.420	0.0	64347.068	0.0
280.0058	25.01	-.53	71263.920	1.0	106966.940	2.0
280.0110	39.01	.03	23310.023	0.0	59022.906	0.0
280.0130	23.01	-.99	37520.610	3.0	73222.720	4.0
280.0138	24.01	-2.76	32603.730	2.5	68305.730	1.5
280.0165	25.01	-.96	69319.010	0.0	105020.670	1.0
280.0168	24.01	.28	45730.740	2.5	81432.360	3.5
280.0228	28.01	-1.44	98561.220	2.5	134262.070	3.5
280.0239	10.02	-1.43	374434.000	2.0	410134.720	1.0
280.0288	24.00	-4.52	21856.940	3.0	57557.030	3.0
280.0320	41.00	-.94	1532.493	0.0	37242.698	0.0
280.0384	23.00	-7.27	2424.890	4.5	38123.760	4.5
280.0397	19.02	-1.02	207421.900	2.5	243120.600	2.5
280.0402	25.01	-1.23	71263.920	1.0	106962.560	1.0
280.0417	25.01	-.94	69215.730	1.0	104914.180	0.0
280.0437	13.01	-4.77	59849.700	1.0	95547.900	2.0
280.0452	22.01	-3.17	9850.900	.5	45548.900	1.5
280.0495	25.02	-4.76	138635.460	2.5	174332.910	1.5
280.0527	23.01	-4.31	32040.760	2.0	67737.800	2.0
280.0552	26.01	-.08	63876.380	5.5	99573.110	4.5
280.0559	25.00	-1.23	23719.520	1.5	59416.150	1.5
280.0570	73.00	-.43	12179.286	0.0	47886.303	0.0
280.0570	90.01	-.51	9114.300	0.0	44821.317	0.0
280.0574	25.01	-3.30	67008.930	3.0	102705.370	3.0
280.0602	26.02	-4.86	143883.740	5.0	179579.830	5.0
280.0629	22.01	.11	31300.920	4.5	66996.670	3.5
280.0701	28.01	-1.03	98561.220	2.5	134256.050	2.5
280.0734	25.01	-2.84	67008.930	3.0	102703.340	4.0
280.0771	24.01	.58	33694.470	5.5	69388.400	6.5
280.0807	28.01	-2.44	98561.220	2.5	134254.690	1.5
280.0820	77.00	.04	9759.560	0.0	45463.390	0.0
280.0825	24.00	-3.27	25177.390	4.0	60870.630	4.0
280.0870	30.00	-.67	32746.953	0.0	68450.145	0.0
280.0884	25.01	-3.08	71263.920	1.0	106956.420	0.0
280.0891	24.00	-2.55	20517.400	2.0	56209.810	3.0
280.0952	23.01	-.23	37531.090	4.0	73222.720	4.0
280.0952	28.01	-2.68	98561.220	2.5	134252.850	3.5
280.1011	25.02	-2.84	100001.300	2.5	135692.170	3.5
280.1011	18.02	-.32	207233.090	2.0	242923.960	1.0
280.1020	23.00	-6.95	2424.890	4.5	38115.650	3.5
280.1050	74.01	1.05	13308.491	0.0	49009.389	0.0
280.1056	23.01	-2.15	30306.400	3.0	65996.700	3.0
280.1065	29.01	-3.66	85388.770	2.0	121078.960	3.0
280.1069	25.00	-1.91	25265.740	5.5	60955.880	4.5
280.1081	25.00	.29	0.000	2.5	35689.980	1.5
280.1087	23.01	-4.18	30613.970	4.0	66303.880	3.0
280.1138	24.00	-1.99	24940.610	2.0	60629.870	2.0
280.1167	24.00	-1.81	20520.920	3.0	56209.810	3.0
280.1174	13.01	-1.34	106918.200	1.0	142607.000	2.0
280.1186	6.01	.17	195813.660	4.5	231502.300	5.5
280.1195	27.00	-3.70	13795.520	2.5	49484.050	3.5
280.1198	28.01	-.93	98561.220	2.5	134249.720	1.5
280.1233	25.02	-.70	173063.550	5.5	208751.600	4.5
280.1255	6.01	.06	195785.740	3.5	231473.500	4.5
280.1349	21.01	.15	27841.170	4.0	63527.730	4.0
280.1374	22.00	-1.58	11776.806	4.0	47463.060	4.0
280.1384	24.00	-2.32	20523.690	4.0	56209.810	3.0
280.1406	28.01	-1.84	100845.410	.5	136531.260	1.5
280.1437	6.01	-.07	195765.850	2.5	231451.300	3.5
280.1462	6.01	-.19	195752.580	1.5	231437.700	2.5
280.1470	42.00	0.00	10646.793	0.0	46342.339	0.0
280.1482	24.01	-3.75	51669.750	2.5	87354.620	1.5
280.1512	27.01	-4.34	27902.500	4.0	63587.000	3.0
280.1527	24.00	-.65	24833.860	3.0	60518.160	3.0
280.1527	24.00	-.88	24833.860	3.0	60518.160	3.0
280.1535	22.01	-3.72	4897.600	3.5	40581.800	2.5
280.1548	24.00	-.91	24200.230	6.0	59884.270	6.0
280.1582	25.01	-1.21	53781.700	3.0	89465.300	4.0
280.1605	23.01	-4.06	34228.790	3.0	69912.100	4.0
280.1725	23.00	-5.42	2153.200	1.5	37834.980	1.5
280.1843	20.02	-4.03	347383.510	4.0	383063.780	3.0
280.1930	76.00	-.33	11292.053	0.0	46981.738	0.0
280.1990	82.00	.70	10566.135	0.0	46255.056	0.0
280.2001	25.01	-1.52	32818.100	0.0	68496.370	1.0
280.2016	23.01	-1.93	30318.630	4.0	65996.700	3.0
280.2030	26.00	-2.64	12560.933	3.0	48238.832	2.0
280.2070	41.00	-1.18	2097.096	0.0	37784.998	0.0
280.2070	73.00	-.56	3871.561	0.0	39559.463	0.0
280.2150	25.01	-5.00	29889.310	3.0	65565.680	4.0
280.2155	28.02	-4.38	76237.800	3.0	111914.100	2.0
280.2166	25.00	-.26	25281.040	2.5	60957.210	3.5
280.2177	22.01	-3.45	9872.870	.5	45548.900	1.5
280.2240	24.00	-2.23	24940.610	2.0	60615.840	3.0
280.2289	24.02	-4.19	118055.200	1.0	153729.800	1.0
280.2311	26.00	-4.89	22845.856	5.0	58520.180	4.0
280.2319	25.00	-4.49	17637.150	.5	53311.370	1.5
280.2338	10.02	-.64	374460.750	1.0	410134.720	1.0
280.2397	25.00	-.26	25265.740	5.5	60938.970	4.5
280.2448	25.00	-1.90	17451.520	2.5	53124.090	3.5
280.2492	26.02	-4.74	144085.970	4.0	179757.980	4.0
280.2505	6.01	-.99	195765.850	2.5	231437.700	2.5
280.2510	28.01	-4.06	100845.410	.5	136517.200	.5
280.2511	25.00	-2.29	25285.430	4.5	60957.210	3.5
280.2530	68.00	-.68	0.000	0.0	35682.044	0.0
280.2536	25.01	-2.00	70497.440	4.0	106166.900	5.0
280.2596	26.01	-2.96	26055.400	2.5	61726.090	3.5
280.2615	25.00	-.90	25285.430	4.5	60955.880	4.5
280.2644	24.00	-.59	24833.860	3.0	60503.940	4.0
280.2692	25.00	-1.03	25287.740	3.5	60957.210	3.5
280.2705	12.01	-.21	0.000	.5	35669.310	.5
280.2754	26.02	-2.11	82494.880	1.0	118163.560	2.0
280.2764	25.02	-2.93	143148.400	1.5	178816.960	2.5
280.2797	25.00	-.20	25287.740	3.5	60955.880	4.5
280.2800	23.01	-.52	13542.680	3.0	49210.780	3.0
280.2800	28.02	-2.02	121566.700	1.0	157234.800	1.0
280.2808	25.00	-.84	25265.740	5.5	60933.730	5.5
280.2810	44.00	-.08	8469.040	0.0	44147.520	0.0
280.2815	28.02	-2.81	84604.800	1.0	120272.700	1.0
280.2840	63.01	-.27	1613.150	0.0	37291.248	0.0
280.2859	28.01	-3.56	100078.780	1.5	135746.130	1.5
280.2905	25.01	-3.07	70497.440	4.0	106164.200	4.0
280.2932	25.00	-4.53	30354.210	3.5	66020.630	2.5
280.2950	74.00	-.23	13711.778	0.0	49388.476	0.0
280.2999	6.01	-.87	195785.740	3.5	231451.300	3.5
280.3008	18.01	-3.43	172816.210	.5	208481.660	.5
280.3049	25.00	-2.04	23719.520	1.5	59384.450	1.5
280.3138	28.00	-1.52	13521.352	2.0	49185.146	2.0
280.3167	26.00	-4.25	415.932	3.0	36079.353	3.0
280.3240	78.00	-.78	6049.314	0.0	41722.321	0.0
280.3242	24.01	-2.79	30150.160	6.5	65812.630	7.5
280.3248	24.02	-3.47	118423.300	2.0	154085.700	3.0
280.3255	25.01	-.80	43850.420	2.0	79512.730	3.0
280.3263	26.02	-4.63	144085.970	4.0	179748.170	5.0
280.3266	23.01	-3.78	30641.710	3.0	66303.880	3.0
280.3280	75.01	.48	13711.778	0.0	49384.476	0.0
280.3300	25.01	-2.52	47073.560	3.0	82735.290	2.0
280.3312	26.02	-4.16	183431.280	5.0	219092.860	5.0
280.3329	23.01	-1.56	16421.510	4.0	52082.880	4.0
280.3348	24.01	-.50	31351.150	2.5	67012.280	2.5
280.3351	25.01	-.25	49882.150	4.0	85543.230	5.0
280.3370	90.01	-1.13	6613.917	0.0	42285.270	0.0
280.3411	28.01	-3.60	100010.170	.5	135670.490	.5
280.3433	26.01	.04	64832.000	4.5	100492.040	3.5
280.3437	26.02	-3.74	89783.590	4.0	125443.580	4.0
280.3439	25.01	-1.14	32836.400	1.0	68496.370	1.0
280.3440	25.01	-4.33	70497.440	4.0	106157.400	3.0
280.3449	6.01	-.98	195813.660	4.5	231473.500	4.5
280.3467	23.01	-.32	13609.000	4.0	49268.610	4.0
280.3471	24.00	-4.82	24833.860	3.0	60493.420	3.0
280.3476	25.01	-1.49	53805.800	4.0	89465.300	4.0
280.3517	23.01	-1.55	13542.680	3.0	49201.660	2.0
280.3531	28.02	-3.52	97841.400	2.0	133500.200	2.0
280.3583	26.02	-4.45	166498.000	3.0	202156.130	2.0
280.3608	26.00	-1.48	19788.248	4.0	55446.060	4.0
280.3613	23.01	-1.94	37369.010	2.0	73026.760	2.0
280.3618	25.00	-2.19	17451.520	2.5	53109.210	2.5
280.3668	10.02	-.41	374477.660	0.0	410134.720	1.0
280.3768	22.00	-1.78	11531.760	2.0	47187.540	2.0
280.3769	27.00	-1.54	4690.180	2.5	40345.950	2.5
280.3797	18.03	-3.14	256093.290	.5	291748.700	1.5
280.3810	41.01	-.67	2984.328	0.0	38650.083	0.0
280.3924	24.01	-.11	47227.500	3.5	82881.300	2.5
280.3944	25.00	-.98	25285.430	4.5	60938.970	4.5
280.3991	22.00	-5.12	0.000	2.0	35652.950	3.0
280.4010	74.00	-1.09	6129.972	0.0	41793.183	0.0
280.4015	26.01	-1.64	27620.390	2.5	63273.030	2.5
280.4036	9.02	-1.20	389737.630	.5	425390.010	.5
280.4069	6.01	-2.42	195785.740	3.5	231437.700	2.5
280.4070	76.00	.54	15324.929	0.0	50987.377	0.0
280.4091	25.00	-1.85	17451.520	2.5	53103.190	1.5
280.4126	25.00	-2.29	25287.740	3.5	60938.970	4.5
280.4184	23.02	-4.97	105282.650	2.5	140933.140	3.5
280.4219	22.00	-7.27	6556.828	1.0	42206.880	2.0
280.4228	25.00	-1.39	27201.540	2.5	62851.470	3.5
280.4240	74.00	.17	16292.819	0.0	51953.105	0.0
280.4274	23.01	-2.37	20522.140	1.0	56171.490	1.0
280.4278	26.02	-3.47	147161.360	4.0	182810.660	5.0
280.4357	23.00	-5.85	2311.370	3.5	37959.660	2.5
280.4357	25.00	-.02	25285.430	4.5	60933.730	5.5
280.4438	23.01	-1.57	19166.190	1.0	54813.450	0.0
280.4440	26.01	-2.08	64040.960	3.5	99688.200	3.5
280.4451	25.01	-4.13	53781.700	3.0	89428.800	3.0
280.4459	25.01	-4.43	55371.300	3.0	91018.300	3.0
280.4480	20.02	-.89	347417.050	3.0	383063.780	3.0
280.4521	26.00	-.72	7376.762	4.0	43022.969	4.0
280.4622	23.00	-5.94	2112.320	.5	37757.240	.5
280.4670	74.00	.04	17583.339	0.0	53238.158	0.0
280.4673	20.02	-2.19	347417.050	3.0	383061.330	2.0
280.4691	24.01	-3.57	31083.110	1.5	66727.160	2.5
280.4711	25.01	-.46	71323.150	2.0	106966.940	2.0
280.4760	73.00	-1.17	5968.656	0.0	41622.330	0.0
280.4782	17.02	-.89	186220.000	.5	221864.900	.5
280.4792	28.01	-3.06	100010.170	.5	135652.930	1.5
280.4807	25.01	-4.80	70527.320	5.0	106169.900	6.0
280.4844	24.00	-2.42	25177.390	4.0	60819.500	3.0
280.4845	22.00	-1.69	11639.804	3.0	47281.900	3.0
280.4858	26.00	-1.15	21999.132	4.0	57641.060	3.0
280.4861	14.02	-1.45	214994.650	1.0	250636.550	2.0
280.4880	26.00	-2.05	19788.248	4.0	55429.890	5.0
280.4885	25.01	-4.09	70527.320	5.0	106168.900	5.0
280.4915	25.00	-1.02	23719.520	1.5	59360.720	2.5
280.4935	23.01	-1.78	37041.110	2.0	72682.060	2.0
280.4959	23.02	-2.93	110181.470	2.5	145824.110	1.5
280.4982	22.01	.63	29544.370	2.5	65164.720	3.5
280.4988	24.01	-2.97	32836.840	3.5	68477.110	4.5
280.5007	26.01	-.04	65109.710	3.5	100749.750	2.5
280.5035	25.01	-4.16	70517.720	3.0	106157.400	3.0
280.5056	25.01	-.64	71323.150	2.0	106962.560	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
280.5077	28.00	-2.40	0.000	4.0	35639.148	3.0
280.5089	25.01	-3.27	47073.560	3.0	82712.550	3.0
280.5115	23.01	-.92	37150.570	4.0	72789.230	3.0
280.5189	24.00	-1.89	20517.400	2.0	56155.120	2.0
280.5195	6.01	-2.53	195813.660	4.5	231451.300	3.5
280.5204	25.01	-1.14	32858.840	2.0	68496.370	1.0
280.5245	10.04	-2.58	605231.000	1.0	640868.000	2.0
280.5312	26.01	-1.82	31364.470	1.5	67000.630	2.5
280.5347	26.02	-4.53	183457.150	4.0	219092.860	5.0
280.5357	25.01	.27	34910.430	4.0	70546.020	4.0
280.5380	27.01	-1.64	27106.000	6.0	62741.300	6.0
280.5466	24.00	-2.53	20520.920	3.0	56155.120	2.0
280.5472	26.02	-3.58	79840.120	7.0	115474.250	6.0
280.5489	17.02	-.80	205938.500	1.5	241572.400	1.5
280.5526	25.01	-3.80	31661.720	3.0	67295.160	4.0
280.5536	23.01	-.54	18293.870	2.0	53927.190	3.0
280.5547	23.01	-.20	37041.110	2.0	72674.280	2.0
280.5586	16.01	-3.27	128599.110	3.5	164231.780	2.5
280.5614	26.00	-3.81	23192.486	2.0	58824.810	2.0
280.5616	26.01	-3.15	62662.300	5.5	98294.600	5.5
280.5630	74.00	.26	17986.627	0.0	53629.246	0.0
280.5665	28.01	-1.22	32499.530	4.5	68131.210	3.5
280.5666	28.01	-3.52	100490.950	1.5	136122.610	2.5
280.5680	23.01	-1.36	36919.230	3.0	72550.710	4.0
280.5686	8.01	-3.84	229946.600	2.5	265578.000	3.5
280.5694	22.00	-2.48	8602.340	2.0	44233.650	3.0
280.5739	23.01	-4.50	30673.140	2.0	66303.880	3.0
280.5782	26.01	-1.63	27314.930	3.5	62945.120	3.5
280.5809	26.00	-2.05	11976.239	4.0	47606.092	5.0
280.5836	26.02	-4.33	79844.740	6.0	115474.250	6.0
280.5920	74.01	1.16	16131.504	0.0	51770.439	0.0
280.6001	9.03	-.33	502970.400	3.0	538597.800	3.0
280.6001	18.01	-2.12	160239.350	1.5	195866.760	1.5
280.6026	25.01	-1.92	71323.150	2.0	106950.240	3.0
280.6062	26.00	-1.63	18378.187	2.0	54004.820	3.0
280.6132	25.00	.10	25265.740	5.5	60891.480	6.5
280.6151	17.02	-3.69	205946.900	2.5	241572.400	1.5
280.6168	18.01	-1.02	160239.350	1.5	195864.640	2.5
280.6185	23.01	-2.49	37520.610	3.0	73145.680	3.0
280.6214	25.02	-3.61	100085.200	1.5	135709.900	2.5
280.6233	28.01	-2.22	71457.740	3.5	107082.210	2.5
280.6236	26.01	-2.42	42237.050	3.5	77861.470	4.5
280.6247	26.01	-3.46	30388.550	4.5	66012.830	4.5
280.6248	26.01	-1.79	63948.840	4.5	99573.110	4.5
280.6265	24.01	-2.88	51789.210	3.5	87413.270	2.5
280.6299	26.01	-3.33	62945.120	3.5	98568.750	3.5
280.6300	73.00	-.25	5968.656	0.0	41602.765	0.0
280.6309	23.03	-1.20	257143.200	2.0	292766.700	2.0
280.6348	25.01	-3.36	53805.800	4.0	89428.800	3.0
280.6358	25.01	-3.70	70546.020	4.0	106168.900	5.0
280.6364	17.01	-3.60	126032.000	2.0	161654.800	1.0
280.6376	24.01	-3.66	32854.460	4.5	68477.110	4.5
280.6383	28.01	-3.77	70358.940	4.5	105981.500	4.5
280.6407	18.01	-3.88	173393.380	2.5	209015.630	3.5
280.6428	22.01	-1.66	9850.900	.5	45472.890	.5
280.6440	10.01	-4.76	303071.840	2.5	338693.680	3.5
280.6446	25.00	-3.12	25281.040	2.5	60902.800	3.5
280.6508	25.01	.33	65846.610	7.0	101467.580	6.0
280.6514	17.02	-1.72	205938.500	1.5	241559.400	.5
280.6537	24.00	-2.76	24897.550	4.0	60518.160	3.0
280.6537	24.00	-1.66	24897.550	4.0	60518.160	3.0
280.6541	23.01	-1.49	16533.000	5.0	52153.550	5.0
280.6580	73.00	-.67	1935.780	0.0	37566.334	0.0
280.6728	25.01	-3.88	70546.020	4.0	106164.200	4.0
280.6730	22.01	-1.91	9930.740	1.5	45548.900	1.5
280.6755	23.01	-2.91	30267.460	2.0	65885.300	2.0
280.6759	26.02	-2.47	97041.380	3.0	132659.170	4.0
280.6780	40.00	-.44	4113.534	0.0	39741.549	0.0
280.6792	25.00	-.64	25285.430	4.5	60902.800	3.5
280.6830	25.01	-.91	34910.430	4.0	70527.320	5.0
280.6896	23.01	-4.55	13594.730	2.0	49210.780	3.0
280.6906	25.01	-.48	48317.850	4.0	83933.770	3.0
280.6910	76.00	-.27	0.000	0.0	35626.365	0.0
280.6974	25.00	-1.09	25287.740	3.5	60902.800	3.5
280.6985	26.00	-1.46	7376.762	4.0	42991.680	5.0
280.6991	23.00	-5.44	2220.130	2.5	37834.980	1.5
280.7011	23.01	.24	37531.090	4.0	73145.680	3.0
280.7071	26.00	-2.87	11976.239	4.0	47590.070	4.0
280.7088	18.02	.24	207532.150	1.0	243145.760	2.0
280.7093	25.01	-7.22	29869.110	2.0	65482.660	3.0
280.7103	28.01	-1.50	100010.170	.5	135623.590	1.5
280.7115	22.00	-3.47	386.874	4.0	36000.144	4.0
280.7143	26.01	-2.96	30764.460	3.5	66377.370	3.5
280.7160	27.01	-2.74	10708.100	3.0	46320.800	4.0
280.7164	26.01	-2.17	31387.980	2.5	67000.630	2.5
280.7176	28.02	-4.54	78482.900	1.0	114095.400	1.0
280.7188	26.02	-2.78	84369.920	2.0	119982.260	1.0
280.7233	25.01	-2.00	52383.720	4.0	87995.500	5.0
280.7246	26.00	-3.12	0.000	4.0	35611.608	3.0
280.7264	25.01	-4.95	70546.020	4.0	106157.400	3.0
280.7360	42.00	-.78	11372.710	0.0	46993.364	0.0
280.7390	28.00	-4.91	15734.018	1.0	51343.800	2.0
280.7393	28.01	-2.42	100010.170	.5	135619.910	1.5
280.7407	24.01	-2.50	31117.590	2.5	66727.160	2.5
280.7448	22.01	-3.22	31207.440	2.5	66816.490	1.5
280.7460	9.03	-.82	502652.400	2.0	538261.300	1.0
280.7480	76.00	-.84	10082.190	0.0	45701.322	0.0
280.7520	22.00	-6.07	6598.749	2.0	42206.880	2.0
280.7531	26.01	-2.04	68000.820	4.5	103608.820	4.5
280.7534	25.01	-.80	43850.420	2.0	79458.380	2.0
280.7557	28.01	-3.03	32523.540	3.5	68131.210	3.5
280.7587	25.01	-1.00	34910.430	4.0	70517.720	3.0
280.7597	25.02	-2.61	143209.800	2.5	178816.960	2.5
280.7615	23.01	-4.68	13594.730	2.0	49201.660	2.0
280.7620	27.01	-2.12	27902.500	4.0	63509.370	4.0
280.7631	10.01	-4.11	303071.840	2.5	338678.570	3.5
280.7658	24.00	-.54	24897.550	4.0	60503.940	4.0
280.7679	25.02	.29	194900.400	5.5	230506.520	5.5
280.7685	24.00	-3.34	24200.230	6.0	59806.270	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
280.7696	17.02	-1.82	204124.000	1.5	239729.900	2.5
280.7720	74.00	.11	19115.832	0.0	54731.919	0.0
280.7735	24.01	-3.57	38509.070	3.5	74114.480	3.5
280.7743	25.01	-3.73	55696.500	4.0	91301.800	5.0
280.7760	42.01	.57	12340.601	0.0	47956.181	0.0
280.7830	90.01	-.25	9517.587	0.0	45132.279	0.0
280.7843	23.00	-5.72	2153.200	1.5	37757.240	.5
280.7860	75.00	-.71	11695.340	0.0	47309.651	0.0
280.7882	26.02	-4.84	98661.880	1.0	134265.420	2.0
280.7905	21.01	-1.01	27841.170	4.0	63444.430	3.0
280.7947	8.02	-3.93	293865.260	1.0	329467.980	2.0
280.7956	27.02	-3.50	91715.100	2.5	127317.700	3.5
280.7962	28.01	-3.80	94729.250	2.5	130331.780	1.5
280.7965	26.00	-3.30	12560.933	3.0	48163.427	2.0
280.7990	25.01	-.69	43311.000	1.0	78913.170	2.0
280.8000	72.01	-.63	4839.451	0.0	40451.987	0.0
280.8014	25.00	-.68	17282.000	3.5	52883.870	2.5
280.8021	23.01	-1.89	13609.000	4.0	49210.780	3.0
280.8050	41.00	-.95	1532.493	0.0	37144.394	0.0
280.8081	25.00	-2.74	30419.610	2.5	66020.630	2.5
280.8106	26.01	-2.74	64087.500	2.5	99688.200	3.5
280.8127	28.01	-4.90	100475.820	3.5	136076.260	4.5
280.8160	22.01	-2.75	9872.870	.5	45472.890	.5
280.8160	40.01	-1.42	241.973	0.0	35852.480	0.0
280.8214	23.00	-8.10	2153.200	1.5	37752.540	2.5
280.8227	26.00	-3.40	23110.925	3.0	58710.090	3.0
280.8229	23.01	-.62	18269.490	1.0	53868.630	2.0
280.8240	76.00	-.46	15324.929	0.0	50934.421	0.0
280.8271	23.01	-1.08	37352.390	5.0	72951.000	4.0
280.8294	25.02	-3.27	194908.200	5.5	230506.520	5.5
280.8328	26.00	-1.52	7728.058	3.0	43325.946	3.0
280.8345	28.01	-2.55	23108.280	2.5	58705.950	1.5
280.8366	26.00	-1.79	24574.655	4.0	60172.060	4.0
280.8370	42.00	-.43	11372.710	0.0	46980.554	0.0
280.8376	25.00	-1.09	23818.870	.5	59416.150	1.5
280.8380	64.01	-.91	3387.616	0.0	38995.333	0.0
280.8390	57.01	.43	10001.532	0.0	45609.122	0.0
280.8420	69.01	-1.45	161.315	0.0	35768.525	0.0
280.8487	24.00	-4.83	24897.550	4.0	60493.420	3.0
280.8510	78.00	-.92	15405.586	0.0	51011.655	0.0
280.8562	25.00	-2.17	30425.710	1.5	66020.630	2.5
280.8593	25.01	-.63	48317.850	4.0	83912.380	5.0
280.8686	25.01	-6.58	29889.310	3.0	65482.660	3.0
280.8692	11.01	-.39	297252.520	3.0	332845.800	3.0
280.8692	11.01	-.39	297252.520	3.0	332845.800	3.0
280.8696	23.01	-2.04	11514.760	1.0	47107.980	1.0
280.8741	25.00	-1.20	30354.210	3.5	65946.870	2.5
280.8816	28.01	-4.04	100078.780	1.5	135670.490	.5
280.8940	76.00	-.71	2661.696	0.0	38262.316	0.0
280.8976	26.02	-2.69	146891.040	3.0	182480.720	2.0
280.8985	22.00	-6.12	6556.828	1.0	42146.390	1.0
280.8990	90.01	-.11	8952.985	0.0	44552.969	0.0
280.8995	10.01	-4.89	302961.070	1.5	338550.510	.5
280.9043	28.01	-1.37	100010.170	.5	135599.000	.5
280.9093	28.02	-2.58	121566.700	1.0	157154.900	2.0
280.9101	25.00	-1.18	17282.000	3.5	52870.100	3.5
280.9154	22.00	-2.76	8492.421	1.0	44079.840	2.0
280.9158	22.00	-5.00	170.132	3.0	35757.510	4.0
280.9170	41.01	-1.08	2581.041	0.0	38178.744	0.0
280.9178	23.01	-2.50	11514.760	1.0	47101.880	2.0
280.9187	25.01	-1.81	34910.430	4.0	70497.440	4.0
280.9259	25.00	-2.59	27201.540	2.5	62787.630	1.5
280.9268	24.01	-2.00	34813.060	5.5	70399.040	5.5
280.9333	23.01	-1.82	19132.690	2.0	54717.850	1.0
280.9393	25.01	-.94	37811.570	1.0	73395.970	2.0
280.9404	25.01	-4.94	43528.300	5.0	79112.560	5.0
280.9407	23.01	.02	37205.010	3.0	72789.230	3.0
280.9437	18.03	.42	251972.000	2.5	287555.830	3.5
280.9484	10.01	-.63	246415.040	1.5	281998.280	2.5
280.9508	23.01	-.78	19132.690	2.0	54715.630	2.0
280.9509	11.01	-.65	264928.000	2.0	300510.920	1.0
280.9538	9.02	-2.99	390976.350	1.5	426558.910	1.5
280.9609	24.01	-2.67	40228.440	5.5	75810.100	4.5
280.9620	16.01	-2.39	128599.110	3.5	164180.630	3.5
280.9620	83.00	-.40	15324.929	0.0	50916.931	0.0
280.9630	24.01	-2.93	34813.060	5.5	70394.460	4.5
280.9666	25.01	-2.01	32836.400	1.0	68417.340	2.0
280.9710	8.02	-1.39	294001.600	2.0	329561.980	1.0
280.9720	64.01	.20	3387.616	0.0	38978.351	0.0
280.9741	26.00	-3.70	23244.826	1.0	58824.810	2.0
280.9794	25.01	-.13	48333.060	5.0	83912.380	5.0
280.9795	26.01	-.62	42658.230	3.5	78237.540	3.5
280.9827	23.01	-2.56	30306.400	3.0	65885.300	2.0
280.9843	22.01	-.84	32025.500	2.5	67604.200	3.5
280.9878	22.01	-.88	29734.450	3.5	65312.710	2.5
280.9934	24.00	-.56	24940.610	2.0	60518.160	3.0
280.9934	24.00	-.98	24940.610	2.0	60518.160	3.0
280.9960	42.00	-.81	11050.080	0.0	46637.775	0.0
280.9966	22.00	-3.91	0.000	2.0	35577.140	2.0
280.9993	25.01	-.81	71390.140	3.0	106966.940	2.0
281.0030	44.00	-.48	2016.438	0.0	37603.247	0.0
281.0035	24.01	.10	47464.940	4.5	83041.200	3.5
281.0083	25.01	-3.81	43536.900	4.0	79112.560	5.0
281.0095	26.02	-4.57	144085.970	4.0	179661.480	3.0
281.0154	23.01	-.30	18293.870	2.0	53868.630	2.0
281.0180	58.01	-.88	2500.383	0.0	38085.292	0.0
281.0202	28.01	-3.72	100078.780	1.5	135652.930	1.5
281.0206	26.02	-2.84	105895.350	1.0	141469.450	1.0
281.0208	25.01	-1.16	43339.100	2.0	78913.170	2.0
281.0214	28.02	-3.95	75646.900	4.0	111220.900	3.0
281.0220	28.01	-1.95	58493.210	2.5	94067.140	1.5
281.0237	23.01	-.89	20089.560	1.0	55663.270	1.0
281.0247	25.01	-.44	37811.570	1.0	73385.150	1.0
281.0269	23.01	.09	18353.890	3.0	53927.190	3.0
281.0273	26.02	-2.88	183431.280	5.0	219004.530	4.0
281.0293	22.01	-.92	29734.450	3.5	65307.450	4.5
281.0295	22.01	-1.23	9975.920	1.5	45548.900	1.5
281.0301	28.02	-1.94	121802.800	3.0	157375.700	4.0
281.0344	29.01	-2.14	117883.140	4.0	153455.500	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
281.0367	24.01	-2.28	51943.040	4.5	87515.100	3.5
281.0430	42.00	-.39	18147.942	0.0	53729.686	0.0
281.0506	24.00	-.84	24897.550	4.0	60467.650	5.0
281.0531	25.00	-4.84	23296.670	3.5	58866.660	4.5
281.0550	44.00	.11	1129.205	0.0	36709.430	0.0
281.0611	24.01	-1.02	48749.570	.5	84318.540	1.5
281.0644	22.00	-5.28	6742.757	4.0	42311.310	3.0
281.0696	25.01	-2.30	52373.180	3.0	87941.080	4.0
281.0720	70.01	-1.06	32182.351	0.0	67760.424	0.0
281.0736	25.00	-2.28	23549.200	2.5	59116.600	2.5
281.0770	29.01	-.50	117883.140	4.0	153450.100	5.0
281.0799	24.01	-1.28	31083.110	1.5	66649.710	1.5
281.0810	41.01	.06	8227.067	0.0	43804.000	0.0
281.0838	27.01	-2.12	9812.700	4.0	45378.800	4.0
281.0861	24.01	-3.54	30143.720	5.5	65709.530	5.5
281.0879	25.00	-4.90	23818.870	.5	59384.450	1.5
281.0882	25.01	-2.39	49882.150	4.0	85447.700	5.0
281.0894	24.01	-.56	47354.630	2.5	82920.030	1.5
281.0910	40.01	-.01	6049.314	0.0	41624.982	0.0
281.0920	73.00	-.01	12179.286	0.0	47754.827	0.0
281.0930	64.01	-.40	3952.218	0.0	39527.633	0.0
281.0959	28.01	-3.71	100389.520	2.5	135954.090	3.5
281.0989	18.02	-3.54	204727.470	1.0	240291.660	2.0
281.1048	25.01	-7.21	29919.220	2.0	65482.660	3.0
281.1054	24.01	.17	45669.540	1.5	81232.910	2.5
281.1063	23.01	-.82	36954.580	1.0	72517.840	1.0
281.1066	26.02	-3.64	105906.230	2.0	141469.450	1.0
281.1086	28.01	-1.56	72985.650	1.5	108548.610	1.5
281.1127	27.00	-1.29	17733.680	3.5	52796.130	2.5
281.1162	24.00	-2.55	23163.270	0.0	58725.280	1.0
281.1164	26.00	-2.61	12560.933	3.0	48122.913	3.0
281.1214	26.02	-4.44	144332.210	4.0	179893.560	5.0
281.1267	26.01	-3.27	25428.800	5.5	60989.480	4.5
281.1290	25.01	-.73	32856.950	3.0	68417.340	2.0
281.1297	26.02	-2.36	105906.230	2.0	141466.530	3.0
281.1310	27.01	-3.00	50035.900	3.0	85596.030	2.0
281.1313	25.01	-.35	71390.140	3.0	106950.240	3.0
281.1320	28.02	-2.83	121412.200	2.0	156972.200	3.0
281.1332	28.01	-4.15	99418.610	3.5	134978.470	2.5
281.1337	25.00	-2.27	27201.540	2.5	62761.330	2.5
281.1370	24.01	-2.45	30150.160	6.5	65709.530	5.5
281.1430	26.02	-.73	184181.390	1.0	219740.000	1.0
281.1430	26.02	-.50	184181.390	1.0	219740.000	2.0
281.1439	25.01	-1.25	32858.840	2.0	68417.340	2.0
281.1449	24.01	-2.03	31168.780	3.5	66727.160	2.5
281.1509	25.01	.08	48317.850	4.0	83875.460	4.0
281.1529	25.01	-3.84	52383.720	4.0	87941.080	4.0
281.1591	23.01	-1.27	19161.270	0.0	54717.850	1.0
281.1630	41.00	.27	11453.368	0.0	47019.925	0.0
281.1708	27.02	-1.65	70934.100	2.5	106489.200	3.5
281.1739	25.00	-1.27	30354.210	3.5	65908.920	4.5
281.1750	63.01	-1.21	1613.150	0.0	37178.190	0.0
281.1759	28.00	-1.47	27260.891	6.0	62815.340	5.0
281.1760	23.01	-1.67	20617.050	2.0	56171.490	1.0
281.1810	24.00	-4.93	23933.900	4.0	59487.710	4.0
281.1831	11.01	-1.69	297252.520	3.0	332806.060	2.0
281.1831	11.01	-1.69	297252.520	3.0	332806.060	2.0
281.1866	27.01	-2.45	28111.900	2.0	63665.000	1.0
281.1870	58.01	-.96	2500.383	0.0	38063.905	0.0
281.1890	24.02	-2.14	65890.900	3.0	101443.700	2.0
281.1965	28.01	-1.56	100078.780	1.5	135630.630	2.5
281.1970	25.01	-.35	68284.380	3.0	103836.170	2.0
281.1980	23.01	-1.27	19166.190	1.0	54717.850	1.0
281.1995	24.01	.49	33619.130	4.5	69170.600	5.5
281.2006	24.01	-.20	38563.150	4.5	74114.480	3.5
281.2025	22.01	-1.97	9363.710	.5	44914.800	1.5
281.2065	9.02	-3.31	431432.270	1.5	466982.860	2.5
281.2070	75.00	-.53	17180.052	0.0	52741.044	0.0
281.2099	25.00	-1.25	30411.740	.5	65961.900	1.5
281.2111	23.02	-3.49	56160.420	2.5	91710.430	3.5
281.2121	23.01	-4.19	16533.000	5.0	52082.880	4.0
281.2156	23.01	-1.16	19166.190	1.0	54715.630	2.0
281.2159	28.02	-3.24	97841.400	2.0	133390.800	3.0
281.2183	18.01	-3.77	155043.070	2.5	190592.170	1.5
281.2207	26.00	-2.94	20874.482	3.0	56423.276	4.0
281.2211	23.01	-2.89	30267.460	2.0	65816.200	1.0
281.2247	26.00	-3.63	17726.985	2.0	53275.270	2.0
281.2250	74.01	.45	13308.491	0.0	48867.207	0.0
281.2264	25.01	-.25	37847.900	2.0	73395.970	2.0
281.2268	26.02	-4.43	83138.230	5.0	118686.250	4.0
281.2290	22.00	-2.75	11639.804	3.0	47187.540	2.0
281.2294	25.01	-3.84	49820.160	2.0	85367.850	2.0
281.2298	22.00	-5.58	6598.749	2.0	42146.390	1.0
281.2301	26.00	-2.74	12968.552	2.0	48516.150	1.0
281.2319	26.02	-2.94	183457.150	4.0	219004.530	4.0
281.2320	72.00	-.69	10404.820	0.0	45962.651	0.0
281.2326	24.01	-1.33	47372.750	1.5	82920.030	1.5
281.2331	25.01	-1.00	37847.900	2.0	73395.120	3.0
281.2338	28.00	-.77	27260.891	6.0	62808.030	6.0
281.2360	75.00	-.44	16212.162	0.0	51769.488	0.0
281.2420	28.02	-3.17	103306.100	3.0	138852.200	3.0
281.2437	22.00	-5.50	6661.003	3.0	42206.880	2.0
281.2438	9.02	-4.44	431432.270	1.5	466978.150	1.5
281.2444	27.00	-4.35	5075.830	1.5	40621.620	1.5
281.2451	27.00	-3.49	7442.410	3.5	42988.120	3.5
281.2489	26.01	-1.60	25787.600	1.5	61332.820	1.5
281.2521	25.01	-.74	37851.150	3.0	73395.970	2.0
281.2522	28.01	-1.59	100078.780	1.5	135623.590	1.5
281.2523	26.02	-4.30	144085.970	4.0	179630.770	4.0
281.2536	23.01	-3.25	30613.970	4.0	66158.600	4.0
281.2580	28.01	-3.44	53037.930	2.5	88582.010	1.5
281.2580	42.01	.04	23793.968	0.0	59348.512	0.0
281.2588	25.01	.08	37851.150	3.0	73395.120	3.0
281.2590	50.00	-.19	17018.737	0.0	52573.155	0.0
281.2598	27.00	-2.94	16470.600	1.5	52014.450	1.5
281.2672	26.01	-2.85	30388.550	4.5	65931.460	3.5
281.2713	25.01	-.62	48333.060	5.0	83875.460	4.0
281.2721	25.00	-1.10	30419.610	2.5	65961.900	1.5
281.2732	22.01	-2.71	9930.740	1.5	45472.890	.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
281.2777	25.01	-1.05	35004.430	3.0	70546.020	4.0
281.2800	77.00	-.62	12985.861	0.0	48537.624	0.0
281.2813	28.01	-1.37	100078.780	1.5	135619.910	1.5
281.2845	25.00	-1.85	17568.480	1.5	53109.210	2.5
281.2918	29.02	-2.51	89017.700	4.5	124557.500	3.5
281.2932	25.00	-1.58	27248.000	1.5	62787.630	1.5
281.2957	25.00	-1.39	25281.040	2.5	60820.350	2.5
281.2958	28.01	-1.94	100078.780	1.5	135618.080	2.5
281.2969	23.01	-1.38	37369.010	2.0	72908.170	3.0
281.2974	22.00	-3.11	8436.618	0.0	43975.710	1.0
281.2979	29.01	-4.14	109275.900	3.0	144814.930	3.0
281.2993	24.01	-1.18	31531.620	1.5	67070.480	1.5
281.3018	26.01	-2.47	73091.700	4.5	108630.240	5.5
281.3093	26.01	-.96	64286.440	3.5	99824.040	2.5
281.3110	75.00	-.71	14518.354	0.0	50066.200	0.0
281.3111	26.02	-2.03	105929.160	3.0	141466.530	3.0
281.3120	25.01	-.87	37847.900	2.0	73385.150	1.0
281.3130	74.00	-.27	17583.339	0.0	53130.932	0.0
281.3185	24.01	-3.64	30143.720	5.5	65680.150	4.5
281.3204	25.00	-1.00	30425.710	1.5	65961.900	1.5
281.3241	26.02	-1.59	89907.850	4.0	125443.580	4.0
281.3241	26.02	-1.24	89907.850	5.0	125443.580	4.0
281.3242	18.02	-2.77	231341.800	2.0	266877.500	3.0
281.3288	26.00	-.15	7376.762	4.0	42911.897	5.0
281.3321	25.00	-3.44	17568.480	1.5	53103.190	1.5
281.3377	17.02	-1.54	204541.200	2.5	240075.200	3.5
281.3469	25.00	-2.37	17568.480	1.5	53101.320	.5
281.3488	25.00	-.83	25287.740	3.5	60820.350	2.5
281.3490	18.01	-2.96	172213.800	1.5	207746.380	2.5
281.3503	23.00	-7.76	2220.130	2.5	37752.540	2.5
281.3524	26.01	-2.07	64040.960	3.5	99573.110	4.5
281.3526	24.01	-1.32	31117.590	2.5	66649.710	1.5
281.3557	25.01	-3.80	47073.560	3.0	82605.290	4.0
281.3558	24.00	-1.46	7593.160	2.0	43124.880	2.0
281.3580	50.00	-.30	8549.697	0.0	44091.604	0.0
281.3614	26.01	-.76	25981.650	3.5	61512.670	4.5
281.3640	39.00	-1.54	483.945	0.0	36025.095	0.0
281.3644	29.01	-3.42	85388.770	2.0	120919.410	1.0
281.3684	18.02	-3.83	204727.470	1.0	240257.590	1.0
281.3688	24.00	-2.58	24897.550	4.0	60427.630	5.0
281.3724	23.01	-.97	37150.570	4.0	72660.200	5.0
281.3784	25.01	-4.43	53597.130	2.0	89126.000	3.0
281.3795	23.01	-2.66	36919.230	3.0	72447.960	3.0
281.3820	27.00	-2.00	15184.040	2.5	50712.450	2.5
281.3840	76.00	.62	14760.326	0.0	50298.949	0.0
281.3860	72.01	-.86	2984.328	0.0	38522.699	0.0
281.3866	10.01	-2.99	246192.450	2.5	281720.280	1.5
281.3872	22.00	-3.72	0.000	2.0	35527.760	1.0
281.3879	20.02	-.39	245611.880	0.0	281139.550	1.0
281.3903	11.01	-1.13	297639.340	2.0	333166.700	1.0
281.3903	11.01	-1.13	297639.340	2.0	333166.700	1.0
281.3911	25.00	-.59	30419.610	2.5	65946.870	2.5
281.3932	23.01	-4.34	13741.610	3.0	49268.610	4.0
281.3940	63.01	-.23	0.000	0.0	35537.360	0.0
281.3960	75.00	-.05	17180.052	0.0	52717.160	0.0
281.4086	26.02	-3.89	93392.450	3.0	128917.510	2.0
281.4109	26.02	-3.21	83161.480	4.0	118686.250	4.0
281.4157	22.01	-3.63	10024.740	2.5	45548.900	1.5
281.4175	24.00	-3.70	24282.340	4.0	59806.270	5.0
281.4200	76.00	-.52	2661.698	0.0	38195.775	0.0
281.4207	24.00	-1.60	25106.340	3.0	60629.870	2.0
281.4208	26.00	-3.28	22996.661	4.0	58520.180	4.0
281.4232	24.01	-2.17	30156.940	3.5	65680.150	4.5
281.4310	73.01	.05	6129.972	0.0	41662.660	0.0
281.4318	25.00	-2.08	30354.210	3.5	65876.340	3.5
281.4322	23.02	-1.33	63303.120	4.5	98825.190	3.5
281.4338	28.01	-2.21	92373.450	2.5	127895.330	3.5
281.4350	28.00	-.25	27260.891	6.0	62782.614	7.0
281.4360	8.01	-4.90	229946.600	2.5	265468.200	1.5
281.4395	25.00	-1.15	30425.710	1.5	65946.870	2.5
281.4469	28.01	-2.24	100078.780	1.5	135599.000	.5
281.4474	25.00	-2.16	27248.000	1.5	62768.160	.5
281.4480	72.01	.23	13389.148	0.0	48919.690	0.0
281.4507	24.01	-1.92	32355.940	3.5	67875.680	3.5
281.4530	70.01	-.43	30407.885	0.0	65937.796	0.0
281.4561	25.01	-.45	68284.380	3.0	103803.440	3.0
281.4563	22.01	-2.46	9395.760	1.5	44914.800	1.5
281.4655	26.02	-4.34	146891.040	3.0	182408.910	3.0
281.4670	42.01	.07	28714.077	0.0	64242.221	0.0
281.4676	26.00	-3.11	23192.486	2.0	58710.090	3.0
281.4680	75.00	-.39	11534.025	0.0	47062.042	0.0
281.4688	10.00	-3.92	134459.287	1.0	169976.740	0.0
281.4690	26.01	-3.02	31483.200	3.5	67000.630	2.5
281.4733	23.01	-4.38	30641.710	3.0	66158.600	4.0
281.4740	69.01	-2.21	161.315	0.0	35688.575	0.0
281.4760	72.01	.25	17583.339	0.0	53110.347	0.0
281.4786	25.01	-1.82	46903.260	2.0	82419.480	3.0
281.4800	73.00	-.92	5968.656	0.0	41495.159	0.0
281.4810	58.01	-.03	6452.602	0.0	41978.979	0.0
281.4840	76.00	-1.58	4113.534	0.0	39639.532	0.0
281.4888	28.00	-3.05	15609.861	2.0	51124.800	3.0
281.4900	40.00	-.11	0.000	0.0	35525.241	0.0
281.4903	23.01	-.89	18353.890	3.0	53866.630	2.0
281.4960	58.01	-.11	7017.204	0.0	42541.687	0.0
281.4973	27.00	-2.73	816.000	3.5	36329.860	2.5
281.5010	73.00	-1.42	1935.780	0.0	37459.632	0.0
281.5013	26.00	-4.15	18378.187	2.0	53891.540	3.0
281.5015	25.00	-1.25	27248.000	1.5	62761.330	2.5
281.5018	25.01	.14	35004.430	3.0	70517.720	3.0
281.5032	23.01	-1.95	11514.760	1.0	47027.880	0.0
281.5052	18.01	-3.54	172816.210	.5	208329.080	.5
281.5063	25.01	-4.07	70657.180	5.0	106169.900	6.0
281.5112	24.01	-2.21	32355.940	3.5	67868.050	2.5
281.5120	73.00	-.92	5968.656	0.0	41491.120	0.0
281.5152	29.02	-4.00	89045.900	3.5	124557.500	3.5
281.5170	9.02	-2.59	391047.540	.5	426558.910	1.5
281.5181	28.00	-3.13	13521.352	2.0	49062.589	2.0
281.5216	9.03	-4.99	456884.300	1.0	492395.100	2.0
281.5268	23.02	-3.54	63315.050	3.5	98825.190	3.5

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WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
281.5270	76.00	-.50	13308.491	0.0	48829.063	0.0
281.5319	24.00	-2.72	25106.340	3.0	60615.840	3.0
281.5327	25.02	-.81	100001.300	2.5	135510.700	2.5
281.5343	28.01	-1.90	68154.310	1.5	103663.500	1.5
281.5349	20.02	-1.47	350741.190	3.0	386250.310	3.0
281.5391	20.02	-2.88	350741.190	3.0	386249.780	4.0
281.5450	74.00	.13	19438.462	0.0	54956.763	0.0
281.5501	20.02	.11	350741.190	3.0	386248.390	4.0
281.5502	26.00	-1.77	12968.552	2.0	48475.740	3.0
281.5540	42.00	-.26	18147.942	0.0	53665.107	0.0
281.5544	22.01	-1.70	9395.760	1.5	44902.420	2.5
281.5546	23.01	-1.84	20156.640	0.0	55663.270	1.0
281.5557	27.00	-1.43	4142.660	3.5	39649.160	3.5
281.5584	23.01	-1.53	37520.610	3.0	73026.760	2.0
281.5608	22.01	-1.81	31490.820	3.5	66996.670	3.5
281.5614	25.00	-1.71	27281.850	.5	62787.630	1.5
281.5633	28.01	-4.34	104503.220	2.5	140008.760	3.5
281.5668	22.00	-2.83	11776.806	4.0	47281.900	3.0
281.5709	26.02	-4.67	93412.930	2.0	128917.510	2.0
281.5747	27.01	-1.77	28111.900	2.0	63616.000	2.0
281.5763	28.02	-2.95	97996.300	3.0	133500.200	2.0
281.5780	26.02	-2.44	105895.350	1.0	141399.040	2.0
281.5780	76.00	-.91	2661.698	0.0	38175.836	0.0
281.5820	72.00	-.97	6533.259	0.0	42046.893	0.0
281.5838	26.00	-2.51	17726.985	2.0	53229.940	1.0
281.5900	24.01	-2.22	45730.740	2.5	81232.910	2.5
281.5910	42.00	-.43	11372.710	0.0	46885.209	0.0
281.5952	26.02	-3.85	146891.040	3.0	182392.550	2.0
281.5980	92.01	-1.18	241.973	0.0	35753.589	0.0
281.6063	26.01	-2.32	62945.120	3.5	98445.240	4.5
281.6070	72.01	-.04	17744.654	0.0	53255.135	0.0
281.6072	8.01	-3.27	229968.200	1.5	265468.200	1.5
281.6150	42.01	1.30	13389.148	0.0	48898.620	0.0
281.6180	63.01	-.82	1613.150	0.0	37122.244	0.0
281.6191	13.01	-.33	59849.700	1.0	95348.200	0.0
281.6207	28.02	-3.87	97841.400	2.0	133339.700	1.0
281.6256	28.01	-2.43	70635.460	2.5	106133.140	1.5
281.6313	22.01	-1.94	9975.920	1.5	45472.690	.5
281.6320	75.00	.16	22019.503	0.0	57526.832	0.0
281.6328	25.01	-.42	32787.600	4.0	68284.380	3.0
281.6350	70.01	-.78	30246.570	0.0	65753.520	0.0
281.6409	25.01	-.75	71390.140	3.0	106885.900	4.0
281.6502	25.01	-3.31	31514.350	4.0	67008.930	3.0
281.6533	23.03	-3.12	222794.600	2.0	258288.800	1.0
281.6580	30.02	-2.56	264632.400	3.0	300126.000	4.0
281.6627	25.01	-1.55	35004.430	3.0	70497.440	4.0
281.6640	26.02	-1.46	184247.160	2.0	219740.000	1.0
281.6640	26.02	-.54	184247.160	2.0	219740.000	2.0
281.6640	26.02	-.29	184247.160	2.0	219740.000	3.0
281.6640	26.01	-.81	64425.460	2.5	99918.300	1.5
281.6643	26.02	-2.17	105906.230	2.0	141399.040	2.0
281.6680	41.01	.22	13550.463	0.0	49053.254	0.0
281.6820	22.01	-.74	29968.080	4.5	65458.650	3.5
281.6824	24.01	-.34	30864.610	2.5	66355.130	1.5
281.6827	24.01	-3.04	30219.040	4.5	65709.530	5.5
281.6874	28.01	-3.86	100389.520	2.5	135879.410	3.5
281.6960	75.00	-.46	14518.354	0.0	50017.616	0.0
281.7007	24.01	.28	47751.980	5.5	83240.200	4.5
281.7021	24.01	-.70	49006.150	1.5	84494.200	2.5
281.7064	24.02	-2.61	118598.200	3.0	154085.700	3.0
281.7090	44.00	-1.08	2661.698	0.0	38159.321	0.0
281.7098	29.01	-2.67	85388.770	2.0	120875.850	2.0
281.7100	73.01	.38	5565.369	0.0	41062.866	0.0
281.7101	27.01	-3.40	25861.460	0.0	61348.500	1.0
281.7104	26.01	-.89	43238.610	2.5	78725.610	1.5
281.7138	14.02	-4.62	204828.060	3.0	240314.630	3.0
281.7140	90.01	-.86	11050.080	0.0	46547.073	0.0
281.7159	25.00	-1.62	27281.850	.5	62768.160	.5
281.7236	25.01	-1.26	52373.180	3.0	87858.510	2.0
281.7271	8.01	-4.73	229946.600	2.5	265431.500	2.5
281.7287	17.02	-2.48	204021.600	.5	239506.300	1.5
281.7294	23.01	-.95	37352.390	5.0	72837.000	6.0
281.7321	25.01	-.02	46903.260	2.0	82387.530	3.0
281.7352	23.01	-1.63	30306.400	3.0	65790.280	4.0
281.7363	26.02	-4.19	83237.860	3.0	118721.600	2.0
281.7399	22.00	-3.22	8492.421	1.0	43975.710	1.0
281.7413	24.00	-3.47	23933.900	4.0	59417.010	3.0
281.7414	28.01	-2.49	100010.170	.5	135493.260	1.5
281.7436	22.00	-3.69	170.132	3.0	35652.950	3.0
281.7440	42.01	.59	15808.874	0.0	51302.088	0.0
281.7477	25.01	-4.66	55696.500	4.0	91178.800	4.0
281.7500	58.01	-.28	5646.026	0.0	41138.484	0.0
281.7500	73.00	-.61	10566.135	0.0	46058.593	0.0
281.7503	23.01	-.44	18269.490	1.0	53751.460	1.0
281.7505	26.00	-1.95	7728.058	3.0	43210.011	2.0
281.7510	76.00	-.38	14760.326	0.0	50252.658	0.0
281.7519	25.01	-3.49	53597.130	2.0	89078.900	2.0
281.7560	24.01	-.79	47372.750	1.5	82854.000	.5
281.7607	24.01	-1.49	31531.620	1.5	67012.280	2.5
281.7673	25.00	-.94	25281.040	2.5	60760.870	1.5
281.7680	72.00	.04	8872.327	0.0	44362.518	0.0
281.7729	25.01	-.40	52379.380	2.0	87858.510	2.0
281.7730	28.01	-2.26	70358.940	4.5	105838.060	3.5
281.7776	24.00	-4.21	21856.940	3.0	57335.470	4.0
281.7819	25.01	-3.81	49889.860	3.0	85367.850	2.0
281.7837	22.01	-.73	29968.080	4.5	65445.850	5.5
281.7858	22.00	-3.22	8602.340	2.0	44079.840	2.0
281.7894	23.01	-.54	37205.010	3.0	72682.060	2.0
281.7919	23.01	-1.13	37041.110	2.0	72517.840	1.0
281.7923	24.01	-1.61	34631.140	4.5	70107.830	4.5
281.7941	26.00	-3.14	11976.239	4.0	47452.702	4.0
281.7944	25.01	-.42	48435.960	6.0	83912.380	5.0
281.7967	24.01	-.76	33694.470	5.5	69170.600	5.5
281.7969	25.00	-.63	17282.000	3.5	52758.110	4.5
281.8001	30.02	-3.10	264632.400	3.0	300108.100	3.0
281.8007	9.02	-2.86	391257.420	2.5	426733.040	2.5
281.8049	27.01	-2.84	28111.900	2.0	63587.000	3.0
281.8060	74.00	-.11	6129.972	0.0	41615.377	0.0
281.8081	24.01	-2.95	30143.720	5.5	65618.410	6.5
281.8136	10.03	-3.68	488917.000	1.5	524391.000	.5
281.8250	78.00	-1.89	806.575	0.0	36289.588	0.0
281.8274	11.01	-1.09	297639.340	2.0	333111.600	1.0
281.8300	42.00	-.69	11372.710	0.0	46855.093	0.0
281.8304	25.02	-3.13	143345.070	3.5	178816.960	2.5
281.8323	23.01	-2.47	30318.630	4.0	65790.280	4.0
281.8349	24.01	.39	33521.230	3.5	68992.550	4.5
281.8360	44.00	-.74	0.000	0.0	35481.628	0.0
281.8387	20.02	-1.34	350779.470	3.0	386250.310	3.0
281.8429	25.02	-4.77	195036.200	6.5	230506.520	5.5
281.8429	25.02	-1.17	195036.200	6.5	230506.520	5.5
281.8429	20.02	.09	350779.470	3.0	386249.780	4.0
281.8438	24.02	-3.81	118423.300	2.0	153893.500	2.0
281.8444	26.02	-3.43	105929.160	3.0	141399.040	2.0
281.8464	27.01	-2.47	49697.500	4.0	85167.380	3.0
281.8512	23.01	-.85	37205.010	3.0	72674.280	2.0
281.8516	25.02	-.61	194900.400	5.5	230369.620	6.5
281.8520	23.01	-5.39	13741.610	3.0	49210.780	3.0
281.8540	20.02	-4.54	350779.470	3.0	386248.390	4.0
281.8590	27.00	-2.68	1406.840	2.5	36875.130	1.5
281.8593	24.01	-2.97	30150.160	6.5	65618.410	6.5
281.8631	26.02	-1.58	109570.840	2.0	145038.610	3.0
281.8638	26.01	-2.10	62662.300	5.5	98129.980	6.5
281.8740	40.01	.52	7662.464	0.0	43139.308	0.0
281.8741	26.02	-3.91	183456.690	3.0	218923.080	3.0
281.8742	8.02	-3.79	294001.600	2.0	329467.980	2.0
281.8769	25.00	-2.13	17637.150	.5	53103.190	1.5
281.8778	26.02	-2.97	183457.150	4.0	218923.080	3.0
281.8796	30.02	-3.69	264632.400	3.0	300098.100	4.0
281.8809	23.02	-2.56	110181.470	2.5	145647.000	1.5
281.8825	24.00	-1.63	25038.610	5.0	60503.940	4.0
281.8860	39.00	-.49	10404.820	0.0	45880.154	0.0
281.8867	27.01	-3.14	11321.500	2.0	46786.300	1.0
281.8917	25.00	-3.15	17637.150	.5	53101.320	.5
281.8928	6.01	-1.97	195752.580	1.5	231216.620	2.5
281.8940	72.00	-.47	6533.259	0.0	42007.586	0.0
281.8950	44.00	-.64	8711.012	0.0	44185.213	0.0
281.8987	8.01	-3.03	229968.200	1.5	265431.500	2.5
281.9010	22.02	-2.73	41703.650	2.0	77166.650	2.0
281.9091	26.01	-3.48	31811.870	2.5	67273.860	1.5
281.9111	24.01	-.86	69903.460	3.5	105365.200	4.5
281.9120	7.01	-1.09	174212.030	2.0	209673.650	2.0
281.9136	25.02	-2.03	194908.200	5.5	230369.620	6.5
281.9140	73.01	.23	10646.793	0.0	46118.604	0.0
281.9161	24.01	-3.00	30219.040	4.5	65680.150	4.5
281.9163	27.00	-2.71	8460.810	2.5	43921.690	2.5
281.9185	24.01	-2.74	32844.920	1.5	68305.730	1.5
281.9208	6.01	-1.37	195752.580	1.5	231213.100	1.5
281.9245	23.01	-5.35	13741.610	3.0	49201.660	2.0
281.9258	28.01	-4.55	100389.520	2.5	135849.410	2.5
281.9302	26.00	-1.15	22249.430	3.0	57708.760	2.0
281.9306	6.01	-1.85	195765.850	2.5	231225.130	3.5
281.9320	28.01	-2.98	98822.550	6.5	134281.660	5.5
281.9322	23.01	-2.85	11295.510	0.0	46754.590	1.0
281.9330	90.01	-.53	7743.122	0.0	43212.542	0.0
281.9340	26.01	-2.59	25428.800	5.5	60887.660	5.5
281.9352	24.01	-.97	48749.570	.5	84208.280	.5
281.9360	27.01	-2.03	48555.900	5.0	84014.500	5.0
281.9370	73.00	-1.18	3871.561	0.0	39340.478	0.0
281.9378	25.00	-1.13	25281.040	2.5	60739.420	3.5
281.9441	23.01	-1.01	18293.870	2.0	53751.460	1.0
281.9488	28.01	-3.84	100619.260	4.5	136076.260	4.5
281.9508	26.00	-2.31	20641.110	4.0	56097.850	3.0
281.9509	25.00	-1.66	30419.610	2.5	65876.340	3.5
281.9550	21.01	.14	27917.690	1.0	63373.910	2.0
281.9560	40.00	-.44	5000.766	0.0	40467.293	0.0
281.9601	26.01	-.74	63876.380	5.5	99331.950	4.5
281.9727	25.00	-1.69	25285.430	4.5	60739.420	3.5
281.9740	72.00	-1.14	0.000	0.0	35464.263	0.0
281.9742	28.02	-1.97	98238.200	4.0	133692.000	5.0
281.9743	25.00	-3.48	30419.610	2.5	65873.400	2.5
281.9780	75.01	.52	17099.394	0.0	52563.154	0.0
281.9807	10.01	-3.08	282375.330	1.5	317828.320	.5
281.9880	28.01	-1.99	98822.550	6.5	134274.620	5.5
281.9911	25.00	-2.85	25287.740	3.5	60739.420	3.5
281.9950	75.00	.23	11695.340	0.0	47156.962	0.0
281.9981	25.01	-.44	68417.340	2.0	103868.140	1.0
281.9983	6.01	-1.26	195765.850	2.5	231216.620	2.5
281.9993	24.01	-3.50	32855.090	2.5	68305.730	1.5
281.9997	30.02	-3.34	264632.400	3.0	300083.000	3.0
281.9999	24.00	-4.00	25177.390	4.0	60627.960	4.0
282.0000	27.00	-4.20	0.000	4.5	35450.560	3.5
282.0001	27.00	-1.55	8460.810	2.5	43911.360	1.5
282.0023	22.01	-1.03	29734.450	3.5	65184.720	3.5
282.0180	76.00	.16	15082.956	0.0	50541.686	0.0
282.0220	72.01	-.14	2984.328	0.0	38442.555	0.0
282.0228	25.00	-1.75	30425.710	1.5	65873.400	2.5
282.0263	6.01	-1.97	195765.850	2.5	231213.100	1.5
282.0293	22.01	-2.10	31490.820	3.5	66937.700	2.5
282.0299	27.02	-3.23	72083.300	4.5	107530.100	3.5
282.0339	27.01	-1.20	50035.900	3.0	85482.190	4.0
282.0355	22.01	-1.93	4628.610	2.5	40074.710	3.5
282.0420	72.01	-.27	13389.148	0.0	48844.860	0.0
282.0429	26.02	-3.63	79844.740	6.0	115289.910	5.0
282.0443	20.02	-2.90	350805.320	4.0	386250.310	3.0
282.0470	28.01	-1.03	98822.550	6.5	134267.200	6.5
282.0485	20.02	-1.36	350805.320	4.0	386249.780	4.0
282.0524	26.00	-2.82	11976.239	4.0	47420.215	5.0
282.0546	30.02	-3.86	264632.400	3.0	300076.100	2.0
282.0560	76.00	-.09	13953.751	0.0	49407.703	0.0
282.0573	20.02	.21	350805.320	4.0	386248.680	5.0
282.0596	20.02	-1.43	350805.320	4.0	386248.390	4.0
282.0607	6.01	-1.96	195785.740	3.5	231228.670	4.5
282.0633	13.01	-1.84	106918.200	1.0	142360.800	0.0
282.0713	27.01	-6.54	27902.500	4.0	63344.100	3.0
282.0719	28.01	-4.88	100609.010	2.5	136050.530	2.5
282.0737	9.03	-.14	416639.800	1.0	452081.100	2.0
282.0745	28.02	-1.62	121412.200	2.0	156853.400	3.0
282.0747	23.00	-7.04	2311.370	3.5	37752.540	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
282.0780	63.01	-.47	0.000	0.0	35451.187	0.0
282.0800	41.01	-.95	2339.068	0.0	37790.004	0.0
282.0804	26.00	-3.33	415.932	3.0	35856.386	2.0
282.0889	6.01	-1.09	195785.740	3.5	231225.130	3.5
282.0902	22.00	-5.25	0.000	2.0	35439.228	1.0
282.0949	26.00	-2.14	19552.474	1.0	54991.110	1.0
282.0955	23.01	-3.85	32299.240	1.0	67737.800	2.0
282.0963	24.00	-1.40	25177.390	4.0	60615.840	3.0
282.0965	26.01	-1.75	44446.890	3.5	79885.320	2.5
282.1031	28.02	-4.78	78657.800	0.0	114095.400	1.0
282.1119	23.01	-1.33	14461.730	3.0	49898.220	2.0
282.1150	70.01	-.06	31779.063	0.0	67225.601	0.0
282.1250	76.00	-.05	11292.053	0.0	46737.334	0.0
282.1289	28.00	-1.81	204.786	3.0	35639.148	3.0
282.1307	28.01	-3.91	100078.780	1.5	135512.920	2.5
282.1313	22.01	-4.01	20891.880	3.5	56325.940	2.5
282.1350	28.02	-3.56	82172.900	3.0	117606.500	3.0
282.1356	18.01	-3.54	172816.210	.5	208249.740	1.5
282.1381	22.01	-1.97	29544.370	2.5	64977.570	3.5
282.1403	27.01	-.86	50913.800	2.0	86346.730	3.0
282.1449	25.00	-.63	17451.520	2.5	52883.870	1.5
282.1449	25.00	-1.47	17451.520	2.5	52883.870	2.5
282.1465	25.01	-4.37	34910.430	4.0	70342.580	3.0
282.1509	24.00	-3.73	24056.110	5.0	59487.710	4.0
282.1515	22.00	-3.19	6661.003	3.0	42092.520	4.0
282.1533	25.02	-3.09	143127.000	.5	178558.300	1.5
282.1560	40.00	-1.12	564.603	0.0	36005.990	0.0
282.1566	6.01	-1.85	195785.740	3.5	231216.620	2.5
282.1585	23.02	-4.69	105320.180	1.5	140750.820	2.5
282.1605	23.01	-.01	37520.610	3.0	72951.000	4.0
282.1622	26.00	-3.64	18378.187	2.0	53808.370	1.0
282.1677	26.02	-4.62	79860.420	5.0	115289.910	5.0
282.1697	24.00	-.44	25038.610	5.0	60467.850	5.0
282.1736	28.01	-.31	98822.550	6.5	134251.300	7.5
282.1737	25.02	-2.40	86051.500	2.5	121480.240	3.5
282.1745	28.01	-2.63	56371.410	3.5	91800.050	4.5
282.1775	27.01	-1.80	51512.200	3.0	86940.460	2.0
282.1841	25.01	-1.94	32856.950	3.0	68284.380	3.0
282.1851	25.01	-.88	53698.700	2.0	89126.000	3.0
282.1861	27.00	-3.49	15184.040	2.5	50611.220	3.5
282.1872	26.02	-4.18	167002.000	2.0	202429.040	1.0
282.1891	9.03	-1.17	502970.400	3.0	538397.200	2.0
282.1920	41.00	-1.12	2742.356	0.0	38179.222	0.0
282.1925	28.01	-4.68	70706.770	1.5	106133.140	1.5
282.1956	26.02	-4.85	149525.630	2.0	184951.620	3.0
282.1983	26.00	-3.48	22845.856	5.0	58271.500	5.0
282.1992	25.01	-3.96	32858.840	2.0	68284.380	3.0
282.1995	25.02	-2.34	100085.200	1.5	135510.700	2.5
282.2020	90.01	-.46	8307.725	0.0	43743.335	0.0
282.2030	44.00	-.25	7985.094	0.0	43420.578	0.0
282.2030	42.01	-.43	11695.340	0.0	47130.824	0.0
282.2050	29.02	-3.26	89017.700	4.5	124442.500	4.5
282.2058	25.01	-.95	44315.170	6.0	79739.880	5.0
282.2120	75.00	-.48	13711.778	0.0	49146.132	0.0
282.2160	26.02	-1.34	184316.580	3.0	219740.000	2.0
282.2160	26.02	-.12	184316.580	3.0	219740.000	4.0
282.2160	26.02	-.45	184316.580	3.0	219740.000	3.0
282.2176	21.01	.32	28021.210	2.0	63444.430	3.0
282.2223	23.01	-.64	37259.420	1.0	72682.060	2.0
282.2335	10.02	-.37	374434.000	2.0	409855.230	1.0
282.2378	24.01	.72	30391.940	6.5	65812.630	7.5
282.2380	90.01	-.81	9356.272	0.0	44787.362	0.0
282.2415	23.01	.07	37369.010	2.0	72789.230	3.0
282.2430	42.00	-.79	11372.710	0.0	46803.172	0.0
282.2440	23.01	-.25	37531.090	4.0	72951.000	4.0
282.2470	25.01	-2.36	55759.270	3.0	91178.800	4.0
282.2474	24.00	-4.86	21856.940	3.0	57276.420	3.0
282.2511	26.02	-4.42	83138.230	5.0	118557.250	5.0
282.2526	25.01	-1.62	68417.340	2.0	103836.170	2.0
282.2546	25.00	-1.18	17451.520	2.5	52870.100	3.5
282.2560	39.00	-.10	10404.820	0.0	45833.651	0.0
282.2570	74.01	1.04	13308.491	0.0	48737.196	0.0
282.2597	18.01	-4.88	173347.830	1.5	208765.770	.5
282.2668	26.01	-2.40	26170.190	5.5	61587.240	5.5
282.2680	72.01	-.14	6291.287	0.0	41718.611	0.0
282.2760	28.01	-2.33	98822.550	6.5	134238.440	6.5
282.2760	17.01	-2.09	126219.000	3.0	161634.900	2.0
282.2799	23.01	-2.08	34228.790	3.0	69644.200	3.0
282.2830	6.01	-.91	195813.660	4.5	231228.670	4.5
282.2843	23.01	.01	37259.420	1.0	72674.280	2.0
282.2860	42.00	-.39	18147.942	0.0	53573.007	0.0
282.2863	25.00	-2.05	30354.210	3.5	65768.810	4.5
282.2873	28.01	-3.02	100078.780	1.5	135493.260	1.5
282.2914	28.01	-3.67	100332.090	4.5	135746.060	3.5
282.2948	10.02	.22	374434.000	2.0	409847.530	3.0
282.3085	24.00	-.34	25106.340	3.0	60518.160	3.0
282.3085	24.00	-.94	25106.340	3.0	60518.160	3.0
282.3113	6.01	-1.96	195813.660	4.5	231225.130	3.5
282.3144	10.02	-.64	374434.000	2.0	409845.080	2.0
282.3169	24.01	-3.59	30298.770	5.5	65709.530	5.5
282.3180	77.00	-.97	0.000	0.0	35421.050	0.0
282.3200	82.00	.30	10566.135	0.0	45986.934	0.0
282.3213	25.01	-1.44	67295.160	4.0	102705.370	3.0
282.3238	25.02	-2.92	143148.400	1.5	178558.300	1.5
282.3277	26.00	-.83	7728.058	3.0	43137.472	3.0
282.3289	26.00	-2.73	23110.925	3.0	58520.180	4.0
282.3327	26.01	-1.56	25428.800	5.5	60837.590	6.5
282.3375	25.01	-2.78	67295.160	4.0	102703.340	4.0
282.3469	22.00	-3.22	170.132	3.0	35577.140	2.0
282.3481	23.01	-1.87	37041.110	2.0	72447.960	3.0
282.3512	10.01	-2.83	282375.330	1.5	317781.790	1.5
282.3542	10.01	-4.12	282375.330	1.5	317781.420	2.5
282.3578	26.00	-4.57	12560.933	3.0	47966.571	3.0
282.3685	15.01	-.33	103340.010	2.0	138744.300	3.0
282.3693	27.01	-2.50	27902.500	4.0	63306.700	5.0
282.3715	28.01	-3.31	101144.630	3.5	136548.550	2.5
282.3729	26.02	-2.74	183456.690	3.0	218860.430	2.0
282.3741	28.01	-3.60	100475.820	3.5	135879.410	3.5
282.3803	24.00	-1.88	25038.610	5.0	60441.420	6.0
282.3808	25.00	-3.77	25265.740	5.5	60668.490	4.5
282.3818	22.00	-6.07	6556.828	1.0	41959.460	0.0
282.3828	28.01	-1.93	101144.630	3.5	136547.130	3.5
282.3844	9.03	-.49	416417.300	0.0	451819.600	1.0
282.3878	28.01	-1.54	101144.630	3.5	136546.500	4.5
282.3887	26.01	-1.39	64286.440	3.5	99688.200	3.5
282.3895	9.02	-2.59	430012.480	1.5	465414.140	2.5
282.3984	15.01	-2.27	105550.450	2.0	140951.000	3.0
282.4016	23.01	-2.28	37150.570	4.0	72550.710	4.0
282.4116	20.02	-.11	347758.220	2.0	383157.110	3.0
282.4116	23.03	-.16	227712.500	4.0	263111.400	4.0
282.4134	22.01	-3.99	4628.610	2.5	40027.280	1.5
282.4141	26.01	-1.57	64425.460	2.5	99824.040	2.5
282.4170	76.00	-.23	11292.053	0.0	46700.666	0.0
282.4215	28.01	-1.70	101144.630	3.5	136542.280	3.5
282.4219	24.00	-.85	25106.340	3.0	60503.940	4.0
282.4250	75.00	-.03	21616.215	0.0	57023.845	0.0
282.4261	25.00	-3.55	23719.520	1.5	59116.600	2.5
282.4287	22.01	-4.15	9518.050	2.5	44914.800	1.5
282.4365	26.02	-4.12	83161.480	4.0	118557.250	5.0
282.4370	29.00	-1.25	11211.395	0.0	46617.521	0.0
282.4370	92.01	-.83	241.973	0.0	35648.099	0.0
282.4427	17.01	-2.84	147053.700	2.0	182448.700	2.0
282.4433	23.01	-2.24	11295.510	0.0	46690.430	1.0
282.4450	77.00	-.37	2823.013	0.0	38228.136	0.0
282.4451	27.00	-3.71	15184.040	2.5	50578.730	3.5
282.4466	28.02	-4.08	97996.300	3.0	133390.800	3.0
282.4468	10.02	-.59	374460.750	1.0	409855.230	1.0
282.4579	26.01	-1.24	44784.780	2.5	80177.870	1.5
282.4635	28.01	-1.67	74283.330	.5	109675.720	.5
282.4680	25.01	-.12	44521.520	4.0	79913.350	4.0
282.4681	18.02	-.22	207532.150	1.0	242923.960	1.0
282.4696	26.00	-1.60	22249.430	3.0	57641.060	3.0
282.4798	27.00	-2.92	18775.010	.5	54165.350	1.5
282.4810	73.00	-.52	12179.286	0.0	47579.897	0.0
282.4904	24.00	-1.66	25038.610	5.0	60427.630	5.0
282.4944	24.00	-4.39	20519.600	6.0	55908.120	6.0
282.4948	26.00	-3.28	21715.735	5.0	57104.207	5.0
282.4970	70.01	-.23	30407.885	0.0	65806.491	0.0
282.5010	27.01	-3.97	11651.310	2.0	47039.000	3.0
282.5020	23.01	-.20	37520.610	3.0	72908.170	3.0
282.5052	27.00	-4.21	8460.810	2.5	43847.980	3.5
282.5055	22.00	-6.25	6556.828	1.0	41943.950	1.0
282.5059	24.00	-4.87	25106.340	3.0	60493.420	3.0
282.5059	22.00	-2.99	6598.749	2.0	41985.830	3.0
282.5071	15.01	-.62	103166.370	1.0	138553.300	2.0
282.5135	24.01	-2.52	30156.940	3.5	65543.060	3.5
282.5137	25.01	-.81	68417.340	2.0	103803.440	3.0
282.5146	27.00	-.93	15774.040	1.5	51160.030	2.5
282.5162	28.01	-4.24	98467.250	3.5	133853.040	4.5
282.5180	41.00	-.64	2097.096	0.0	37493.071	0.0
282.5217	26.00	-2.23	18378.187	2.0	53763.280	3.0
282.5217	27.01	-2.27	9812.700	4.0	45197.800	5.0
282.5230	28.01	-1.98	23108.280	2.5	58493.210	2.5
282.5230	25.01	-3.00	67295.160	4.0	102680.090	5.0
282.5263	10.00	-3.68	134459.287	1.0	169843.820	2.0
282.5270	28.01	-3.45	70748.700	.5	106133.140	1.5
282.5275	22.01	-3.10	9518.050	2.5	44902.420	2.5
282.5279	10.02	-.03	374460.750	1.0	409845.080	2.0
282.5338	28.01	-3.46	98467.250	3.5	133850.830	3.5
282.5346	9.02	-2.94	391047.540	.5	426431.030	.5
282.5370	39.01	0.00	29036.707	0.0	64430.301	0.0
282.5376	26.01	-2.99	63948.840	4.5	99331.950	4.5
282.5377	29.01	-4.86	115359.800	4.0	150742.900	3.0
282.5380	25.00	-1.58	25285.430	4.5	60668.490	4.5
282.5403	28.01	-2.72	100078.780	1.5	135461.550	2.5
282.5406	23.01	-2.92	30613.970	4.0	65996.700	3.0
282.5432	28.01	-2.32	72985.650	1.5	108368.050	2.5
282.5438	26.01	-3.70	65109.710	3.5	100492.040	3.5
282.5441	17.02	-2.47	204124.000	1.5	239506.300	1.5
282.5459	26.00	-6.06	12968.552	2.0	48350.620	1.0
282.5460	75.00	-.32	16534.792	0.0	51927.259	0.0
282.5474	28.01	-2.62	68281.620	.5	103663.500	1.5
282.5514	24.01	-1.28	30298.770	5.5	65680.150	4.5
282.5557	26.00	-1.23	7728.058	3.0	43108.899	4.0
282.5560	40.01	.62	7420.492	0.0	42811.706	0.0
282.5564	25.00	-1.17	25287.740	3.5	60668.490	4.5
282.5608	25.01	-4.67	53698.700	2.0	89078.900	2.0
282.5611	10.00	-3.58	134459.287	1.0	169839.450	1.0
282.5641	28.01	-.60	101144.630	3.5	136524.420	4.5
282.5670	42.00	-.08	18228.600	0.0	53618.437	0.0
282.5689	26.00	-2.89	0.000	4.0	35379.189	5.0
282.5745	26.01	-1.48	25428.800	5.5	60807.280	4.5
282.5816	26.02	-4.56	116380.070	1.0	151757.670	2.0
282.5818	10.02	-1.49	374477.660	0.0	409855.230	1.0
282.5857	23.01	-.18	37531.090	4.0	72908.170	3.0
282.5860	28.01	-4.09	100609.010	2.5	135986.060	3.5
282.5860	41.01	-.12	10808.108	0.0	46195.565	0.0
282.5943	24.01	-1.96	31351.150	2.5	66727.160	2.5
282.5996	26.00	-4.58	704.003	2.0	36079.353	3.0
282.6021	26.01	-1.30	27314.930	3.5	62689.960	2.5
282.6040	28.01	-2.14	74300.930	1.5	109675.720	.5
282.6090	22.01	-5.49	20951.770	2.5	56325.940	2.5
282.6103	24.01	-.68	49351.960	2.5	84725.960	3.5
282.6127	9.03	.15	417143.400	2.0	452517.100	3.0
282.6150	24.01	-.66	33619.130	4.5	68992.550	4.5
282.6154	22.00	-4.38	8602.340	2.0	43975.710	1.0
282.6160	26.01	-3.07	26352.800	4.5	61726.090	3.5
282.6160	81.00	-.63	7743.122	0.0	43126.823	0.0
282.6180	73.00	-.46	10888.765	0.0	46272.215	0.0
282.6229	28.01	-3.09	70635.460	2.5	106007.890	2.5
282.6234	28.01	-4.47	100010.170	.5	135382.530	1.5
282.6270	28.01	-3.42	57420.160	2.5	92792.080	3.5
282.6274	15.01	-.15	103668.740	3.0	139040.600	4.0
282.6282	25.01	-.92	68496.370	1.0	103868.140	1.0
282.6287	22.00	-7.36	6556.828	1.0	41928.528	2.0
282.6372	22.00	-3.62	386.874	4.0	35757.510	4.0
282.6375	30.02	-.64	257491.100	0.0	292861.700	1.0
282.6380	39.01	.19	23632.653	0.0	59013.600	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
282.6420	73.00	-.79	10566.135	0.0	45946.581	0.0
282.6430	45.00	-.13	10243.505	0.0	45623.826	0.0
282.6480	41.00	-.68	2097.096	0.0	37476.791	0.0
282.6499	26.00	-3.21	12560.933	3.0	47929.981	4.0
282.6501	27.00	-3.46	7442.410	3.5	42811.440	3.5
282.6540	42.00	.85	24681.201	0.0	60060.145	0.0
282.6680	45.00	-.19	9114.300	0.0	44491.492	0.0
282.6687	21.01	.48	28161.030	3.0	63527.730	4.0
282.6696	28.01	-1.77	73903.250	.5	109269.830	1.5
282.6735	26.00	-3.44	17550.180	3.0	52916.278	2.0
282.6750	42.00	-.09	18147.942	0.0	53524.258	0.0
282.6790	26.02	-.43	184374.590	4.0	219740.000	4.0
282.6790	26.02	-1.38	184374.590	4.0	219740.000	3.0
282.6790	26.02	.03	184374.590	4.0	219740.000	5.0
282.6808	23.01	-2.46	11514.760	1.0	46879.940	2.0
282.6860	90.01	-.29	7904.437	0.0	43279.376	0.0
282.6979	18.01	-4.04	183797.360	2.5	219160.400	2.5
282.7005	26.02	-4.65	83358.880	2.0	118721.600	2.0
282.7010	9.02	-2.20	391626.910	3.5	426989.570	3.5
282.7043	28.01	-4.25	104646.520	3.5	140008.760	3.5
282.7080	41.01	-.55	80.658	0.0	35452.844	0.0
282.7127	28.01	-1.93	58705.950	1.5	94067.140	1.5
282.7150	74.00	.33	19519.120	0.0	54890.430	0.0
282.7180	73.00	-.99	5565.369	0.0	40936.304	0.0
282.7235	22.01	.71	29734.450	3.5	65094.290	4.5
282.7250	28.01	-2.91	104646.520	3.5	140006.170	4.5
282.7310	45.00	-1.67	3226.301	0.0	38595.610	0.0
282.7346	28.01	-2.84	100490.950	1.5	135849.410	2.5
282.7430	26.01	-2.06	26170.190	5.5	61527.590	6.5
282.7480	73.01	.94	14518.354	0.0	49885.536	0.0
282.7493	28.01	-4.77	100389.520	2.5	135746.130	1.5
282.7500	40.01	-.33	6049.314	0.0	41416.246	0.0
282.7520	75.00	-.45	14115.066	0.0	49481.748	0.0
282.7540	15.01	-2.02	103166.370	1.0	138522.400	1.0
282.7592	24.00	-4.99	20519.600	6.0	55874.980	5.0
282.7595	10.00	-3.49	134459.287	1.0	169814.630	2.0
282.7623	23.01	-2.56	30641.710	3.0	65996.700	3.0
282.7667	26.00	-2.06	21715.735	5.0	57070.171	6.0
282.7740	42.01	.58	27504.214	0.0	62868.144	0.0
282.7806	21.01	-.67	28021.210	2.0	63373.910	2.0
282.7854	28.02	-2.58	121802.800	3.0	157154.900	2.0
282.7865	26.00	-2.73	24574.655	4.0	59926.620	5.0
282.7870	44.00	-.84	1129.205	0.0	36491.509	0.0
282.7893	26.00	-5.05	415.932	3.0	35767.546	4.0
282.7896	26.01	-2.11	25805.320	4.5	61156.900	3.5
282.7939	24.00	-4.88	20523.940	5.0	55874.980	5.0
282.7990	90.01	-.72	9114.300	0.0	44475.104	0.0
282.8001	20.02	-.03	350900.040	2.0	386250.310	3.0
282.8041	22.00	-2.24	6742.757	4.0	42092.520	4.0
282.8048	22.00	-3.09	6556.828	1.0	41906.510	2.0
282.8142	25.02	-3.09	143209.800	2.5	178558.300	1.5
282.8149	22.01	.90	30240.680	5.5	65585.100	6.5
282.8164	24.00	-.77	23512.000	1.0	58860.230	2.0
282.8190	28.02	-3.94	78303.100	2.0	113651.000	2.0
282.8243	18.01	-4.72	173347.830	1.5	208695.070	1.5
282.8245	25.01	-3.47	31661.720	3.0	67008.930	3.0
282.8349	25.01	-2.95	47073.560	3.0	82419.480	3.0
282.8366	23.01	-1.60	37205.010	3.0	72550.710	4.0
282.8377	23.00	-6.58	2153.200	1.5	37498.760	2.5
282.8406	22.00	-5.84	6598.749	2.0	41943.950	1.0
282.8408	23.00	-9.50	2112.320	.5	37457.500	1.5
282.8449	22.00	-2.34	12118.394	4.0	47463.060	4.0
282.8467	25.01	-.38	52373.180	3.0	87717.620	3.0
282.8478	25.01	-1.80	53781.700	3.0	89126.000	3.0
282.8580	73.01	1.74	31133.803	0.0	66487.231	0.0
282.8624	26.01	-.80	26170.190	5.5	61512.670	4.5
282.8644	25.01	-1.31	52653.270	4.0	87995.500	5.0
282.8671	24.01	.28	33418.110	2.5	68760.000	3.5
282.8673	26.01	-1.17	27620.390	2.5	62962.260	1.5
282.8720	63.01	-.97	1613.150	0.0	36964.828	0.0
282.8742	29.01	-4.81	111218.800	4.0	146559.800	4.0
282.8761	24.00	-1.78	25177.390	4.0	60518.160	3.0
282.8761	24.00	-2.20	25177.390	4.0	60518.160	3.0
282.8782	24.01	-1.18	31531.620	1.5	66872.120	.5
282.8790	42.00	.05	23955.283	0.0	59306.087	0.0
282.8800	22.01	-1.16	29544.370	2.5	64884.650	2.5
282.8809	26.00	-1.10	7985.783	2.0	43325.946	3.0
282.8822	23.00	-4.43	2424.890	4.5	37764.890	5.5
282.8838	25.01	-.66	68496.370	1.0	103836.170	2.0
282.8862	30.02	-2.68	264783.900	4.0	300123.400	5.0
282.8873	22.01	.36	29968.080	4.5	65307.450	4.5
282.8923	29.01	-2.04	116080.460	3.0	151419.200	3.0
282.8960	26.02	-4.01	116419.390	2.0	151757.670	2.0
282.8963	25.01	-1.66	52379.380	2.0	87717.620	3.0
282.8971	25.01	-3.58	35004.430	3.0	70342.580	3.0
282.9010	32.00	-.29	16292.819	0.0	51640.874	0.0
282.9030	76.00	-1.17	10082.190	0.0	45429.995	0.0
282.9070	2.00	-1.74	159856.000	0.0	195203.305	0.0
282.9109	23.01	-4.92	26839.820	3.0	62176.240	4.0
282.9137	26.00	-3.22	12968.552	2.0	48304.623	2.0
282.9153	23.00	-5.68	2220.130	2.5	37556.000	3.5
282.9158	28.01	-1.15	100309.290	5.5	135645.100	5.5
282.9160	44.00	.11	6452.602	0.0	41798.782	0.0
282.9270	76.00	-.60	4113.534	0.0	39458.340	0.0
282.9300	63.01	-1.50	1613.150	0.0	36957.581	0.0
282.9311	25.01	-1.40	52383.720	4.0	87717.620	3.0
282.9320	72.01	.18	17260.709	0.0	52604.691	0.0
282.9349	25.02	-2.91	195036.200	6.5	230369.620	6.5
282.9349	25.02	.33	195036.200	6.5	230369.620	6.5
282.9380	23.00	-4.98	2311.370	3.5	37644.410	4.5
282.9405	26.02	-4.75	143883.740	5.0	179216.470	6.0
282.9452	28.01	-3.33	52205.950	3.5	87538.090	3.5
282.9524	28.01	-2.96	100309.290	5.5	135640.530	4.5
282.9548	28.01	-3.07	67694.640	2.5	103025.580	2.5
282.9641	22.00	-6.46	6598.749	2.0	41928.528	2.0
282.9655	15.02	-2.86	178653.200	2.5	213982.800	2.5
282.9655	15.02	-1.56	178653.200	3.5	213982.800	2.5
282.9655	15.02	-1.72	178653.200	2.5	213982.800	1.5
282.9711	28.02	-4.88	97996.300	3.0	133325.200	4.0
282.9750	41.01	-1.09	1209.863	0.0	36548.674	0.0
282.9781	18.01	-4.75	183675.570	3.5	219003.600	2.5
282.9790	42.00	-.66	11775.998	0.0	47114.309	0.0
282.9790	73.01	-.66	4355.506	0.0	39693.817	0.0
282.9799	23.01	-2.43	37352.390	5.0	72680.200	5.0
282.9806	26.02	-3.74	84369.920	2.0	119697.640	2.0
282.9810	40.00	-.59	4355.506	0.0	39693.568	0.0
282.9820	74.00	.22	13227.833	0.0	48565.770	0.0
282.9857	11.01	-.65	297639.340	2.0	332966.420	2.0
282.9857	11.01	-.65	297639.340	2.0	332966.420	2.0
282.9900	24.00	-.32	25177.390	4.0	60503.940	4.0
282.9912	30.02	-1.05	257566.100	1.0	292892.500	2.0
282.9940	42.00	-.40	11775.998	0.0	47112.436	0.0
282.9940	90.01	-.77	11453.368	0.0	46789.806	0.0
282.9984	18.01	-3.82	173347.830	1.5	208673.320	2.5
283.0016	14.02	-1.45	214532.170	1.0	249857.260	0.0
283.0038	22.00	-2.16	6661.003	3.0	41985.830	3.0
283.0045	26.01	-2.66	27620.390	2.5	62945.120	3.5
283.0102	24.01	-2.00	30219.040	4.5	65543.060	3.5
283.0116	24.00	-2.30	24093.160	2.0	59417.010	3.0
283.0139	23.01	-3.32	30673.140	2.0	65996.700	3.0
283.0157	29.01	-2.28	116080.460	3.0	151403.800	2.0
283.0170	77.00	-1.63	2823.013	0.0	38156.580	0.0
283.0171	25.01	-3.94	30523.450	6.0	65846.610	7.0
283.0184	17.01	-1.88	147125.700	3.0	182448.700	2.0
283.0206	26.02	.17	184417.270	5.0	219740.000	6.0
283.0206	26.02	-1.56	184417.270	5.0	219740.000	4.0
283.0206	26.02	-.48	184417.270	5.0	219740.000	5.0
283.0242	24.01	-1.80	33521.230	3.5	68843.510	3.5
283.0248	18.03	-.17	250906.600	1.5	286228.800	1.5
283.0269	29.01	-1.05	116080.460	3.0	151402.400	3.0
283.0284	24.00	-4.81	21810.840	1.0	57132.590	1.0
283.0290	74.00	-.70	12098.628	0.0	47430.696	0.0
283.0300	78.00	-.56	0.000	0.0	35331.944	0.0
283.0320	26.00	-5.64	12968.552	2.0	48289.852	1.0
283.0403	23.01	-.47	20343.000	2.0	55663.270	1.0
283.0408	25.01	-3.31	53805.800	4.0	89126.000	3.0
283.0450	90.01	-.92	6129.972	0.0	41460.043	0.0
283.0453	24.01	.66	30298.770	5.5	65618.410	6.5
283.0471	25.01	-.78	44138.960	1.0	79458.380	2.0
283.0495	28.01	-2.19	100309.290	5.5	135628.410	4.5
283.0510	77.00	-.59	12098.628	0.0	47427.950	0.0
283.0536	17.01	-2.21	147053.700	2.0	182372.300	1.0
283.0618	24.01	-.28	30391.940	6.5	65709.530	5.5
283.0670	28.01	-1.98	98969.440	5.5	134286.380	4.5
283.0673	28.02	-2.18	97841.400	2.0	133158.300	3.0
283.0710	28.01	-3.59	101357.200	4.5	136673.640	4.5
283.0710	23.01	-.17	37201.410	0.0	72517.840	1.0
283.0713	17.01	-1.73	126032.000	2.0	161348.400	1.0
283.0719	25.01	.54	51553.060	5.0	86869.390	6.0
283.0743	24.00	-4.53	25177.390	4.0	60493.420	3.0
283.0794	25.00	-2.88	17568.480	1.5	52883.870	1.5
283.0794	25.00	-.89	17568.480	1.5	52883.870	2.5
283.0836	25.01	-1.00	53781.700	3.0	89096.560	4.0
283.0856	25.00	-.80	17568.480	1.5	52883.100	.5
283.0889	30.02	-2.85	264783.900	4.0	300098.100	4.0
283.0900	24.01	-.59	70107.830	4.5	105421.900	5.5
283.0900	24.00	-2.28	7810.820	1.0	43124.880	2.0
283.0900	58.01	.54	7178.519	0.0	42502.974	0.0
283.0908	25.01	-1.13	47073.560	3.0	82387.530	3.0
283.0915	26.01	-1.93	30764.460	3.5	66078.340	2.5
283.0980	70.01	.04	30407.885	0.0	65731.342	0.0
283.0981	23.01	-.44	37369.010	2.0	72682.060	2.0
283.0985	28.01	-1.95	100332.090	4.5	135645.100	5.5
283.1017	10.01	-4.70	303237.910	1.5	338550.510	.5
283.1034	24.01	-.90	49006.150	1.5	84318.540	1.5
283.1048	28.01	-1.10	98969.440	5.5	134281.660	5.5
283.1079	26.01	-1.47	26932.740	.5	62244.570	1.5
283.1249	9.02	-1.52	390080.300	1.5	425390.010	.5
283.1351	28.01	-1.30	100332.090	4.5	135640.530	4.5
283.1360	77.00	-1.00	9759.560	0.0	45078.276	0.0
283.1380	74.00	-.22	2903.671	0.0	38222.138	0.0
283.1406	22.00	-2.24	6598.749	2.0	41906.510	2.0
283.1422	26.01	-3.40	30388.550	4.5	65696.110	4.5
283.1440	42.01	.35	33392.213	0.0	68709.931	0.0
283.1464	22.00	-3.06	8492.421	1.0	43799.455	2.0
283.1507	24.02	-4.44	118423.300	2.0	153729.800	1.0
283.1539	17.02	-4.76	173736.000	.5	209042.100	.5
283.1560	26.01	-.01	25787.600	1.5	61093.440	2.5
283.1582	20.02	-.99	347758.220	2.0	383063.780	3.0
283.1590	76.00	-.69	14760.326	0.0	50076.173	0.0
283.1605	23.01	-.14	37369.010	2.0	72674.280	2.0
283.1608	10.01	-3.54	246415.040	1.5	281720.280	1.5
283.1613	28.01	-1.70	98969.440	5.5	134274.620	5.5
283.1683	23.00	-9.31	2153.200	1.5	37457.500	1.5
283.1706	13.02	-2.45	178433.430	.5	213737.440	1.5
283.1727	28.01	-4.55	100078.780	1.5	135382.530	1.5
283.1727	25.00	-1.08	27201.540	2.5	62505.290	3.5
283.1779	20.02	-1.29	347758.220	2.0	383061.330	2.0
283.1823	26.00	-2.74	17927.378	1.0	53229.940	1.0
283.1856	28.01	-2.35	98969.440	5.5	134271.590	4.5
283.1892	26.01	-1.19	45044.210	1.5	80345.910	.5
283.1909	9.02	-2.94	391257.420	2.5	426558.910	1.5
283.1933	28.01	-1.38	101247.370	2.5	136548.550	2.5
283.1938	28.01	-2.83	70706.770	1.5	106007.890	2.5
283.2021	8.02	-2.93	366486.910	1.0	401787.000	2.0
283.2047	28.01	-1.16	101247.370	2.5	136547.130	3.5
283.2070	42.01	.12	24681.201	0.0	59991.063	0.0
283.2100	30.02	-3.69	264783.900	4.0	300083.000	3.0
283.2144	24.01	-1.54	31351.150	2.5	66649.710	1.5
283.2171	22.01	-1.10	4628.610	2.5	39926.830	2.5
283.2182	24.01	-2.54	33694.470	5.5	68992.550	4.5
283.2200	70.01	-1.00	28633.420	0.0	63941.661	0.0
283.2208	28.01	-1.39	98969.440	5.5	134267.200	6.5
283.2209	28.01	-2.88	51045.460	4.5	86343.210	5.5
283.2238	23.01	-4.03	37150.570	4.0	72447.960	3.0
283.2240	76.00	-.27	10969.423	0.0	46277.165	0.0
283.2242	22.01	-4.92	20951.770	2.5	56249.110	1.5
283.2244	28.01	-2.47	100332.090	4.5	135629.400	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
283.2245	26.01	-1.61	37227.320	.5	72524.620	1.5
283.2253	25.01	-3.91	53781.700	3.0	89078.900	2.0
283.2254	22.00	-2.44	6556.828	1.0	41854.010	1.0
283.2268	28.01	-.38	100309.290	5.5	135606.300	6.5
283.2276	28.01	-2.26	100309.290	5.5	135606.200	5.5
283.2310	90.01	-.10	4113.534	0.0	39420.404	0.0
283.2323	28.01	-2.50	100332.090	4.5	135628.410	4.5
283.2329	28.00	-1.68	13521.352	2.0	48817.600	1.0
283.2345	22.02	-2.99	41703.650	2.0	76999.700	1.0
283.2367	29.01	-4.37	85388.770	2.0	120684.550	3.0
283.2372	26.01	-3.14	63273.030	2.5	98568.750	3.5
283.2381	30.02	-.66	257566.100	1.0	292861.700	1.0
283.2381	30.02	-.42	257566.100	1.0	292861.700	2.0
283.2405	24.02	-4.07	118598.200	3.0	153893.500	2.0
283.2436	26.00	-.34	7728.058	3.0	43022.969	4.0
283.2436	25.00	-3.16	30354.210	3.5	65649.130	2.5
283.2437	28.01	-1.56	101247.370	2.5	136542.280	3.5
283.2442	29.01	-1.79	116080.460	3.0	151375.300	2.0
283.2448	24.01	.16	34813.060	5.5	70107.830	4.5
283.2544	23.01	-5.18	26839.820	3.0	62133.390	3.0
283.2594	28.01	-4.28	100609.010	2.5	135901.960	2.5
283.2620	26.02	-1.94	184447.380	6.0	219740.000	5.0
283.2620	26.02	-.68	184447.380	6.0	219740.000	6.0
283.2620	26.02	.29	184447.380	6.0	219740.000	7.0
283.2700	73.01	-.07	6775.232	0.0	42077.241	0.0
283.2751	26.01	-1.29	64040.960	3.5	99331.950	4.5
283.2770	25.01	-1.92	53805.800	4.0	89096.560	4.0
283.2787	28.01	-1.29	101258.010	1.5	136548.550	2.5
283.2790	28.01	-3.05	100332.090	4.5	135622.600	3.5
283.2794	24.00	-.90	25177.390	4.0	60467.850	5.0
283.2848	25.01	-2.61	46903.260	2.0	82193.040	2.0
283.2862	28.01	-3.48	98561.220	2.5	133850.830	3.5
283.2922	10.00	-4.11	134459.287	1.0	169748.150	1.0
283.3006	25.01	-2.05	52653.270	4.0	87941.080	4.0
283.3008	10.01	-2.51	282375.330	1.5	317663.130	1.5
283.3060	82.00	-.67	0.000	0.0	35297.523	0.0
283.3098	26.01	-1.91	64286.440	3.5	99573.110	4.5
283.3099	26.01	-.54	43238.610	2.5	78525.270	2.5
283.3117	28.01	-3.15	100592.980	3.5	135879.410	3.5
283.3166	25.00	-1.04	27201.540	2.5	62487.360	2.5
283.3224	28.01	-1.56	101246.160	.5	136531.260	1.5
283.3255	24.00	-4.52	21847.880	2.0	57132.590	1.0
283.3260	63.01	-1.43	1613.150	0.0	36908.181	0.0
283.3279	26.01	-1.38	31387.980	2.5	66672.390	3.5
283.3280	72.00	-1.19	0.000	0.0	35294.782	0.0
283.3319	22.00	-4.94	170.132	3.0	35454.051	4.0
283.3321	28.01	-2.10	101247.370	2.5	136531.260	1.5
283.3330	90.01	-.72	8388.382	0.0	43682.541	0.0
283.3361	21.01	-.70	28161.030	3.0	63444.430	3.0
283.3363	26.01	-2.69	7955.240	3.5	43238.610	2.5
283.3365	26.02	-3.67	147161.360	4.0	182444.700	3.0
283.3375	24.01	-1.92	35569.020	2.5	70852.240	3.5
283.3397	26.00	-3.38	18378.187	2.0	53661.130	3.0
283.3455	26.02	-3.88	116475.440	3.0	151757.670	2.0
283.3518	26.02	-2.82	83161.480	4.0	118442.920	3.0
283.3601	28.01	-3.56	53601.190	1.5	88881.590	.5
283.3630	74.00	-.12	6129.972	0.0	41420.395	0.0
283.3640	73.00	-.20	9920.875	0.0	45211.173	0.0
283.3674	24.00	-4.82	20519.600	6.0	55799.100	7.0
283.3714	25.01	-3.05	44521.520	4.0	79800.520	4.0
283.3744	23.00	-6.56	2220.130	2.5	37498.760	2.5
283.3750	64.01	-.16	3952.218	0.0	39241.146	0.0
283.3820	69.01	-.82	8711.012	0.0	43999.068	0.0
283.3841	26.01	-2.83	26055.400	2.5	61332.820	1.5
283.3877	25.01	-1.56	44315.170	6.0	79592.140	6.0
283.3886	24.00	-4.59	21810.840	1.0	57087.700	2.0
283.3910	40.01	-.09	7420.492	0.0	42707.428	0.0
283.3920	27.00	-3.51	816.000	3.5	36092.440	2.5
283.3936	24.01	-3.20	30143.720	5.5	65419.950	5.5
283.3993	9.02	.32	355981.900	1.5	391257.420	2.5
283.4000	44.00	-.93	2016.438	0.0	37302.253	0.0
283.4048	26.00	-2.49	22996.661	4.0	58271.500	5.0
283.4080	75.00	.03	14518.354	0.0	49803.173	0.0
283.4083	23.03	.02	257143.200	2.0	292417.600	3.0
283.4107	28.01	-.49	100332.090	4.5	135606.200	5.5
283.4120	45.00	-.34	10888.765	0.0	46173.086	0.0
283.4130	72.00	-.32	8872.327	0.0	44156.524	0.0
283.4136	25.02	-4.70	97023.800	3.5	132297.550	2.5
283.4139	8.01	-3.67	229946.600	2.5	265220.300	1.5
283.4154	22.01	.80	29968.080	4.5	65241.600	5.5
283.4170	26.00	-2.88	12560.933	3.0	47834.260	3.0
283.4176	28.01	-1.80	101258.010	1.5	136531.260	1.5
283.4204	23.01	-2.69	11908.270	2.0	47181.170	3.0
283.4236	27.02	-4.48	91715.100	2.5	126987.600	1.5
283.4251	24.01	.04	34631.140	4.5	69903.460	3.5
283.4263	24.01	.51	50667.330	3.5	85939.500	4.5
283.4268	27.01	-3.21	27469.200	5.0	62741.300	6.0
283.4275	24.01	-4.44	31083.110	1.5	66355.130	1.5
283.4280	24.01	-2.04	32603.730	2.5	67875.680	3.5
283.4350	71.01	-.04	28310.790	0.0	63592.248	0.0
283.4353	28.01	-1.36	101246.160	.5	136517.200	.5
283.4360	28.01	-4.75	100309.290	5.5	135580.250	4.5
283.4390	42.01	.21	16857.422	0.0	52138.382	0.0
283.4400	40.01	-.34	6371.944	0.0	41652.779	0.0
283.4410	73.00	-.60	9920.875	0.0	45201.586	0.0
283.4415	26.00	-3.50	12968.552	2.0	48238.832	2.0
283.4418	28.01	-4.51	100475.820	3.5	135746.060	3.5
283.4421	26.00	-2.65	12560.933	3.0	47831.132	2.0
283.4427	27.00	-2.42	5075.830	1.5	40345.950	2.5
283.4454	24.01	-3.40	30150.160	6.5	65419.950	5.5
283.4470	23.01	-3.86	14461.730	3.0	49731.320	2.0
283.4481	24.01	-1.00	35610.500	4.5	70879.950	5.5
283.4490	90.01	-.33	7904.437	0.0	43184.152	0.0
283.4498	9.02	-1.20	390120.770	.5	425390.010	.5
283.4517	28.01	-.46	98969.440	5.5	134238.440	6.5
283.4545	28.00	-2.31	1332.153	3.0	36600.805	2.0
283.4548	23.01	-.36	37520.610	3.0	72789.230	3.0
283.4550	24.00	-4.92	25106.340	3.0	60374.940	2.0
283.4636	22.00	-6.00	6661.003	3.0	41928.528	2.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
283.4668	13.02	-2.20	178470.320	1.5	213737.440	2.5
283.4668	13.02	-3.15	178470.320	1.5	213737.440	1.5
283.4697	24.01	-3.02	32603.730	2.5	67870.500	1.5
283.4710	78.00	-.62	10082.190	0.0	45359.167	0.0
283.4746	22.00	-2.56	6556.828	1.0	41822.990	0.0
283.4747	26.01	-3.86	48039.230	2.5	83305.370	3.5
283.4750	26.00	-1.31	20641.110	4.0	55907.220	5.0
283.4752	22.00	-3.05	386.874	4.0	35652.950	3.0
283.4847	30.02	-3.09	264783.900	4.0	300048.800	5.0
283.4860	24.00	-3.69	24093.160	2.0	59357.900	2.0
283.4883	26.00	-4.21	20641.110	4.0	55905.560	4.0
283.4894	24.01	-2.69	32603.730	2.5	67868.050	2.5
283.4919	27.01	-2.44	10708.100	3.0	45972.100	3.0
283.4967	28.01	-4.31	100389.520	2.5	135652.930	1.5
283.4980	70.01	-.71	37344.432	0.0	72618.049	0.0
283.4987	25.00	-2.93	30354.210	3.5	65617.370	3.5
283.5021	26.01	-1.89	64425.460	2.5	99688.200	3.5
283.5054	28.01	-.02	79823.030	3.5	115085.360	3.5
283.5084	23.01	-2.97	14461.730	3.0	49723.680	4.0
283.5120	41.01	-.51	2984.328	0.0	38256.204	0.0
283.5229	28.01	-4.59	100619.260	4.5	135879.410	3.5
283.5236	10.00	-4.43	135888.717	1.0	171148.780	0.0
283.5273	27.02	-3.97	72270.500	3.5	107530.100	3.5
283.5273	19.02	-2.98	208687.800	1.5	243947.400	1.5
283.5306	28.01	-3.06	101258.010	1.5	136517.200	.5
283.5319	25.01	-2.19	55759.270	3.0	91018.300	3.0
283.5321	25.02	-3.12	143127.000	.5	178386.000	.5
283.5330	42.01	.11	15324.929	0.0	50594.192	0.0
283.5337	28.01	-3.89	94729.250	2.5	129988.050	2.5
283.5337	26.01	-2.64	49101.090	.5	84359.900	1.5
283.5368	23.01	-.16	37259.420	1.0	72517.840	1.0
283.5375	28.01	-2.06	79823.030	3.5	115081.360	4.5
283.5391	23.01	-1.05	37531.090	4.0	72789.230	3.0
283.5422	26.02	-4.86	144501.740	2.0	179759.490	2.0
283.5440	45.00	-1.75	1451.835	0.0	36719.730	0.0
283.5452	24.01	-1.55	70107.830	4.5	105365.200	4.5
283.5455	26.02	-4.43	147161.360	4.0	182418.700	4.0
283.5457	26.00	-2.14	0.000	4.0	35257.309	4.0
283.5477	23.01	-1.51	20242.320	4.0	55499.380	5.0
283.5498	25.01	-.71	53805.800	4.0	89062.600	5.0
283.5528	28.01	-4.98	100592.980	3.5	135849.410	2.5
283.5600	58.01	-.43	5887.999	0.0	41153.904	0.0
283.5622	22.00	-2.32	6598.749	2.0	41854.010	1.0
283.5628	24.01	.60	12496.790	4.5	47751.980	5.5
283.5629	28.01	-3.73	100490.950	1.5	135746.130	1.5
283.5636	9.02	.48	356371.820	2.5	391626.910	3.5
283.5640	74.00	-1.11	2903.671	0.0	38169.078	0.0
283.5643	27.01	-2.45	28111.900	2.0	63366.900	2.0
283.5647	23.00	-6.80	2220.130	2.5	37475.080	3.5
283.5660	77.00	-.22	12824.546	0.0	48089.705	0.0
283.5704	28.01	-1.50	99040.750	1.5	134294.990	2.5
283.5709	26.01	-1.64	25787.600	1.5	61041.780	2.5
283.5756	28.02	-4.66	97841.400	2.0	133095.000	3.0
283.5876	8.01	-4.53	229968.200	1.5	265220.300	2.5
283.5910	42.00	-.96	11775.998	0.0	47038.048	0.0
283.5951	26.00	-2.14	12560.933	3.0	47812.104	4.0
283.5981	18.02	-1.48	207673.160	0.0	242923.960	1.0
283.6005	26.02	-4.02	79860.420	5.0	115110.920	4.0
283.6026	24.00	-2.27	25177.390	4.0	60427.630	5.0
283.6030	42.00	-.88	16534.792	0.0	51795.350	0.0
283.6050	90.01	-.91	4113.534	0.0	39373.843	0.0
283.6061	30.02	-3.34	264826.300	1.0	300076.100	2.0
283.6081	22.00	-1.72	6842.964	5.0	42092.520	4.0
283.6114	26.02	-1.84	90423.680	2.0	125672.830	2.0
283.6176	26.01	-2.56	30764.460	3.5	66012.830	4.5
283.6185	26.01	-1.34	31364.470	1.5	66612.740	1.5
283.6193	28.01	-4.35	100332.090	4.5	135580.250	4.5
283.6206	25.01	-4.53	31760.930	2.0	67008.930	3.0
283.6225	26.01	-4.28	25787.600	1.5	61035.370	.5
283.6242	26.02	-2.76	147161.360	4.0	182408.910	3.0
283.6250	74.00	.13	19519.120	0.0	54776.943	0.0
283.6263	28.02	-3.58	75123.800	5.0	110371.100	4.0
283.6306	26.00	-1.29	22650.415	6.0	57897.170	5.0
283.6309	25.00	-.87	17637.150	.5	52883.870	1.5
283.6341	8.02	-1.21	294221.650	3.0	329467.980	2.0
283.6371	25.00	-1.33	17637.150	.5	52883.100	.5
283.6400	77.00	-.41	4032.876	0.0	39288.834	0.0
283.6407	22.00	-2.13	6661.003	3.0	41906.510	2.0
283.6424	28.01	-1.03	57080.550	3.5	92325.850	3.5
283.6432	23.01	-2.75	26839.820	3.0	62085.020	2.0
283.6444	25.02	-1.84	195036.200	6.5	230281.250	7.5
283.6444	25.02	-.43	195036.200	6.5	230281.250	7.5
283.6450	25.02	-2.54	100001.300	2.5	135246.270	2.5
283.6477	23.00	-5.90	2311.370	3.5	37556.000	3.5
283.6477	24.01	-.18	35607.600	3.5	70852.240	3.5
283.6490	40.00	-.75	5000.766	0.0	40255.606	0.0
283.6505	26.01	-1.08	31368.450	.5	66612.740	1.5
283.6525	23.01	-.51	13609.000	4.0	48853.040	5.0
283.6570	44.00	-.63	8952.985	0.0	44206.830	0.0
283.6599	22.01	-1.43	29734.450	3.5	64977.570	3.5
283.6603	22.00	-1.93	6742.757	4.0	41985.830	3.0
283.6613	23.01	-2.90	37205.010	3.0	72447.960	3.0
283.6620	73.00	-2.13	0.000	0.0	35253.224	0.0
283.6643	24.01	-3.32	39742.360	2.5	74984.930	1.5
283.6651	25.01	-3.81	53597.130	2.0	88839.600	1.0
283.6690	45.00	-1.01	5565.369	0.0	40817.723	0.0
283.6710	24.01	-.78	35610.500	4.5	70852.240	3.5
283.6711	23.00	-2.64	137.380	2.5	35379.110	3.5
283.6759	18.01	-3.84	155351.030	1.5	190592.170	1.5
283.6761	28.01	-1.32	100389.520	2.5	135630.630	2.5
283.6824	24.01	-2.77	30143.720	5.5	65384.040	4.5
283.6851	28.01	-3.66	99418.610	3.5	134658.600	4.5
283.6860	28.01	-1.15	100389.520	2.5	135629.400	3.5
283.6864	23.01	-3.13	11514.760	1.0	46754.590	1.0
283.6902	25.00	-.76	27248.000	1.5	62487.360	2.5
283.6910	48.00	-.98	29923.940	0.0	65173.560	0.0
283.6920	49.00	-1.18	2177.753	0.0	37427.249	0.0
283.6937	27.01	-1.25	49348.200	4.0	84587.120	4.0
283.6949	24.01	-.79	33521.230	3.5	68760.000	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
283.6995	22.03	-.31	230597.600	.5	265835.800	.5
283.7000	64.01	-.91	3064.986	0.0	38313.488	0.0
283.7043	25.02	-3.18	143148.400	1.5	178386.000	.5
283.7048	24.01	-3.17	31117.590	2.5	66355.130	1.5
283.7062	23.00	-8.07	2220.130	2.5	37457.500	1.5
283.7120	68.00	-.41	7097.862	0.0	42344.873	0.0
283.7149	27.00	-.62	16778.160	2.5	52014.450	1.5
283.7230	40.00	-.01	564.603	0.0	35810.248	0.0
283.7258	28.00	-1.99	27580.411	5.0	62815.340	5.0
283.7298	26.01	-2.02	26352.800	4.5	61587.240	5.5
283.7328	28.01	-2.01	100389.520	2.5	135623.590	1.5
283.7330	77.00	-.40	9759.560	0.0	45003.962	0.0
283.7332	14.02	-2.09	214532.170	1.0	249766.190	1.0
283.7340	74.00	-1.54	1613.150	0.0	36857.428	0.0
283.7369	29.01	-1.14	73101.870	1.0	108335.430	2.0
283.7372	18.01	-4.86	154181.430	4.5	189414.960	3.5
283.7407	28.01	-1.17	100389.520	2.5	135622.600	3.5
283.7420	76.00	-.01	10969.423	0.0	46212.707	0.0
283.7478	27.01	-3.03	28111.900	2.0	63344.100	3.0
283.7550	75.00	.24	22019.503	0.0	57261.173	0.0
283.7571	25.01	-2.92	30523.450	6.0	65754.500	6.0
283.7594	24.00	-3.82	21856.940	3.0	57087.700	2.0
283.7624	28.01	-2.41	100389.520	2.5	135619.910	1.5
283.7659	28.01	-2.69	70358.940	4.5	105588.890	4.5
283.7663	27.00	-4.67	13795.520	2.5	49025.420	1.5
283.7674	28.01	-1.98	70778.120	3.5	106007.890	2.5
283.7694	25.00	-2.01	30419.610	2.5	65649.130	2.5
283.7710	28.01	-4.06	100309.290	5.5	135538.610	5.5
283.7731	26.01	-3.40	8391.920	2.5	43620.980	1.5
283.7760	74.00	-.25	17986.627	0.0	53225.689	0.0
283.7770	24.01	-2.96	35356.060	1.5	70584.640	2.5
283.7771	28.01	-1.55	100389.520	2.5	135618.080	2.5
283.7847	28.00	-2.30	27580.411	5.0	62808.030	6.0
283.7889	24.01	-2.63	30156.940	3.5	65384.040	4.5
283.7890	58.01	-.50	6452.602	0.0	41690.050	0.0
283.7900	42.00	.04	21051.613	0.0	56288.936	0.0
283.7920	28.01	-3.76	100332.090	4.5	135558.800	4.5
283.7926	25.01	-4.05	35004.430	3.0	70231.070	2.0
283.7940	24.01	-3.41	30391.940	6.5	65618.410	6.5
283.7940	73.00	-.60	10888.765	0.0	46125.592	0.0
283.7977	28.01	-4.97	99154.810	4.5	134380.820	3.5
283.8018	25.01	-2.82	55371.300	3.0	90596.800	2.0
283.8020	40.01	-.57	6049.314	0.0	41285.147	0.0
283.8041	23.01	-1.93	11514.760	1.0	46739.980	2.0
283.8055	23.00	-2.42	0.000	1.5	35225.040	2.5
283.8078	26.01	-2.27	31387.980	2.5	66612.740	1.5
283.8108	24.01	-1.87	33619.130	4.5	68843.510	3.5
283.8120	26.00	-.97	7985.783	2.0	43210.011	2.0
283.8170	76.00	-.57	4113.534	0.0	39347.505	0.0
283.8181	28.01	-3.78	99418.610	3.5	134642.090	3.5
283.8190	26.00	-2.37	20874.482	3.0	56097.850	3.0
283.8240	26.01	-.75	43620.980	1.5	78843.720	.5
283.8240	73.01	.99	15728.216	0.0	50961.318	0.0
283.8339	24.00	-4.93	20519.600	6.0	55741.110	6.0
283.8367	26.02	-2.99	116316.630	5.0	151537.800	4.0
283.8450	57.01	-.44	19115.832	0.0	54346.328	0.0
283.8493	8.02	-2.35	297557.500	1.0	332777.100	1.0
283.8500	23.00	-5.68	2424.890	4.5	37644.410	4.5
283.8526	23.01	-1.58	20280.190	5.0	55499.380	5.0
283.8593	25.01	-2.50	44521.520	4.0	79739.880	5.0
283.8620	92.01	-1.50	887.233	0.0	36115.619	0.0
283.8630	76.00	.59	5081.424	0.0	40309.686	0.0
283.8647	30.02	.03	260418.100	2.0	295635.800	3.0
283.8647	30.02	-1.12	260418.100	2.0	295635.800	2.0
283.8705	25.01	-2.64	43696.190	3.0	78913.170	2.0
283.8710	26.01	-1.83	63876.380	5.5	99093.290	5.5
283.8721	26.02	-3.46	83138.230	5.0	118355.010	6.0
283.8732	22.01	-3.91	29968.080	4.5	65184.720	3.5
283.8789	24.01	-.41	38269.670	3.5	73485.600	3.5
283.8798	25.02	-2.93	86051.500	2.5	121267.320	2.5
283.8840	28.01	-3.00	99040.750	1.5	134256.050	2.5
283.8890	74.00	-.44	15002.299	0.0	50227.334	0.0
283.8910	27.01	-4.58	50381.600	3.0	85596.030	2.0
283.8921	26.02	-2.70	90423.680	2.0	125637.980	3.0
283.8948	28.00	-.93	13521.352	2.0	48735.308	2.0
283.8950	28.01	-1.19	99040.750	1.5	134254.690	1.5
283.8961	30.02	-1.25	257678.700	2.0	292892.500	2.0
283.8961	30.02	-.10	257678.700	2.0	292892.500	3.0
283.9002	15.01	-1.40	103340.010	2.0	138553.300	2.0
283.9003	24.00	-1.75	23512.000	1.0	58725.280	1.0
283.9035	21.01	-2.46	28161.030	3.0	63373.910	2.0
283.9093	23.01	-4.18	30673.140	2.0	65885.300	2.0
283.9105	26.02	-4.31	83138.230	5.0	118350.240	4.0
283.9145	24.01	-.83	42898.120	2.5	78109.640	1.5
283.9160	77.00	.79	12985.861	0.0	48207.546	0.0
283.9240	90.01	-1.01	4436.164	0.0	39656.857	0.0
283.9340	40.01	-.16	6371.944	0.0	41591.396	0.0
283.9340	74.00	-.52	9436.930	0.0	44656.382	0.0
283.9350	28.01	-2.74	99040.750	1.5	134249.720	1.5
283.9360	58.01	-.91	2581.041	0.0	37800.245	0.0
283.9505	25.01	-1.88	52373.180	3.0	87580.230	4.0
283.9526	26.01	.11	44232.510	4.5	79439.300	3.5
283.9548	28.01	-3.60	100332.090	4.5	135538.610	5.5
283.9553	11.01	-.38	297639.340	2.0	332845.800	3.0
283.9553	11.01	-.38	297639.340	2.0	332845.800	3.0
283.9558	26.02	-2.21	89697.520	3.0	124903.920	2.0
283.9571	18.01	-3.93	183797.360	2.5	219003.600	2.5
283.9580	42.00	-.52	11775.998	0.0	46992.474	0.0
283.9641	24.00	-2.97	24282.340	4.0	59487.710	4.0
283.9657	22.01	.44	30240.680	5.5	65445.850	5.5
283.9666	26.02	-3.96	83237.860	3.0	118442.920	3.0
283.9686	24.00	-1.80	28637.000	3.0	63841.810	4.0
283.9716	18.01	-4.63	183797.360	2.5	219001.800	1.5
283.9813	26.01	-.17	42658.230	3.5	77861.470	4.5
283.9879	26.01	-1.86	37227.320	.5	72429.740	.5
283.9902	24.01	-1.69	49006.150	1.5	84208.280	.5
283.9990	50.00	.40	3387.616	0.0	38599.008	0.0
284.0001	24.01	.59	30219.040	4.5	65419.950	5.5
284.0020	21.01	-4.44	29742.120	1.0	64942.790	0.0
284.0097	23.01	-1.78	11908.270	2.0	47107.980	1.0
284.0150	90.01	-1.68	0.000	0.0	35209.408	0.0
284.0210	23.01	-4.09	37352.390	5.0	72550.710	4.0
284.0212	22.00	-3.97	11639.804	3.0	46838.090	4.0
284.0220	77.00	-.14	6291.287	0.0	41499.827	0.0
284.0230	64.01	.10	3952.218	0.0	39160.634	0.0
284.0248	22.00	-3.12	11776.806	4.0	46974.650	5.0
284.0255	25.00	-2.21	30419.610	2.5	65617.370	3.5
284.0283	24.00	-1.60	7927.470	2.0	43124.880	2.0
284.0307	22.00	-2.08	8602.340	2.0	43799.455	2.0
284.0343	26.01	-.74	25428.800	5.5	60625.470	5.5
284.0350	75.00	-.24	13711.778	0.0	48918.707	0.0
284.0356	25.01	-.38	52383.720	4.0	87580.230	4.0
284.0423	26.00	-2.24	415.932	3.0	35611.608	3.0
284.0429	18.01	-2.86	172816.210	.5	208011.810	1.5
284.0434	24.01	-3.24	31531.620	1.5	66727.160	2.5
284.0440	76.00	-.03	14276.381	0.0	49482.194	0.0
284.0488	26.00	-4.14	12968.552	2.0	48163.427	2.0
284.0509	29.01	-2.61	88362.030	2.0	123556.640	2.0
284.0510	57.01	.02	29359.337	0.0	64564.283	0.0
284.0540	44.00	-.34	6452.602	0.0	41657.176	0.0
284.0586	22.00	-4.23	11531.760	2.0	46725.420	3.0
284.0590	23.01	-1.67	11908.270	2.0	47101.880	2.0
284.0617	9.00	-4.78	102405.710	2.5	137598.990	3.5
284.0645	26.01	-.47	26932.740	.5	62125.660	1.5
284.0662	26.02	-4.27	93412.930	2.0	128605.650	1.0
284.0757	26.01	-.22	30388.550	4.5	65580.090	5.5
284.0801	10.04	-3.07	605231.000	1.0	640422.000	1.0
284.0835	23.01	-3.89	20980.920	2.0	56171.490	1.0
284.0866	26.02	-4.91	144570.530	3.0	179760.720	3.0
284.0887	28.01	-2.55	101357.200	4.5	136547.130	3.5
284.0896	26.00	-2.35	19621.004	5.0	54810.820	4.0
284.0925	23.00	-6.20	2153.200	1.5	37342.660	2.5
284.0938	26.00	-1.80	17726.985	2.0	52916.278	2.0
284.0938	28.01	-1.34	101357.200	4.5	136546.500	4.5
284.0940	41.00	-.49	2097.096	0.0	37296.713	0.0
284.0942	26.02	-2.75	90483.590	3.0	125672.830	2.0
284.0947	26.01	-1.81	31483.200	3.5	66672.390	3.5
284.0970	27.02	-4.43	73214.500	.5	108403.400	1.5
284.0974	25.00	-4.88	23296.670	3.5	58485.520	4.5
284.0981	26.02	-3.74	83161.480	4.0	118350.240	4.0
284.0981	26.01	-2.34	31811.870	2.5	67000.630	2.5
284.0986	17.02	-2.34	204541.200	2.5	239729.900	2.5
284.0989	25.00	-2.73	27201.540	2.5	62390.200	1.5
284.1022	24.00	-3.60	23933.900	4.0	59122.150	3.0
284.1036	23.01	-.55	13542.680	3.0	48730.760	4.0
284.1092	23.00	-7.61	2311.370	3.5	37498.760	2.5
284.1150	41.01	-.08	2984.328	0.0	38181.343	0.0
284.1160	90.01	-.43	9114.300	0.0	44311.191	0.0
284.1278	28.01	-2.87	101357.200	4.5	136542.280	3.5
284.1330	64.01	-.57	3387.616	0.0	38582.402	0.0
284.1353	26.01	-2.41	25805.320	4.5	60989.480	4.5
284.1358	29.01	-4.22	111218.800	4.0	146402.900	5.0
284.1384	24.00	-3.69	24303.940	3.0	59487.710	4.0
284.1446	30.02	-1.55	257678.700	2.0	292861.700	1.0
284.1446	30.02	-.59	257678.700	2.0	292861.700	2.0
284.1469	25.02	-1.04	195186.900	7.5	230369.620	6.5
284.1490	72.00	-.92	5484.711	0.0	40677.515	0.0
284.1494	28.01	-1.95	101366.140	2.5	136548.550	2.5
284.1495	30.02	-4.97	264826.300	1.0	300008.700	1.0
284.1496	15.01	-1.79	103340.010	2.0	138522.400	1.0
284.1570	74.00	-.60	4758.794	0.0	39950.607	0.0
284.1585	9.02	-1.19	418188.480	.5	453369.770	1.5
284.1592	26.02	-4.14	144501.740	2.0	179682.940	1.0
284.1592	22.01	-1.59	31756.500	1.5	66937.700	2.5
284.1600	76.00	-.54	2661.698	0.0	37853.139	0.0
284.1609	28.01	-1.16	101366.140	2.5	136547.130	3.5
284.1705	9.03	-.61	416639.800	1.0	451819.600	1.0
284.1713	11.01	-.07	264928.000	2.0	300107.710	2.0
284.1720	58.01	-.44	8227.067	0.0	43417.022	0.0
284.1726	28.01	-4.56	100490.950	1.5	135670.490	.5
284.1810	90.01	-1.02	9678.902	0.0	44867.743	0.0
284.1897	25.01	-2.61	56883.380	1.0	92060.800	1.0
284.1922	22.01	-.60	4897.600	3.5	40074.710	3.5
284.1931	27.02	-4.14	91715.100	2.5	126892.100	3.5
284.1959	24.00	-4.50	21856.940	3.0	57033.600	4.0
284.1987	23.01	-4.90	30613.970	4.0	65790.280	4.0
284.2001	28.01	-.87	101366.140	2.5	136542.280	3.5
284.2020	41.00	-.77	5242.739	0.0	40428.980	0.0
284.2039	23.01	-2.60	11514.760	1.0	46690.430	1.0
284.2072	26.01	-2.08	25981.650	3.5	61156.900	3.5
284.2084	8.02	-2.96	332777.100	1.0	367952.200	1.0
284.2099	12.01	-2.35	80619.500	.5	115794.410	1.5
284.2136	18.01	-3.88	183985.940	1.5	219160.400	2.5
284.2150	42.01	.10	11937.313	0.0	47121.944	0.0
284.2201	24.01	-4.50	31083.110	1.5	66256.770	.5
284.2274	22.00	-4.72	386.874	4.0	35559.627	5.0
284.2280	77.00	-.74	7017.204	0.0	42200.226	0.0
284.2312	24.01	-1.26	35707.660	5.5	70879.950	5.5
284.2327	25.01	-4.83	31514.350	4.0	66686.450	3.0
284.2333	14.00	-4.03	15394.370	0.0	50566.397	1.0
284.2375	10.00	-4.19	135888.717	1.0	171060.220	2.0
284.2381	27.00	-1.69	15774.040	1.5	50945.470	.5
284.2408	28.01	-1.51	32523.540	3.5	67694.640	2.5
284.2448	24.01	-1.58	38315.000	2.5	73485.600	3.5
284.2520	58.01	-.99	2581.041	0.0	37761.093	0.0
284.2545	28.02	-1.62	121802.800	3.0	156972.200	3.0
284.2560	74.00	-.35	16292.819	0.0	51472.375	0.0
284.2562	10.00	-3.94	135888.717	1.0	171057.900	1.0
284.2577	17.01	-2.45	110299.500	2.0	145468.500	1.0
284.2580	70.01	-1.05	32827.611	0.0	68006.920	0.0
284.2583	28.01	-4.65	66571.340	2.5	101740.270	3.5
284.2650	41.01	-.09	2581.041	0.0	37759.484	0.0
284.2675	26.01	-2.18	30388.550	4.5	65556.340	4.5
284.2692	23.01	-1.52	14556.090	4.0	49723.680	4.0
284.2695	28.01	-4.12	99040.750	1.5	134208.300	2.5
284.2721	28.01	-2.20	101357.200	4.5	136524.420	4.5
284.2739	26.01	-3.44	30764.460	3.5	65931.460	3.5
284.2762	11.01	-1.07	297639.340	2.0	332806.060	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
284.2762	11.01	-1.07	297639.340	2.0	332806.060	2.0
284.2772	24.01	-.13	38269.670	3.5	73436.270	2.5
284.2774	28.00	-2.98	26665.903	3.0	61832.470	4.0
284.2779	17.01	-3.19	110302.000	1.0	145468.500	1.0
284.2820	73.00	.13	11130.738	0.0	46307.077	0.0
284.2820	90.01	-.83	1451.835	0.0	36628.174	0.0
284.2844	27.02	-3.12	72341.900	1.5	107507.600	.5
284.2852	18.02	-.41	196589.200	1.0	231754.800	0.0
284.2874	24.01	-1.49	33418.110	2.5	68583.440	2.5
284.2891	28.01	-3.38	101366.140	2.5	136531.260	1.5
284.2901	24.01	-2.87	30219.040	4.5	65384.040	4.5
284.2901	17.01	-3.71	110303.500	0.0	145468.500	1.0
284.2914	24.00	.41	27597.220	3.0	62762.060	4.0
284.2924	28.01	-.90	100475.820	3.5	135640.530	4.5
284.3000	75.00	-.04	15647.559	0.0	50821.671	0.0
284.3005	23.00	-6.11	2311.370	3.5	37475.080	3.5
284.3022	22.00	-4.13	12118.394	4.0	47281.900	3.0
284.3080	28.01	-2.55	71457.740	3.5	106620.530	3.5
284.3143	28.02	-2.84	97996.300	3.0	133158.300	3.0
284.3145	28.01	-4.36	100490.950	1.5	135652.930	1.5
284.3149	10.01	-4.76	281720.280	1.5	316882.210	2.5
284.3168	20.02	.06	348028.130	3.0	383189.820	4.0
284.3170	44.00	-.33	9033.642	0.0	44205.651	0.0
284.3186	28.01	-1.26	79923.880	4.5	115085.360	3.5
284.3188	23.01	-.43	37520.610	3.0	72682.060	2.0
284.3219	25.02	-3.68	100085.200	1.5	135246.270	2.5
284.3228	24.01	.42	12303.980	3.5	47464.940	4.5
284.3316	26.01	-1.65	26352.800	4.5	61512.670	4.5
284.3479	26.01	-.94	31364.470	1.5	66522.320	2.5
284.3480	26.02	-4.79	116380.070	1.0	151537.910	0.0
284.3509	28.01	.06	79923.880	4.5	115081.360	4.5
284.3510	73.01	1.04	18067.285	0.0	53235.088	0.0
284.3520	40.01	.02	7662.464	0.0	42830.143	0.0
284.3579	26.02	-3.72	116380.070	1.0	151536.680	1.0
284.3587	26.02	-3.54	89697.520	3.0	124854.040	3.0
284.3595	25.01	-2.30	56883.380	1.0	92039.800	2.0
284.3627	26.00	-2.41	22845.856	5.0	58001.880	6.0
284.3631	26.00	-1.32	7376.762	4.0	42532.729	3.0
284.3640	41.01	-.19	10082.190	0.0	45248.385	0.0
284.3712	10.00	-3.76	135888.717	1.0	171043.690	2.0
284.3723	26.02	-4.46	116380.070	1.0	151534.900	2.0
284.3725	28.01	-1.85	100475.820	3.5	135630.630	2.5
284.3730	42.01	.14	33714.843	0.0	68879.925	0.0
284.3759	26.02	-1.72	90483.590	3.0	125637.980	3.0
284.3761	26.00	-3.29	12968.552	2.0	48122.913	3.0
284.3780	26.02	-4.50	167002.000	2.0	202156.130	2.0
284.3817	23.01	-1.06	37520.610	3.0	72674.280	2.0
284.3823	28.01	-4.50	99132.780	5.5	134286.380	4.5
284.3824	28.01	-1.06	100475.820	3.5	135629.400	3.5
284.3854	25.00	-1.35	27201.540	2.5	62354.760	1.5
284.3865	28.01	-4.88	100592.980	3.5	135746.060	3.5
284.3904	28.02	-2.35	98238.200	4.0	133390.800	3.0
284.3905	28.01	-1.23	100475.820	3.5	135628.410	4.5
284.3918	22.00	-2.21	6842.964	5.0	41995.390	6.0
284.3921	26.00	-2.68	704.003	2.0	35856.386	2.0
284.3921	22.00	-2.45	6742.757	4.0	41895.150	5.0
284.3960	63.01	-1.69	1613.150	0.0	36775.389	0.0
284.3977	26.00	-.51	7985.783	2.0	43137.472	3.0
284.3993	26.01	-1.48	25805.320	4.5	60956.820	3.5
284.4028	27.00	-3.86	15774.040	1.5	50925.110	1.5
284.4033	28.01	-.47	101357.200	4.5	136508.200	5.5
284.4070	28.00	-4.20	13521.352	2.0	48671.900	3.0
284.4098	22.01	-2.48	29734.450	3.5	64884.650	2.5
284.4128	18.01	-2.61	138243.550	1.5	173393.380	2.5
284.4146	26.00	-3.83	20641.110	4.0	55790.720	3.0
284.4160	75.00	-.83	11534.025	0.0	46693.791	0.0
284.4186	23.01	-2.21	37531.090	4.0	72680.200	5.0
284.4205	28.01	-2.53	99132.780	5.5	134281.660	5.5
284.4209	23.01	-.95	37369.010	2.0	72517.840	1.0
284.4230	23.01	-4.80	30641.710	3.0	65790.280	4.0
284.4250	73.00	-.12	5968.656	0.0	41127.309	0.0
284.4303	10.01	-3.40	282680.650	.5	317828.320	.5
284.4375	28.01	-1.63	100475.820	3.5	135622.600	3.5
284.4389	30.02	-4.33	257796.000	5.0	292942.600	5.0
284.4389	30.02	-1.98	257796.000	5.0	292942.600	4.0
284.4390	42.00	.81	24358.571	0.0	59515.494	0.0
284.4400	76.00	.24	5081.424	0.0	40238.223	0.0
284.4440	41.01	.28	14518.354	0.0	49674.659	0.0
284.4460	73.01	-.16	967.890	0.0	36123.948	0.0
284.4479	12.01	-2.44	80619.500	.5	115764.990	.5
284.4510	28.01	-4.15	73893.730	1.5	109038.840	1.5
284.4563	26.01	-1.47	63948.840	4.5	99093.290	5.5
284.4568	12.01	-2.10	80650.020	1.5	115794.410	2.5
284.4568	12.01	-3.05	80650.020	1.5	115794.410	1.5
284.4580	40.01	.76	7985.094	0.0	43139.669	0.0
284.4630	23.01	-3.34	11908.270	2.0	47051.890	3.0
284.4630	15.01	-2.67	103166.370	1.0	138310.000	2.0
284.4642	24.00	-1.40	24940.610	2.0	60084.090	1.0
284.4660	69.01	-1.21	161.315	0.0	35314.901	0.0
284.4677	25.00	-2.11	27248.000	1.5	62391.050	.5
284.4680	76.00	-.13	14276.381	0.0	49429.720	0.0
284.4741	28.01	-1.88	100475.820	3.5	135618.080	2.5
284.4742	24.01	-1.12	49351.960	2.5	84494.200	2.5
284.4745	25.00	-3.02	27248.000	1.5	62390.200	1.5
284.4775	28.01	-.91	99132.780	5.5	134274.620	5.5
284.4810	30.02	-2.75	257796.000	5.0	292937.400	6.0
284.4810	30.02	-.66	257796.000	5.0	292937.400	5.0
284.4832	23.01	-1.47	20522.140	1.0	55663.270	1.0
284.4851	25.01	-4.94	53698.700	2.0	88839.600	1.0
284.4853	24.01	-2.53	33619.130	4.5	68760.000	3.5
284.4907	25.01	-3.52	31760.930	2.0	66901.140	2.0
284.4915	28.01	-3.46	70358.940	4.5	105499.050	3.5
284.4949	28.01	-1.62	100490.950	1.5	135630.630	2.5
284.4971	26.01	-.92	45206.490	.5	80345.910	.5
284.5001	26.02	-3.73	82382.870	3.0	117521.910	4.0
284.5009	25.01	-3.56	33278.390	3.0	68417.340	2.0
284.5020	28.01	-1.64	99132.780	5.5	134271.590	4.5
284.5058	20.02	.16	348051.860	4.0	383190.200	5.0
284.5089	20.02	-1.73	348051.860	4.0	383189.820	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
284.5130	71.00	-1.20	1935.780	0.0	37083.559	0.0
284.5223	23.03	-.25	256781.800	1.0	291918.100	2.0
284.5234	23.01	-.28	20363.220	6.0	55499.380	5.0
284.5329	27.01	-3.02	11651.310	2.0	46786.300	1.0
284.5341	25.01	-3.59	30523.450	6.0	65658.300	5.0
284.5350	73.00	-.52	5565.369	0.0	40710.430	0.0
284.5355	24.00	-4.07	24282.340	4.0	59417.010	3.0
284.5375	28.01	-.54	99132.780	5.5	134267.200	6.5
284.5382	28.01	-4.82	99844.130	3.5	134978.470	2.5
284.5382	26.01	-1.15	31387.980	2.5	66522.320	2.5
284.5437	26.01	-.64	45044.210	1.5	80177.870	1.5
284.5520	28.01	-1.66	100490.950	1.5	135623.590	1.5
284.5543	26.00	-1.91	12560.933	3.0	47693.289	3.0
284.5596	26.00	-1.63	7728.058	3.0	42859.756	2.0
284.5606	28.01	-1.36	99154.810	4.5	134286.380	4.5
284.5612	26.01	.00	44753.820	3.5	79885.320	2.5
284.5614	27.01	-1.91	50035.900	3.0	85167.380	3.0
284.5643	23.00	-7.38	2424.890	4.5	37556.000	3.5
284.5644	29.02	-4.87	85446.400	1.5	120577.500	2.5
284.5644	27.01	-3.27	11321.500	2.0	46452.600	2.0
284.5652	24.00	-3.64	31049.330	6.0	66180.340	5.0
284.5664	26.00	-3.44	17726.985	2.0	52857.840	1.0
284.5715	26.00	-2.28	11976.239	4.0	47106.463	4.0
284.5800	41.01	.03	9436.930	0.0	44576.434	0.0
284.5817	20.02	-.88	348028.130	3.0	383157.110	3.0
284.5818	28.01	-1.78	100490.950	1.5	135619.910	1.5
284.5830	72.00	-.15	5565.369	0.0	40704.502	0.0
284.5840	73.00	-1.39	5968.656	0.0	41107.666	0.0
284.5842	25.01	-3.13	31514.350	4.0	66643.010	4.0
284.5865	20.02	-2.35	348028.130	3.0	383156.510	4.0
284.5925	26.02	-4.51	83429.610	6.0	118557.250	5.0
284.5966	28.01	-1.67	100490.950	1.5	135618.080	2.5
284.5976	27.01	-5.87	13261.100	2.0	48388.100	2.0
284.5989	28.01	-1.26	99154.810	4.5	134281.660	5.5
284.5993	28.01	-4.77	100619.260	4.5	135746.060	3.5
284.6023	24.00	.45	27703.840	4.0	62830.260	5.0
284.6035	25.01	.11	49517.580	5.0	84643.860	6.0
284.6040	22.01	-1.16	29968.080	4.5	65094.290	4.5
284.6268	28.01	-3.47	100389.520	2.5	135512.920	2.5
284.6280	41.01	-.37	2339.068	0.0	37472.646	0.0
284.6285	23.01	-1.98	20280.190	5.0	55403.380	6.0
284.6308	24.01	-.33	42986.730	1.5	78109.640	1.5
284.6320	44.00	-.63	9033.642	0.0	44166.726	0.0
284.6328	25.01	-2.11	32787.600	4.0	67910.260	4.0
284.6335	10.01	-2.07	246597.710	.5	281720.280	1.5
284.6339	23.00	-5.29	2220.130	2.5	37342.660	2.5
284.6390	76.00	-.42	5726.684	0.0	40858.904	0.0
284.6401	23.01	-5.28	13609.000	4.0	48730.760	4.0
284.6414	26.02	-4.91	144085.970	4.0	179207.570	5.0
284.6441	24.01	.05	38315.000	2.5	73436.270	2.5
284.6445	9.02	-2.09	418248.560	1.5	453369.770	1.5
284.6448	24.01	-2.47	30298.770	5.5	65419.950	5.5
284.6478	29.00	-1.97	40974.020	0.0	76105.154	0.0
284.6493	10.00	-4.67	135888.717	1.0	171009.340	1.0
284.6548	22.00	-2.65	6661.003	3.0	41780.950	4.0
284.6550	76.00	-.51	8630.355	0.0	43760.600	0.0
284.6559	28.01	-.84	99154.810	4.5	134274.620	5.5
284.6560	23.03	-4.17	220343.500	1.0	255463.300	2.0
284.6586	25.01	-3.05	47073.560	3.0	82193.040	2.0
284.6636	24.01	-1.27	33619.130	4.5	68737.990	5.5
284.6656	25.02	-4.97	109841.120	3.5	144959.740	4.5
284.6699	24.01	-1.01	31531.620	1.5	66649.710	1.5
284.6716	12.00	-1.28	21850.405	0.0	56968.271	1.0
284.6771	28.00	-4.37	15734.018	1.0	50851.220	1.0
284.6777	24.00	-3.91	24299.890	2.0	59417.010	3.0
284.6805	28.01	-.93	99154.810	4.5	134271.590	4.5
284.6831	26.00	-2.70	11976.239	4.0	47092.693	3.0
284.6880	25.01	-1.59	36274.290	2.0	71390.140	3.0
284.6908	26.02	-3.22	116419.390	2.0	151534.900	2.0
284.6909	25.02	-2.76	100001.300	2.5	135116.800	1.5
284.6951	12.01	-2.14	80650.020	1.5	115764.990	.5
284.6970	26.02	-3.51	116419.390	2.0	151534.130	3.0
284.6982	25.00	-3.79	25281.040	2.5	60395.640	1.5
284.7106	24.00	-3.31	24303.940	3.0	59417.010	3.0
284.7162	26.02	-4.12	83237.860	3.0	118350.240	4.0
284.7166	24.01	-3.89	51669.750	2.5	86782.070	3.5
284.7170	70.01	.08	26939.612	0.0	62062.207	0.0
284.7200	28.02	-2.28	121412.200	2.0	156524.100	2.0
284.7209	26.01	-2.07	25981.650	3.5	61093.440	2.5
284.7210	26.01	-2.67	64806.520	.5	99918.300	1.5
284.7240	41.01	.22	14599.011	0.0	49720.743	0.0
284.7360	90.01	-.38	9598.245	0.0	44718.497	0.0
284.7419	25.00	-1.51	27281.850	.5	62391.050	.5
284.7466	28.01	-4.70	99418.610	3.5	134527.240	3.5
284.7488	25.00	-3.29	27281.850	.5	62390.200	1.5
284.7510	71.01	.18	11695.340	0.0	46813.742	0.0
284.7513	28.01	-2.35	100490.950	1.5	135599.000	.5
284.7513	24.00	-.85	24897.550	4.0	60005.600	5.0
284.7571	24.01	-4.54	51584.440	1.5	86691.770	2.5
284.7573	23.01	.22	20242.320	4.0	55349.630	3.0
284.7577	28.01	-1.32	99154.810	4.5	134262.070	3.5
284.7617	25.00	-1.06	27248.000	1.5	62354.760	1.5
284.7621	23.01	-2.19	14461.730	3.0	49568.450	3.0
284.7629	9.02	-1.90	395268.130	1.5	430374.750	2.5
284.7650	26.02	-4.29	144570.530	3.0	179676.890	2.0
284.7668	9.02	-2.64	391626.910	3.5	426733.040	2.5
284.7681	26.01	-2.46	31483.200	3.5	66589.170	4.5
284.7707	28.01	-1.16	99132.780	5.5	134238.440	6.5
284.7728	23.00	-7.43	2424.890	4.5	37530.290	5.5
284.7740	20.02	-2.42	348051.860	4.0	383157.110	3.0
284.7754	26.00	-2.30	21999.132	4.0	57104.207	5.0
284.7788	20.02	-.77	348051.860	4.0	383156.510	4.0
284.7790	26.01	-.67	43620.980	1.5	78725.610	1.5
284.7806	28.01	-2.19	100475.820	3.5	135580.250	4.5
284.7818	18.01	-2.92	138243.550	1.5	173347.830	1.5
284.7820	74.00	-1.19	3306.958	0.0	38421.537	0.0
284.7862	28.01	-4.46	100389.520	2.5	135493.260	1.5
284.7902	28.01	-3.44	92792.080	3.5	127895.330	3.5
284.7909	28.01	-4.56	100332.090	4.5	135435.260	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
284.7939	30.02	-2.50	265005.300	2.0	300108.100	3.0
284.8030	74.00	-.54	2903.671	0.0	38015.661	0.0
284.8044	26.01	-.76	26055.400	2.5	61156.900	3.5
284.8050	73.00	-.32	9598.245	0.0	44709.988	0.0
284.8073	10.01	-4.73	282680.650	.5	317781.790	1.5
284.8118	27.01	-.87	50381.600	3.0	85482.190	4.0
284.8122	26.01	-.31	44784.780	2.5	79885.320	2.5
284.8158	24.01	-2.88	30156.940	3.5	65257.030	3.5
284.8190	40.01	-.02	5726.684	0.0	40836.701	0.0
284.8230	42.01	1.23	12824.546	0.0	47934.070	0.0
284.8250	76.00	.61	14760.326	0.0	49869.604	0.0
284.8300	41.01	.68	14599.011	0.0	49707.672	0.0
284.8325	28.01	-2.23	99154.810	4.5	134252.850	3.5
284.8331	26.01	-.17	45079.910	2.5	80177.870	1.5
284.8344	12.00	-1.41	21870.464	1.0	56968.271	1.0
284.8346	12.00	-1.10	21870.464	1.0	56968.248	2.0
284.8369	13.01	-2.80	110087.500	2.0	145185.000	1.0
284.8414	24.01	-.18	38315.000	2.5	73411.940	1.5
284.8440	70.01	-.20	32908.268	0.0	68015.204	0.0
284.8520	40.00	-.24	1209.863	0.0	36315.813	0.0
284.8520	73.00	-.44	3871.561	0.0	38977.511	0.0
284.8531	18.02	-4.90	231627.300	1.0	266722.800	2.0
284.8567	9.02	-.98	418248.560	1.5	453343.620	2.5
284.8580	44.00	-1.02	3064.986	0.0	38170.196	0.0
284.8619	27.00	-3.39	8460.810	2.5	43555.220	3.5
284.8624	25.02	.40	195186.900	7.5	230281.250	7.5
284.8671	28.01	-2.12	92792.080	3.5	127885.860	4.5
284.8715	26.00	-2.15	7985.783	2.0	43079.013	1.0
284.8731	29.01	-1.22	116326.160	3.0	151419.200	3.0
284.8744	24.01	-3.09	32355.940	3.5	67448.820	4.5
284.8786	23.00	-1.26	0.000	1.5	35092.360	1.5
284.8815	24.03	-3.23	127218.000	3.5	162310.000	2.5
284.8870	25.02	-4.04	195415.200	4.5	230506.520	5.5
284.8900	26.01	-1.42	32909.870	5.5	68000.820	4.5
284.8926	28.01	-3.59	53037.930	2.5	88128.560	2.5
284.8969	30.02	.36	257796.000	5.0	292886.100	6.0
284.8980	69.01	-1.18	8872.327	0.0	43972.609	0.0
284.9018	30.02	-.80	260613.100	5.0	295702.600	5.0
284.9018	30.02	-2.53	260613.100	5.0	295702.600	4.0
284.9030	58.01	-.76	3306.958	0.0	38406.624	0.0
284.9049	23.01	-.66	13490.840	2.0	48579.960	3.0
284.9050	76.00	-.01	15082.956	0.0	50182.375	0.0
284.9059	17.02	-3.99	174093.800	1.5	209182.800	1.5
284.9091	28.02	-3.87	75123.800	5.0	110212.400	5.0
284.9168	23.00	-1.17	137.380	2.5	35225.040	2.5
284.9176	23.02	-4.29	106903.350	5.5	141990.910	6.5
284.9210	72.01	.27	12017.970	0.0	47115.418	0.0
284.9221	28.02	-2.60	98238.200	4.0	133325.200	4.0
284.9260	26.02	-3.36	88663.870	4.0	123750.390	3.0
284.9290	24.00	.65	27816.880	5.0	62903.030	6.0
284.9300	76.00	-.89	10082.190	0.0	45178.529	0.0
284.9330	70.01	-.82	44780.979	0.0	79376.949	0.0
284.9334	22.00	-2.65	11639.804	3.0	46725.420	3.0
284.9362	24.01	-.57	30298.770	5.5	65384.040	4.5
284.9379	24.00	-3.90	31009.000	3.0	66094.060	4.0
284.9380	26.02	-4.75	83161.480	4.0	118246.520	3.0
284.9450	26.01	-4.05	64834.120	1.5	99918.300	1.5
284.9460	74.00	.44	19680.435	0.0	54774.804	0.0
284.9462	26.02	-4.35	83358.880	2.0	118442.920	3.0
284.9505	24.01	-4.69	51584.440	1.5	86667.950	1.5
284.9548	28.01	-3.10	100475.820	3.5	135558.800	4.5
284.9560	41.01	-.95	403.288	0.0	35496.425	0.0
284.9600	26.01	-1.15	25805.320	4.5	60887.660	5.5
284.9668	28.02	-3.27	83033.800	2.0	118115.300	2.0
284.9720	77.00	-.25	0.000	0.0	35091.167	0.0
284.9813	24.01	-2.42	49646.250	3.5	84725.960	3.5
284.9820	28.00	-1.84	15609.861	2.0	50689.490	2.0
284.9820	73.00	-.27	11130.738	0.0	46220.674	0.0
284.9830	24.01	.21	12148.000	2.5	47227.500	3.5
284.9830	30.02	-2.53	260623.100	4.0	295702.600	5.0
284.9830	30.02	-.89	260623.100	4.0	295702.600	4.0
284.9875	23.01	-4.02	37369.010	2.0	72447.960	3.0
284.9944	28.02	-3.01	82172.900	3.0	117251.000	3.0
284.9950	25.01	-2.78	32787.600	4.0	67865.630	4.0
284.9977	30.02	-4.45	265005.300	2.0	300083.000	3.0
284.9981	29.01	-2.15	116326.160	3.0	151403.600	2.0
284.9985	24.01	-1.91	29952.080	.5	65029.670	.5
285.0042	27.00	-1.65	8460.810	2.5	43537.710	1.5
285.0095	29.01	-2.82	116326.160	3.0	151402.400	3.0
285.0122	23.03	.21	257690.800	3.0	292766.700	2.0
285.0150	15.01	-1.38	103668.740	3.0	138744.300	3.0
285.0150	72.01	-.22	12824.546	0.0	47910.419	0.0
285.0168	28.01	-1.99	100389.520	2.5	135464.860	3.5
285.0175	25.01	-4.49	30679.240	5.0	65754.500	6.0
285.0286	24.01	-3.09	30143.720	5.5	65217.610	4.5
285.0291	26.02	-1.29	105929.160	3.0	141002.990	4.0
285.0301	24.01	-1.15	38362.560	1.5	73436.270	2.5
285.0366	25.00	-2.36	27281.850	.5	62354.760	1.5
285.0389	26.02	-2.62	86847.110	2.0	121919.740	3.0
285.0399	30.02	-2.34	260613.100	5.0	295685.600	4.0
285.0437	28.01	-3.76	100389.520	2.5	135461.550	2.5
285.0467	23.01	-2.19	11514.760	1.0	46586.430	0.0
285.0471	24.01	-1.39	35607.600	3.5	70679.220	4.5
285.0492	24.00	-3.80	24286.540	1.0	59357.900	2.0
285.0520	26.02	-4.92	167085.120	3.0	202156.130	2.0
285.0537	30.02	-3.25	265005.300	2.0	300076.100	2.0
285.0566	26.02	-2.32	89783.590	4.0	124854.040	3.0
285.0571	26.02	-3.94	116467.410	4.0	151537.800	4.0
285.0603	24.01	-3.50	51584.440	1.5	86654.430	2.5
285.0620	50.00	.11	8549.697	0.0	43629.785	0.0
285.0637	26.01	-2.88	27620.390	2.5	62689.960	2.5
285.0680	23.01	-.28	22273.540	1.0	57342.590	2.0
285.0706	24.01	-1.08	35610.500	4.5	70679.220	4.5
285.0715	24.01	-2.83	51669.750	2.5	86738.360	3.5
285.0718	28.01	-4.82	100332.090	4.5	135400.670	3.5
285.0726	23.02	-1.54	63315.050	3.5	98383.530	2.5
285.0729	26.01	-1.14	67516.370	5.5	102584.810	5.5
285.0760	76.00	-.25	2661.698	0.0	37740.063	0.0
285.0761	23.01	-.45	14655.630	5.0	49723.680	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
285.0790	42.00	-.47	11775.998	0.0	46853.994	0.0
285.0800	74.00	.06	15002.299	0.0	50080.172	0.0
285.0832	22.00	-5.44	386.874	4.0	35454.051	4.0
285.0865	22.01	-.87	30240.680	5.5	65307.450	4.5
285.0869	26.02	-3.18	116467.410	4.0	151534.130	3.0
285.0944	27.00	-2.62	1809.330	1.5	36875.130	1.5
285.0957	9.02	-4.19	355981.900	1.5	391047.540	.5
285.0960	72.00	-.35	5565.369	0.0	40641.273	0.0
285.0980	73.00	.29	5565.369	0.0	40641.027	0.0
285.0980	75.00	-.34	11534.025	0.0	46609.683	0.0
285.0993	28.02	-2.90	84604.800	1.0	119670.000	2.0
285.1062	25.01	-2.29	52653.270	4.0	87717.620	3.0
285.1098	22.01	-.82	9850.900	.5	44914.800	1.5
285.1110	51.00	-.50	18309.257	0.0	53383.316	0.0
285.1120	70.01	.27	26616.982	0.0	61690.918	0.0
285.1126	26.02	-1.71	97041.380	3.0	132104.940	2.0
285.1127	18.01	-3.43	172213.800	1.5	207277.350	1.5
285.1180	42.00	-.72	12259.943	0.0	47333.141	0.0
285.1192	25.01	-2.03	43850.420	2.0	78913.170	2.0
285.1196	25.02	-2.93	100054.100	.5	135116.800	1.5
285.1210	72.01	-.61	6291.287	0.0	41364.116	0.0
285.1212	30.02	-3.98	260623.100	4.0	295685.600	4.0
285.1212	30.02	-2.44	260623.100	4.0	295685.600	3.0
285.1223	26.02	-3.17	116475.440	3.0	151537.800	4.0
285.1227	10.01	-2.66	294086.490	1.5	329148.800	1.5
285.1236	24.01	-2.03	33521.230	3.5	68583.440	2.5
285.1238	10.01	-1.55	294086.490	1.5	329148.670	2.5
285.1251	23.01	-.89	20242.320	4.0	55304.340	4.0
285.1260	90.01	-.91	1451.835	0.0	36524.049	0.0
285.1311	22.00	-2.37	11776.806	4.0	46838.090	4.0
285.1353	28.01	-4.62	98467.250	3.5	133528.020	3.5
285.1361	24.01	.50	30156.940	3.5	65217.610	4.5
285.1405	26.01	-1.91	25981.650	3.5	61041.780	2.5
285.1416	22.01	-1.11	31756.500	1.5	66816.490	1.5
285.1430	90.01	-1.44	1451.835	0.0	36521.958	0.0
285.1450	41.00	.49	10162.848	0.0	45232.725	0.0
285.1459	26.02	-3.91	116475.440	3.0	151534.900	2.0
285.1508	26.00	-1.05	21038.987	2.0	56097.850	3.0
285.1522	26.02	-3.19	116475.440	3.0	151534.130	3.0
285.1551	25.01	-2.79	32787.600	4.0	67845.930	5.0
285.1560	24.00	-1.28	27703.840	4.0	62762.060	4.0
285.1571	24.01	-2.52	51789.210	3.5	86847.300	4.5
285.1577	24.00	-3.95	24299.890	2.0	59357.900	2.0
285.1652	12.00	-2.58	21911.178	2.0	56968.271	1.0
285.1654	12.00	-1.58	21911.178	2.0	56968.248	2.0
285.1656	12.00	-.66	21911.178	2.0	56968.218	3.0
285.1733	23.03	-.58	256739.900	0.0	291796.000	1.0
285.1735	26.01	-.38	45289.840	1.5	80345.910	.5
285.1746	22.00	-2.31	7255.369	2.0	42311.310	3.0
285.1766	23.00	-1.35	323.420	3.5	35379.110	3.5
285.1798	26.00	-.55	8154.713	1.0	43210.011	2.0
285.1814	24.00	-.37	7593.160	2.0	42648.260	3.0
285.1826	28.01	-3.38	100389.520	2.5	135444.470	3.5
285.1860	70.01	-.44	33311.556	0.0	68376.391	0.0
285.1907	24.00	-4.05	24303.940	3.0	59357.900	2.0
285.1916	22.01	-1.38	32767.020	3.5	67820.870	4.5
285.1938	18.03	-.98	250906.600	1.5	285960.170	.5
285.1960	25.01	-1.77	32856.950	3.0	67910.260	4.0
285.1970	40.01	.44	7662.464	0.0	42725.946	0.0
285.1980	41.00	.63	12017.970	0.0	47081.329	0.0
285.2051	22.00	-2.62	6842.964	5.0	41895.150	5.0
285.2091	30.02	-.17	260584.100	1.0	295635.800	2.0
285.2122	26.00	-2.20	22845.856	5.0	57897.170	5.0
285.2126	12.00	.27	0.000	0.0	35051.264	1.0
285.2180	28.02	-2.97	121802.800	3.0	156853.400	3.0
285.2182	23.00	-7.62	2311.370	3.5	37361.950	4.5
285.2214	23.00	-6.06	2424.890	4.5	37475.080	3.5
285.2279	24.01	-.27	38362.560	1.5	73411.940	1.5
285.2299	29.01	-4.19	116326.160	3.0	151375.300	2.0
285.2322	25.01	-3.18	36274.290	2.0	71323.150	2.0
285.2360	73.01	.98	18067.285	0.0	53125.973	0.0
285.2400	30.02	-3.18	265005.300	2.0	300053.200	2.0
285.2409	29.01	-2.78	116371.410	4.0	151419.200	3.0
285.2428	28.01	-1.09	100592.980	3.5	135640.530	4.5
285.2472	23.02	-4.95	106441.310	4.5	141488.320	4.5
285.2537	23.01	-1.59	20617.050	2.0	55663.270	1.0
285.2594	26.01	-1.27	64286.440	3.5	99331.950	4.5
285.2627	26.01	.03	73603.530	5.5	108648.640	6.5
285.2708	24.01	-.43	38362.560	1.5	73406.680	.5
285.2756	24.01	-2.96	33694.470	5.5	68737.990	5.5
285.2779	20.02	-1.51	348051.860	4.0	383095.100	5.0
285.2792	8.02	-.79	366486.910	1.0	401530.000	2.0
285.2811	11.00	-2.48	0.000	.5	35042.850	1.5
285.2840	75.00	-.34	17180.052	0.0	52232.842	0.0
285.2850	26.01	-8.49	26932.740	.5	61975.110	1.5
285.2886	22.01	-3.22	9872.870	.5	44914.800	1.5
285.2929	13.01	-2.51	110087.500	2.0	145128.900	3.0
285.2967	26.00	-2.79	11976.239	4.0	47017.170	3.0
285.3012	11.00	-2.79	0.000	.5	35040.380	.5
285.3027	30.02	-1.45	260613.100	5.0	295653.300	5.0
285.3027	30.02	.36	260613.100	5.0	295653.300	6.0
285.3030	23.01	-1.96	20363.220	6.0	55403.380	6.0
285.3047	25.02	-2.77	100001.300	2.5	135041.250	1.5
285.3077	25.02	-3.80	86051.500	2.5	121091.080	1.5
285.3093	9.02	-3.91	430374.750	2.5	465414.140	2.5
285.3110	78.00	-.90	13389.148	0.0	48438.620	0.0
285.3115	26.01	-2.29	31483.200	3.5	66522.320	2.5
285.3137	24.01	-1.51	32836.840	3.5	67875.680	3.5
285.3148	24.00	-4.18	31055.350	5.0	66094.060	4.0
285.3151	18.01	-3.20	157673.320	2.5	192712.000	1.5
285.3163	26.02	-3.21	97041.380	3.0	132079.910	3.0
285.3190	22.00	-2.60	6742.757	4.0	41780.950	4.0
285.3198	18.02	-.56	196589.200	1.0	231627.300	1.0
285.3203	26.01	-4.23	26055.400	2.5	61093.440	2.5
285.3207	24.01	-.73	30219.040	4.5	65257.030	3.5
285.3217	24.01	-3.14	32355.940	3.5	67393.800	3.5
285.3230	42.01	1.24	26939.612	0.0	61987.610	0.0
285.3234	28.01	-3.17	100592.980	3.5	135630.630	2.5
285.3250	69.01	-2.25	161.315	0.0	35209.068	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
285.3256	24.01	-2.48	51943.040	4.5	86980.420	5.5
285.3261	23.01	-3.20	14556.090	4.0	49593.410	5.0
285.3265	25.02	-4.95	109780.400	2.5	144817.680	3.5
285.3265	23.01	-5.79	13542.680	3.0	48579.960	3.0
285.3278	24.01	.06	42898.120	2.5	77935.240	2.5
285.3335	28.01	-2.35	100592.980	3.5	135629.400	3.5
285.3364	25.01	-2.53	33248.320	4.0	68284.380	3.0
285.3398	20.02	-3.75	348028.130	3.0	383063.780	3.0
285.3410	70.01	-.82	45974.786	0.0	81020.573	0.0
285.3415	28.01	-.94	100592.980	3.5	135628.410	4.5
285.3431	28.01	-1.60	58493.210	2.5	93528.440	3.5
285.3438	22.00	-3.53	0.000	2.0	35035.147	2.0
285.3490	74.00	-.12	15324.929	0.0	50369.734	0.0
285.3513	10.01	-3.51	219130.780	2.5	254165.010	1.5
285.3570	92.01	-.99	1693.808	0.0	36737.630	0.0
285.3580	42.00	-.27	16534.792	0.0	51578.491	0.0
285.3585	27.00	-4.21	13795.520	2.5	48828.870	2.5
285.3597	20.02	-2.44	348028.130	3.0	383061.330	2.0
285.3680	70.01	-.93	34360.104	0.0	69402.575	0.0
285.3685	26.00	-2.24	11976.239	4.0	47008.351	5.0
285.3727	25.02	-1.29	100085.200	1.5	135116.800	1.5
285.3747	24.01	-2.63	32355.940	3.5	67387.300	2.5
285.3752	23.00	-6.10	2311.370	3.5	37342.660	2.5
285.3754	23.01	-1.24	19112.930	4.0	54144.200	4.0
285.3759	24.01	-1.59	32836.840	3.5	67868.050	2.5
285.3760	29.01	-.93	116388.000	2.0	151419.200	3.0
285.3770	26.00	-.92	20874.482	3.0	55905.560	4.0
285.3776	27.02	-3.22	70934.100	2.5	105965.100	2.5
285.3777	29.01	-1.97	116371.410	4.0	151402.400	3.0
285.3840	74.00	-1.80	3306.958	0.0	38347.465	0.0
285.3841	30.02	.28	260623.100	4.0	295653.300	5.0
285.3849	23.01	-3.50	37520.610	3.0	72550.710	4.0
285.3884	24.00	-1.31	8095.210	3.0	43124.880	2.0
285.3888	28.01	-1.12	100592.980	3.5	135622.600	3.5
285.3920	22.01	-1.20	4897.600	3.5	39926.830	2.5
285.3928	26.00	-3.76	12560.933	3.0	47590.070	4.0
285.3940	24.00	-.92	24093.160	2.0	59122.150	3.0
285.3962	28.01	-4.23	100309.290	5.5	135338.010	5.5
285.4020	24.01	-2.38	30391.940	6.5	65419.950	5.5
285.4028	25.01	-3.57	31514.350	4.0	66542.260	5.0
285.4066	24.01	-1.82	70394.460	4.5	105421.900	5.5
285.4070	44.00	-.26	2016.438	0.0	37054.121	0.0
285.4126	26.01	-1.25	73603.530	5.5	108630.240	5.5
285.4130	70.01	-.42	35650.624	0.0	70687.570	0.0
285.4145	6.00	-1.16	84851.530	1.0	119878.000	1.0
285.4162	25.01	-1.13	47073.560	3.0	82099.820	4.0
285.4170	41.00	-.63	2742.356	0.0	37778.811	0.0
285.4196	28.01	-.58	100619.260	4.5	135645.100	5.5
285.4202	26.02	-2.74	84671.870	3.0	119697.640	2.0
285.4218	24.01	-1.85	32844.920	1.5	67870.500	1.5
285.4257	28.01	-1.85	100592.980	3.5	135618.080	2.5
285.4271	26.01	-2.97	38164.240	2.5	73189.160	1.5
285.4287	25.01	-3.03	31661.720	3.0	66686.450	3.0
285.4334	23.01	.32	20280.190	5.0	55304.340	4.0
285.4334	25.01	-2.48	32787.600	4.0	67811.750	3.0
285.4417	24.01	-2.55	32844.920	1.5	67868.050	2.5
285.4430	39.01	.42	24519.886	0.0	59553.150	0.0
285.4430	40.01	-.25	7743.122	0.0	42776.386	0.0
285.4439	24.01	-.29	70399.040	5.5	105421.900	5.5
285.4463	26.00	-2.98	19788.248	4.0	54810.820	4.0
285.4490	70.01	-.52	39844.815	0.0	74877.343	0.0
285.4508	24.01	-3.41	51669.750	2.5	86691.770	2.5
285.4509	28.01	-4.29	104081.040	4.5	139103.050	5.5
285.4512	28.01	-3.23	100490.950	1.5	135512.920	2.5
285.4569	28.01	-2.15	100619.260	4.5	135640.530	4.5
285.4573	24.01	-1.45	32854.460	4.5	67875.680	3.5
285.4580	46.01	.54	32101.693	0.0	67133.116	0.0
285.4624	24.01	-2.66	32855.090	2.5	67875.680	3.5
285.4670	58.01	-.64	1855.123	0.0	36885.442	0.0
285.4703	23.01	-3.67	37531.090	4.0	72550.710	4.0
285.4714	24.01	-.31	49706.470	2.5	84725.960	3.5
285.4863	18.01	-4.76	183985.940	1.5	219003.600	2.5
285.4870	42.00	.08	24681.201	0.0	59709.066	0.0
285.4880	58.01	-.55	2581.041	0.0	37608.783	0.0
285.5008	25.01	-1.44	49291.310	3.0	84307.200	4.0
285.5010	18.01	-4.05	183985.940	1.5	219001.800	1.5
285.5015	29.01	-1.29	116388.000	2.0	151403.800	2.0
285.5030	24.01	-.19	35569.020	2.5	70584.640	2.5
285.5033	24.01	-1.02	38396.360	.5	73411.940	1.5
285.5047	24.01	-1.71	32855.090	2.5	67870.500	1.5
285.5081	24.01	-1.81	32844.920	1.5	67859.910	.5
285.5093	25.01	-3.47	31661.720	3.0	66676.560	2.0
285.5129	29.01	-1.79	116388.000	2.0	151402.400	3.0
285.5145	23.03	-.69	256781.800	1.0	291796.000	1.0
285.5194	28.01	-4.63	79823.030	3.5	114836.630	3.5
285.5200	25.01	-.86	44899.820	3.0	79913.350	4.0
285.5211	18.02	-.07	196613.910	2.0	231627.300	1.0
285.5212	24.00	-2.32	27816.880	5.0	62830.260	5.0
285.5246	24.01	-1.69	32855.090	2.5	67868.050	2.5
285.5251	23.00	-.82	0.000	1.5	35012.910	.5
285.5279	26.02	-2.74	147406.140	5.0	182418.700	4.0
285.5295	23.01	-.44	14556.090	4.0	49568.450	3.0
285.5317	25.01	-1.77	82136.200	4.0	117148.300	5.0
285.5331	20.02	-2.32	348051.860	4.0	383063.780	3.0
285.5340	76.00	-.59	8630.355	0.0	43652.454	0.0
285.5350	74.00	-.30	13227.833	0.0	48249.809	0.0
285.5394	28.01	-2.80	100389.520	2.5	135400.670	3.5
285.5412	22.01	-2.22	31756.500	1.5	66767.430	.5
285.5450	58.01	-.85	2581.041	0.0	37601.791	0.0
285.5457	24.01	-2.91	51584.440	1.5	86594.820	1.5
285.5462	24.01	-.56	38396.360	.5	73406.680	.5
285.5470	9.02	-1.47	431967.930	.5	466978.150	1.5
285.5476	28.01	-2.25	100619.260	4.5	135629.400	3.5
285.5530	22.01	-3.04	29968.080	4.5	64977.570	3.5
285.5557	28.01	-1.01	100619.260	4.5	135628.410	4.5
285.5559	6.01	-1.72	196557.870	.5	231567.000	.5
285.5596	25.01	-4.60	32856.950	3.0	67865.630	4.0
285.5597	26.02	-3.59	83237.860	3.0	118246.520	3.0
285.5604	9.01	-3.90	254701.620	3.0	289710.200	2.0
285.5665	26.01	-1.13	25981.650	3.5	60989.480	4.5
285.5666	24.01	-.04	12032.720	1.5	47040.540	2.5
285.5686	26.01	-.74	27314.930	3.5	62322.500	3.5
285.5720	58.01	-.86	2500.383	0.0	37517.822	0.0
285.5763	23.01	-5.90	20343.000	2.0	55349.630	3.0
285.5773	26.02	-3.30	147406.140	5.0	182412.650	4.0
285.5815	25.01	-3.61	33278.390	3.0	68284.380	3.0
285.5820	77.00	-.25	18389.915	0.0	53406.128	0.0
285.5835	28.01	-4.03	92325.850	3.5	127331.600	2.5
285.5900	57.01	.37	24358.571	0.0	59373.803	0.0
285.5919	9.01	-3.00	254701.620	3.0	289706.330	3.0
285.5979	24.01	-3.08	31351.150	2.5	66355.130	1.5
285.6000	42.01	.36	27584.872	0.0	62598.878	0.0
285.6011	6.01	-1.72	196563.410	1.5	231567.000	.5
285.6023	16.02	.65	170067.310	2.0	205070.750	3.0
285.6026	30.02	-4.22	265005.300	2.0	300008.700	1.0
285.6030	74.00	-.80	1613.150	0.0	36626.788	0.0
285.6031	28.01	-1.91	100619.260	4.5	135622.600	3.5
285.6060	40.01	-.93	5646.026	0.0	40659.296	0.0
285.6115	28.01	-3.34	100490.950	1.5	135493.260	1.5
285.6144	26.01	-1.09	25805.320	4.5	60807.280	4.5
285.6160	45.00	-1.47	3387.616	0.0	38399.660	0.0
285.6173	25.01	-2.63	82136.200	4.0	117137.800	4.0
285.6181	26.01	-3.11	31999.120	3.5	67000.630	2.5
285.6229	22.01	-1.61	30240.680	5.5	65241.600	5.5
285.6231	25.01	-.59	49427.320	4.0	84428.210	5.0
285.6231	29.01	-2.25	116371.410	4.0	151372.300	5.0
285.6300	39.01	-.03	23632.653	0.0	58642.981	0.0
285.6308	24.00	-2.01	31009.000	3.0	66008.950	3.0
285.6312	24.01	-.95	30156.940	3.5	65156.840	2.5
285.6329	26.02	-1.42	109570.840	2.0	144570.530	3.0
285.6391	26.01	-.46	43238.610	2.5	78237.540	3.5
285.6421	24.01	-1.95	30219.040	4.5	65217.610	4.5
285.6451	24.01	-4.16	51669.750	2.5	86667.950	1.5
285.6465	26.00	-3.49	12968.552	2.0	47966.571	3.0
285.6495	24.01	-2.24	32355.940	3.5	67353.600	4.5
285.6503	11.01	-.48	298169.140	1.0	333166.700	1.0
285.6503	11.01	-.48	298169.140	1.0	333166.700	1.0
285.6520	64.01	-.89	3952.218	0.0	38959.850	0.0
285.6541	24.00	-4.37	20519.600	6.0	55516.690	6.0
285.6551	26.02	-4.16	87901.870	3.0	122898.840	2.0
285.6589	22.01	-2.68	8744.270	2.5	43740.770	3.5
285.6598	22.01	-1.58	12628.770	1.5	47625.170	2.5
285.6672	24.01	-.11	54625.760	2.5	89621.250	3.5
285.6690	73.01	.61	12501.916	0.0	47507.464	0.0
285.6754	24.01	-.51	19631.280	1.5	54625.760	2.5
285.6757	9.02	-4.80	355981.900	1.5	390976.350	1.5
285.6833	9.01	-3.25	254716.680	2.0	289710.200	2.0
285.6838	25.01	-1.94	82144.340	3.0	117137.800	4.0
285.6848	6.01	-1.72	196557.870	.5	231551.200	1.5
285.6874	28.01	-4.12	100389.520	2.5	135382.530	1.5
285.6887	24.01	-2.73	51789.210	3.5	86782.070	3.5
285.6923	26.01	-.03	44446.890	3.5	79439.300	3.5
285.6972	27.00	-3.69	7442.410	3.5	42434.230	2.5
285.6985	24.00	-4.44	21810.840	1.0	56802.500	0.0
285.7021	25.01	-1.19	44521.520	4.0	79512.730	3.0
285.7096	27.02	-4.97	137812.400	3.5	172802.700	2.5
285.7127	26.01	-3.35	64834.120	1.5	99824.040	2.5
285.7130	74.00	-.16	14840.984	0.0	49841.142	0.0
285.7138	21.01	-2.71	26081.320	2.0	61071.100	1.0
285.7149	9.01	-3.90	254716.680	2.0	289706.330	3.0
285.7150	25.01	-3.75	36274.290	2.0	71263.920	1.0
285.7170	26.01	-.86	31387.980	2.5	66377.370	3.5
285.7190	23.01	-4.40	13741.610	3.0	48730.760	4.0
285.7190	27.00	-5.62	14036.280	1.5	49025.420	1.5
285.7195	9.02	-.77	395385.660	2.5	430374.750	2.5
285.7210	26.00	-2.86	17927.378	1.0	52916.278	2.0
285.7212	28.01	-4.80	104503.220	2.5	139492.100	2.5
285.7244	24.01	-3.81	32355.940	3.5	67344.420	2.5
285.7280	73.01	.44	9598.245	0.0	44596.565	0.0
285.7290	41.00	-.40	5887.999	0.0	40886.197	0.0
285.7301	6.01	-1.51	196563.410	1.5	231551.200	1.5
285.7341	29.01	-2.11	116388.000	2.0	151375.300	2.0
285.7343	28.01	-1.87	100592.980	3.5	135580.250	4.5
285.7353	25.02	-2.13	100054.100	.5	135041.250	1.5
285.7370	28.01	-2.89	100619.260	4.5	135600.200	5.5
285.7372	9.01	-3.92	254723.280	1.0	289710.200	2.0
285.7393	24.01	-.61	19798.010	2.5	54784.670	3.5
285.7406	28.01	-.68	74283.330	.5	109269.830	1.5
285.7407	22.00	-5.95	6598.749	2.0	41585.240	3.0
285.7416	26.01	-1.36	26055.400	2.5	61041.780	2.5
285.7429	23.01	-2.37	12621.570	5.0	47607.790	6.0
285.7465	26.01	-2.76	37227.320	.5	72213.100	.5
285.7469	28.01	-4.57	100475.820	3.5	135461.550	2.5
285.7490	90.01	-.96	6613.917	0.0	41609.665	0.0
285.7510	23.01	-4.43	13594.730	2.0	48579.960	3.0
285.7540	76.00	-.04	18793.202	0.0	53788.338	0.0
285.7555	24.01	-2.70	51669.750	2.5	86654.430	2.5
285.7586	30.02	-.37	257908.200	1.0	292892.500	2.0
285.7605	22.01	-2.83	9930.740	1.5	44914.800	1.5
285.7650	72.01	-.35	12824.546	0.0	47818.335	0.0
285.7651	27.01	-5.68	13404.600	1.0	48388.100	2.0
285.7684	28.02	-4.36	76237.800	3.0	111220.900	3.0
285.7735	10.01	-3.75	282680.650	.5	317663.130	1.5
285.7748	29.01	-2.49	73353.120	2.0	108335.430	2.0
285.7835	18.01	-4.77	173347.830	1.5	208329.080	.5
285.7869	8.02	-4.82	331820.200	3.0	366801.040	3.0
285.7870	28.01	-3.92	53601.190	1.5	88582.010	1.5
285.7872	22.00	-4.38	8602.340	2.0	43583.140	3.0
285.7886	24.00	-2.89	31028.330	2.0	66008.950	3.0
285.7988	6.01	-1.57	196571.820	2.5	231551.200	1.5
285.7995	24.01	-1.94	34659.480	.5	69638.770	1.5
285.7999	26.01	-1.70	38164.240	2.5	73143.480	3.5
285.8014	25.01	-3.07	30679.240	5.0	65658.300	5.0
285.8025	10.01	-.63	246192.450	2.5	281171.380	2.5
285.8040	74.00	-.85	6129.972	0.0	41116.985	0.0
285.8079	24.01	-3.93	32355.940	3.5	67334.200	3.5
285.8140	49.00	-2.26	0.000	0.0	34987.789	0.0
285.8179	24.01	-1.28	35607.600	3.5	70584.640	2.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
285.8190	28.02	-3.78	97841.400	2.0	132818.300	2.0
285.8218	25.02	-4.26	109841.120	3.5	144817.680	3.5
285.8221	24.01	-3.94	38509.070	3.5	73485.600	3.5
285.8225	29.00	-1.18	39038.240	0.0	74024.989	0.0
285.8289	24.01	-3.65	39742.360	2.5	74718.050	1.5
285.8315	24.01	-.15	54499.700	1.5	89475.080	2.5
285.8330	70.01	-.59	30085.255	0.0	65070.719	0.0
285.8332	26.01	-1.21	25981.650	3.5	60956.820	3.5
285.8335	22.00	-4.70	8492.421	1.0	43467.550	2.0
285.8337	26.01	-.08	30388.550	4.5	65363.660	5.5
285.8373	26.01	-2.46	38214.500	1.5	73189.160	1.5
285.8404	22.01	-1.43	4628.610	2.5	39602.900	1.5
285.8440	73.01	.23	5242.739	0.0	40226.856	0.0
285.8450	26.02	-3.93	147406.140	5.0	182379.860	5.0
285.8455	23.00	-8.54	2311.370	3.5	37285.030	4.5
285.8460	70.01	-.56	32827.611	0.0	67811.483	0.0
285.8512	26.01	-1.97	38214.500	1.5	73187.460	.5
285.8570	68.00	-1.01	0.000	0.0	34982.526	0.0
285.8617	22.01	-1.64	9930.740	1.5	44902.420	2.5
285.8618	23.01	-2.19	11908.270	2.0	46879.940	2.0
285.8627	24.01	-2.37	35707.660	5.5	70679.220	4.5
285.8632	29.01	-4.26	118484.000	3.0	153455.500	4.0
285.8641	26.01	-.89	45206.490	.5	80177.870	1.5
285.8646	24.01	-.64	19528.380	.5	54499.700	1.5
285.8659	28.01	-4.90	94396.740	5.5	129367.910	6.5
285.8659	22.01	-1.52	32025.500	2.5	66996.670	3.5
285.8676	23.01	-3.89	13609.000	4.0	48579.960	3.0
285.8694	24.01	-.57	70394.460	4.5	105365.200	4.5
285.8697	25.00	-4.98	23549.200	2.5	58519.900	3.5
285.8705	28.01	-3.07	100490.950	1.5	135461.550	2.5
285.8734	29.00	-3.48	11211.395	0.0	46191.914	0.0
285.8755	15.01	-1.54	103340.010	2.0	138310.000	2.0
285.8844	28.01	-1.80	74300.930	1.5	109269.830	1.5
285.8865	28.01	-3.76	100475.820	3.5	135444.470	3.5
285.8897	26.00	-2.80	888.132	1.0	35856.386	2.0
285.8906	24.01	-.18	12496.790	4.5	47464.940	4.5
285.8999	23.01	-2.46	17910.980	4.0	52877.990	5.0
285.9000	24.00	-.43	25038.610	5.0	60005.600	5.0
285.9034	24.01	-2.23	49351.960	2.5	84318.540	1.5
285.9040	25.01	-2.18	53805.800	4.0	88772.300	5.0
285.9040	41.01	.05	10727.450	0.0	45704.225	0.0
285.9068	24.01	-1.04	70399.040	5.5	105365.200	4.5
285.9096	28.01	-2.87	100592.980	3.5	135558.800	4.5
285.9155	17.02	-3.69	204541.200	2.5	239506.300	1.5
285.9164	6.01	-1.57	196563.410	1.5	231528.390	2.5
285.9171	27.00	-4.19	8460.810	2.5	43425.710	2.5
285.9179	26.02	-.31	184777.300	1.0	219742.100	2.0
285.9200	23.01	-2.94	20242.320	4.0	55206.870	5.0
285.9204	26.02	-.86	184777.600	2.0	219742.100	2.0
285.9204	26.02	-.17	184777.600	2.0	219742.100	3.0
285.9278	26.02	-2.04	184778.500	3.0	219742.100	2.0
285.9278	26.02	-.70	184778.500	3.0	219742.100	3.0
285.9286	26.02	-.03	184778.500	3.0	219742.000	4.0
285.9316	22.00	-5.03	6661.003	3.0	41624.130	4.0
285.9323	21.01	-.45	29742.120	1.0	64705.160	2.0
285.9350	25.00	-1.40	17052.290	4.5	52015.000	3.5
285.9351	27.01	-2.75	50913.800	2.0	85876.500	1.0
285.9359	26.02	-1.99	184779.500	4.0	219742.100	3.0
285.9368	26.02	-.69	184779.500	4.0	219742.000	4.0
285.9376	26.02	.10	184779.500	4.0	219741.900	5.0
285.9380	70.01	-.17	35650.624	0.0	70623.240	0.0
285.9474	26.02	-2.26	184780.800	5.0	219742.000	4.0
285.9477	11.01	-.96	264928.000	2.0	299889.160	1.0
285.9482	26.02	.22	184780.800	5.0	219741.900	6.0
285.9482	26.02	-.85	184780.800	5.0	219741.900	5.0
285.9491	28.01	-3.24	100619.260	4.5	135580.250	4.5
285.9492	24.01	-4.43	35356.060	1.5	70317.040	2.5
285.9498	30.02	-.08	257962.500	2.0	292923.400	3.0
285.9520	58.01	-.07	9517.587	0.0	44488.491	0.0
285.9565	25.01	-3.39	40759.500	0.0	75719.590	1.0
285.9570	42.00	.03	20809.640	0.0	55779.933	0.0
285.9573	26.02	-2.64	90483.590	3.0	125443.580	4.0
285.9618	28.01	-4.39	100475.820	3.5	135435.260	4.5
285.9629	25.02	-4.98	86520.940	2.5	121480.240	3.5
285.9655	27.00	-2.30	4690.180	2.5	39649.160	3.5
285.9666	25.01	-1.46	36364.300	1.0	71323.150	2.0
285.9670	63.01	-1.19	1613.150	0.0	36582.220	0.0
285.9719	27.00	-3.13	13795.520	2.5	48753.720	1.5
285.9723	28.01	-2.52	92373.450	2.5	127331.600	2.5
285.9780	64.01	-1.37	4194.191	0.0	39161.916	0.0
285.9785	28.02	-1.97	121566.700	1.0	156524.100	2.0
285.9800	70.01	.20	21293.585	0.0	56261.065	0.0
285.9836	25.01	-1.99	66542.260	5.0	101499.030	4.0
285.9853	6.01	-1.18	196571.820	2.5	231528.390	2.5
285.9895	25.02	-3.12	100085.200	1.5	135041.250	1.5
285.9904	26.00	-2.88	17726.985	2.0	52682.930	2.0
285.9909	24.01	-1.32	33521.230	3.5	68477.110	4.5
285.9942	28.00	-2.33	15734.018	1.0	50689.490	2.0
285.9960	41.00	-.49	2742.356	0.0	37707.880	0.0
285.9973	27.02	-2.29	72341.900	1.5	107297.000	1.5
285.9983	23.00	-.68	137.380	2.5	35092.360	1.5
285.9997	25.01	-3.26	32856.950	3.0	67811.750	3.0
286.0018	23.00	-7.42	2220.130	2.5	37174.680	3.5
286.0020	44.00	-.73	2661.698	0.0	37626.488	0.0
286.0027	28.01	-1.45	99340.550	3.5	134294.990	2.5
286.0060	76.00	.10	16131.504	0.0	51095.805	0.0
286.0070	75.00	-.77	14115.066	0.0	49079.245	0.0
286.0104	30.02	-1.39	257908.200	1.0	292861.700	1.0
286.0104	30.02	-.67	257908.200	1.0	292861.700	2.0
286.0121	26.00	-2.45	20037.815	0.0	54991.110	1.0
286.0121	28.01	-3.45	57420.160	2.5	92373.450	2.5
286.0152	25.01	-3.51	32858.840	2.0	67811.750	3.0
286.0169	28.01	-3.64	100309.290	5.5	135261.990	4.5
286.0218	28.02	-4.12	79143.300	2.0	114095.400	1.0
286.0223	6.01	-1.66	196571.820	2.5	231523.870	3.5
286.0250	75.00	-.74	14518.354	0.0	49480.333	0.0
286.0267	22.00	-.33	7255.369	2.0	42206.880	2.0
286.0269	29.01	-3.37	88605.160	1.0	123556.640	2.0
286.0310	72.01	0.00	17260.709	0.0	52221.954	0.0
286.0315	25.00	-2.44	30354.210	3.5	65305.130	3.5
286.0343	9.02	.25	360435.080	1.5	395385.660	2.5
286.0440	33.00	.61	18067.285	0.0	53026.942	0.0
286.0460	24.01	-2.67	51789.210	3.5	86738.360	3.5
286.0504	22.00	-4.05	11776.806	4.0	46725.420	3.0
286.0512	24.01	-1.28	42986.730	1.5	77935.240	2.5
286.0530	17.02	-4.69	174093.800	1.5	209042.100	.5
286.0550	25.02	-.50	195186.900	7.5	230134.950	8.5
286.0550	69.01	-1.89	161.315	0.0	35119.627	0.0
286.0560	72.00	-1.22	0.000	0.0	34958.190	0.0
286.0626	22.00	-3.55	0.000	2.0	34947.120	1.0
286.0632	25.01	-.85	66542.260	5.0	101489.310	5.0
286.0660	77.00	-.74	12098.628	0.0	47055.596	0.0
286.0680	45.00	-1.21	5565.369	0.0	40522.093	0.0
286.0683	6.01	-1.66	196581.960	3.5	231528.390	2.5
286.0702	26.02	-1.21	89907.850	4.0	124854.040	3.0
286.0726	17.01	-1.19	126725.100	1.0	161671.000	0.0
286.0732	28.01	-.78	99340.550	3.5	134286.380	4.5
286.0746	24.00	-2.39	7593.160	2.0	42538.810	3.0
286.0785	24.00	-3.61	27816.880	5.0	62762.060	4.0
286.0850	40.00	-.90	564.603	0.0	35519.249	0.0
286.0880	73.01	-.15	6775.232	0.0	41729.512	0.0
286.0921	24.01	-.40	11962.000	.5	46905.520	1.5
286.0960	76.00	.03	5081.424	0.0	40034.726	0.0
286.0991	6.00	-2.20	84935.340	1.0	119878.000	1.0
286.1008	11.01	-1.34	298169.140	1.0	333111.600	1.0
286.1010	72.01	-.77	0.000	0.0	34952.692	0.0
286.1050	23.01	-4.38	44098.460	3.0	79040.400	3.0
286.1053	6.01	-.88	196581.960	3.5	231523.870	3.5
286.1059	26.01	-4.75	37227.320	.5	72169.150	1.5
286.1090	41.01	-.21	2339.068	0.0	37290.782	0.0
286.1120	73.00	-1.23	5968.656	0.0	40920.004	0.0
286.1167	26.01	-2.53	8680.470	1.5	43620.980	1.5
286.1210	70.01	-.05	31456.433	0.0	66406.681	0.0
286.1247	28.01	-4.88	100619.260	4.5	135558.800	4.5
286.1251	25.01	-.61	72010.750	4.0	106950.240	3.0
286.1301	22.01	-1.72	9975.920	1.5	44914.800	1.5
286.1302	25.01	-.19	67766.510	2.0	102705.370	3.0
286.1330	70.01	-.18	34844.049	0.0	69792.832	0.0
286.1339	27.00	-2.42	15774.040	1.5	50712.450	2.5
286.1340	90.01	.15	9598.245	0.0	44546.905	0.0
286.1350	58.01	-1.35	967.890	0.0	35916.428	0.0
286.1360	25.02	-1.15	195343.100	8.5	230281.250	7.5
286.1374	24.01	-2.01	70427.220	3.5	105365.200	4.5
286.1374	22.00	-3.62	6842.964	5.0	41780.950	4.0
286.1376	28.01	-3.75	99442.860	4.5	134380.820	3.5
286.1388	27.00	-4.23	8460.810	2.5	43398.620	3.5
286.1391	23.01	-1.51	14655.630	5.0	49593.410	5.0
286.1398	9.03	-.57	417143.400	2.0	452081.100	2.0
286.1410	44.00	.10	6452.602	0.0	41400.407	0.0
286.1450	23.00	-7.13	2424.890	4.5	37361.950	4.5
286.1536	25.01	.25	67744.080	6.0	102680.090	5.0
286.1538	8.02	-1.50	366594.010	2.0	401530.000	2.0
286.1561	26.01	-1.45	65556.340	4.5	100492.040	3.5
286.1620	58.01	-.86	2581.041	0.0	37526.282	0.0
286.1700	72.01	-.32	3629.588	0.0	38573.852	0.0
286.1817	28.01	-3.83	99040.750	1.5	133973.330	2.5
286.1893	26.01	-2.00	30764.460	3.5	65696.110	4.5
286.1943	28.01	-2.29	99340.550	3.5	134271.590	4.5
286.1954	26.02	-1.86	109570.840	2.0	144501.740	2.0
286.1969	24.00	-4.49	20520.920	3.0	55451.640	3.0
286.1980	73.00	.06	9678.902	0.0	44619.747	0.0
286.1990	26.00	-2.81	17927.378	1.0	52857.840	1.0
286.2019	25.01	-3.71	32836.400	1.0	67766.510	2.0
286.2028	30.02	-.57	257962.500	2.0	292892.500	2.0
286.2028	30.02	-1.72	257962.500	2.0	292892.500	3.0
286.2036	28.01	-3.67	100332.090	4.5	135261.990	4.5
286.2053	17.01	-1.35	126725.100	1.0	161654.800	1.0
286.2077	24.01	-.79	49564.800	1.5	84494.200	2.5
286.2196	24.00	-3.34	20523.690	4.0	55451.640	3.0
286.2218	26.02	-4.84	87901.870	3.0	122829.550	3.0
286.2231	28.01	-4.29	68735.980	2.5	103663.500	1.5
286.2258	24.01	-2.41	38509.070	3.5	73436.270	2.5
286.2272	9.02	-2.62	430012.480	1.5	464939.500	2.5
286.2277	25.01	-2.22	52653.270	4.0	87580.230	4.0
286.2300	23.01	-.90	20280.190	5.0	55206.870	5.0
286.2314	7.02	.17	320287.500	3.5	355214.000	4.5
286.2314	7.02	-1.38	320287.500	3.5	355214.000	3.5
286.2315	22.01	-.69	9975.920	1.5	44902.420	2.5
286.2381	26.02	-4.39	83237.860	3.0	118163.560	2.0
286.2395	25.01	-4.44	31760.930	2.0	66686.450	3.0
286.2405	26.02	-3.40	83429.610	6.0	118355.010	6.0
286.2412	25.01	.11	66542.260	5.0	101467.580	6.0
286.2432	24.01	-3.63	51669.750	2.5	86594.820	1.5
286.2450	28.01	-4.56	100475.820	3.5	135400.670	3.5
286.2480	64.01	-.50	4758.794	0.0	39693.536	0.0
286.2495	26.00	-2.45	8154.713	1.0	43079.013	1.0
286.2498	26.02	-4.11	147556.450	1.0	182480.720	2.0
286.2500	22.00	-7.90	6661.003	3.0	41585.240	3.0
286.2559	24.01	-.03	12303.980	3.5	47227.500	3.5
286.2570	63.01	-1.37	0.000	0.0	34933.644	0.0
286.2600	27.00	-2.17	1406.840	2.5	36329.860	2.5
286.2620	92.01	-.95	4516.821	0.0	39449.854	0.0
286.2647	24.01	-1.86	38563.150	4.5	73485.600	3.5
286.2651	22.03	-0.00	230913.400	1.5	265835.800	.5
286.2665	9.02	-1.24	432060.640	1.5	466982.860	2.5
286.2668	24.00	-4.58	7593.160	2.0	42515.350	2.0
286.2723	28.01	-3.30	99340.550	3.5	134262.070	3.5
286.2765	27.00	-1.98	15184.040	2.5	50105.050	1.5
286.2790	58.01	-1.12	0.000	0.0	34930.959	0.0
286.2824	25.01	-.75	47073.560	3.0	81993.850	4.0
286.2840	28.02	-4.82	98238.200	4.0	133158.300	3.0
286.2860	9.02	-.02	360348.280	.5	395268.130	1.5
286.2879	24.01	-.38	54418.080	.5	89337.700	1.5
286.2901	28.01	-2.47	100619.260	4.5	135538.610	5.5
286.2940	45.00	-.47	5565.369	0.0	40494.498	0.0
286.2943	24.01	-2.47	30298.770	5.5	65217.610	4.5
286.2980	57.01	.01	20245.038	0.0	55173.679	0.0
286.3010	74.00	-1.51	1613.150	0.0	36541.425	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
286.3052	9.02	-2.29	432060.640	1.5	466978.150	1.5
286.3052	10.01	-3.23	246415.040	1.5	281332.550	.5
286.3081	23.02	-3.43	109854.870	3.5	144772.020	3.5
286.3156	26.00	-3.79	20874.482	3.0	55790.720	3.0
286.3200	42.01	-.02	24035.941	0.0	58961.898	0.0
286.3206	25.01	-3.25	31760.930	2.0	66676.560	2.0
286.3217	28.01	-2.75	99340.550	3.5	134256.050	2.5
286.3330	50.00	-.19	0.000	0.0	34924.371	0.0
286.3350	69.01	-1.77	0.000	0.0	34924.127	0.0
286.3370	76.01	.73	11372.710	0.0	46296.593	0.0
286.3431	26.00	-1.52	11976.239	4.0	46889.126	4.0
286.3442	28.01	-3.01	79923.880	4.5	114836.630	3.5
286.3479	28.01	-.90	99340.550	3.5	134252.850	3.5
286.3487	22.01	-.75	32025.500	2.5	66937.700	2.5
286.3526	16.02	.80	170648.940	3.0	205560.670	4.0
286.3545	17.01	-.85	126743.300	2.0	161654.600	1.0
286.3612	28.01	-4.89	103653.030	3.5	138563.710	3.5
286.3616	25.01	-2.08	49517.580	5.0	84428.210	5.0
286.3679	21.01	-.53	29736.220	0.0	64646.080	1.0
286.3684	17.01	-2.54	126725.100	1.0	161634.900	2.0
286.3687	28.01	-1.37	23796.180	1.5	58705.950	1.5
286.3697	25.01	-2.80	46903.260	2.0	81812.900	2.0
286.3704	25.01	-3.44	32856.950	3.0	67766.510	2.0
286.3773	24.00	-1.35	24897.550	4.0	59806.270	5.0
286.3810	42.01	1.23	26616.982	0.0	61535.500	0.0
286.3826	25.00	-1.41	30354.210	3.5	65262.280	4.5
286.3840	77.00	-.60	9759.560	0.0	44677.712	0.0
286.3859	25.01	-3.42	32858.840	2.0	67766.510	2.0
286.3864	26.00	-2.26	704.003	2.0	35611.608	3.0
286.3880	74.00	.34	19680.435	0.0	54598.099	0.0
286.3975	22.01	-3.88	32697.940	2.5	67604.200	3.5
286.3989	24.01	-2.64	50667.330	3.5	85573.420	3.5
286.4021	28.01	-.73	57420.160	2.5	92325.850	3.5
286.4075	25.01	-2.96	70150.390	1.0	105055.430	2.0
286.4136	26.01	-.90	43620.980	1.5	78525.270	2.5
286.4139	24.01	-2.89	51943.040	4.5	86847.300	4.5
286.4163	21.01	-.64	29742.120	1.0	64646.080	1.0
286.4260	76.00	-.36	15324.929	0.0	50237.961	0.0
286.4278	24.01	-3.06	51789.210	3.5	86691.770	2.5
286.4310	42.00	.66	23955.283	0.0	58867.705	0.0
286.4324	25.02	-4.02	86578.240	3.5	121480.240	3.5
286.4332	18.01	-4.57	173347.830	1.5	208249.740	1.5
286.4354	23.01	-2.95	12706.150	6.0	47607.790	6.0
286.4355	23.00	-.53	323.420	3.5	35225.040	2.5
286.4372	26.01	-3.54	26055.400	2.5	60956.820	3.5
286.4400	45.00	-1.41	3226.301	0.0	38137.626	0.0
286.4420	63.01	-1.04	11050.080	0.0	45961.161	0.0
286.4429	28.01	-2.94	100845.410	.5	135746.130	1.5
286.4431	25.01	-2.10	44899.820	3.0	79800.520	4.0
286.4447	26.00	-3.51	22996.661	4.0	57897.170	5.0
286.4514	23.01	-1.05	20242.320	4.0	55142.010	3.0
286.4520	25.01	-3.24	36364.300	1.0	71263.920	1.0
286.4554	30.02	-1.72	257962.500	2.0	292861.700	1.0
286.4554	30.02	-2.73	257962.500	2.0	292861.700	2.0
286.4560	75.00	-.19	27100.927	0.0	62010.302	0.0
286.4660	42.00	-.13	11775.998	0.0	46684.155	0.0
286.4728	26.00	-3.95	18378.187	2.0	53275.270	2.0
286.4747	28.01	-1.71	58493.210	2.5	93390.060	2.5
286.4801	23.03	-4.12	222794.600	2.0	257690.800	3.0
286.4802	25.01	-.37	51553.060	5.0	86449.240	4.0
286.4951	28.01	-2.76	68131.210	3.5	103025.580	2.5
286.4967	26.01	-1.29	31483.200	3.5	66377.370	3.5
286.4971	28.01	-2.80	92325.850	3.5	127219.970	3.5
286.5012	25.01	-1.15	67811.750	3.0	102705.370	3.0
286.5060	64.01	-.97	3387.616	0.0	38290.899	0.0
286.5100	40.01	-.99	2823.013	0.0	37725.809	0.0
286.5101	24.01	-.03	12148.000	2.5	47040.540	2.5
286.5147	25.02	-3.87	109780.400	2.5	144672.380	2.5
286.5164	26.00	-4.77	12560.933	3.0	47452.702	4.0
286.5178	17.01	-1.35	126743.300	2.0	161634.900	2.0
286.5179	25.01	-.08	67811.750	3.0	102703.340	4.0
286.5211	27.02	-3.29	71873.700	5.5	106764.900	4.5
286.5226	22.00	-3.11	7255.369	2.0	42146.390	1.0
286.5232	23.00	-7.80	2424.890	4.5	37315.830	5.5
286.5250	26.01	-3.60	38164.240	2.5	73054.970	2.5
286.5305	22.01	-5.17	10024.740	2.5	44914.800	1.5
286.5320	73.01	1.03	17099.394	0.0	51999.510	0.0
286.5334	24.01	-.60	19528.380	.5	54418.080	.5
286.5341	27.01	-1.17	49697.500	4.0	84587.120	4.0
286.5342	27.01	-5.48	13261.100	2.0	48150.700	3.0
286.5471	26.01	-1.01	45289.840	1.5	80177.870	1.5
286.5496	28.00	-1.96	1713.080	1.0	36600.805	2.0
286.5505	24.01	-4.59	33418.110	2.5	68305.730	1.5
286.5512	24.01	-1.68	49838.430	4.5	84725.960	3.5
286.5600	40.01	-.66	3710.246	0.0	38606.952	0.0
286.5602	25.01	-3.33	30679.240	5.0	65565.680	4.0
286.5610	41.01	-.88	0.000	0.0	34896.584	0.0
286.5620	42.01	-.19	15566.901	0.0	50463.363	0.0
286.5655	24.01	.41	50687.630	2.5	85573.420	3.5
286.5671	9.02	-.89	356371.820	2.5	391257.420	2.5
286.5677	25.00	-3.05	30419.610	2.5	65305.130	3.5
286.5680	76.00	-.44	11292.053	0.0	46187.785	0.0
286.5680	92.01	-.52	0.000	0.0	34895.732	0.0
286.5757	15.01	-3.51	103668.740	3.0	138553.300	2.0
286.5764	26.00	-1.35	20641.110	4.0	55525.580	5.0
286.5786	26.01	-3.86	31364.470	1.5	66248.670	.5
286.5790	18.01	-4.08	155708.020	.5	190592.170	1.5
286.5815	25.01	-4.30	31760.930	2.0	66644.780	1.0
286.5835	28.01	-4.07	98969.440	5.5	133853.040	4.5
286.5842	18.01	-1.95	157673.320	2.5	192556.840	2.5
286.5893	24.01	.36	39824.520	4.5	74707.420	5.5
286.6018	22.00	-4.82	6742.757	4.0	41624.130	4.0
286.6030	21.01	.08	29823.920	2.0	64705.160	2.0
286.6051	23.01	-3.11	44159.430	2.0	79040.400	3.0
286.6060	74.00	-.61	3306.958	0.0	38198.063	0.0
286.6082	27.02	-3.13	138970.500	1.5	173851.100	.5
286.6082	27.02	-3.13	138970.500	1.5	173851.100	.5
286.6082	27.02	-3.75	138970.500	1.5	173851.100	.5
286.6113	26.01	-3.56	31368.450	.5	66248.670	.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
286.6141	25.01	-1.45	49427.320	4.0	84307.200	4.0
286.6147	26.00	-2.36	20874.482	3.0	55754.290	2.0
286.6156	30.02	.00	260805.900	2.0	295685.600	3.0
286.6221	26.01	.01	73751.340	4.5	108630.240	5.5
286.6322	22.01	-4.81	10024.740	2.5	44902.420	2.5
286.6341	25.01	-1.09	46903.260	2.0	81780.700	3.0
286.6370	72.00	-.15	0.000	0.0	34887.331	0.0
286.6370	74.00	-1.63	4758.794	0.0	39646.125	0.0
286.6375	26.00	-1.91	21715.735	5.0	56592.760	4.0
286.6400	90.01	-1.46	4436.164	0.0	39323.130	0.0
286.6522	28.01	-3.41	101247.370	2.5	136122.610	2.5
286.6530	25.01	-.12	72010.750	4.0	106885.900	4.0
286.6538	20.02	-1.40	247696.390	1.0	282571.430	1.0
286.6540	24.01	-1.13	34631.140	4.5	69506.160	3.5
286.6546	23.01	-8.17	12545.150	4.0	47420.100	4.0
286.6565	24.00	-4.26	21847.880	2.0	56722.600	1.0
286.6626	26.00	-2.00	7985.783	2.0	42859.756	2.0
286.6640	44.00	-.34	2016.438	0.0	36900.483	0.0
286.6667	25.00	-1.91	27201.540	2.5	62075.020	2.5
286.6670	41.00	-1.07	1129.205	0.0	36012.885	0.0
286.6690	42.01	.67	17260.709	0.0	52144.146	0.0
286.6690	77.00	-.54	12824.546	0.0	47707.983	0.0
286.6693	21.01	-.52	29742.120	1.0	64615.280	0.0
286.6723	24.01	-.13	12032.720	1.5	46905.520	1.5
286.6798	28.01	-2.99	100592.980	3.5	135464.860	3.5
286.6810	58.01	-.70	4436.164	0.0	39318.141	0.0
286.6849	28.01	-2.14	68154.310	1.5	103025.580	2.5
286.6917	26.00	-4.51	22838.320	2.0	57708.760	2.0
286.6920	17.02	-3.84	183042.700	2.5	217913.100	1.5
286.6930	25.01	-1.95	70150.390	1.0	105020.670	1.0
286.6953	24.03	-2.04	127202.000	4.5	162072.000	3.5
286.6961	30.02	-4.13	265256.100	3.0	300126.000	4.0
286.6992	23.00	-7.12	2311.370	3.5	37180.900	4.5
286.7050	70.01	.08	30085.255	0.0	64964.312	0.0
286.7055	26.02	-4.10	179178.620	3.0	214047.380	4.0
286.7071	28.01	-4.18	100592.980	3.5	135461.550	2.5
286.7083	24.01	-.39	19631.280	1.5	54499.700	1.5
286.7138	28.01	-4.80	99340.550	3.5	134208.300	2.5
286.7189	24.01	-2.08	34631.140	4.5	69498.270	4.5
286.7190	75.00	.05	16534.792	0.0	51412.146	0.0
286.7198	22.01	-2.70	12758.150	2.5	47625.170	2.5
286.7208	30.02	-1.36	258075.700	3.0	292942.600	4.0
286.7288	25.02	-4.59	144817.680	3.5	179683.610	4.5
286.7297	9.01	-.55	235642.480	1.0	270508.290	2.0
286.7306	26.00	-2.30	12968.552	2.0	47834.260	3.0
286.7346	24.01	-3.58	51789.210	3.5	86654.430	2.5
286.7347	22.00	-5.21	8602.340	2.0	43467.550	2.0
286.7363	22.00	-4.99	170.132	3.0	35035.147	2.0
286.7397	28.01	-2.02	101258.010	1.5	136122.610	2.5
286.7410	73.01	1.20	17905.969	0.0	52780.647	0.0
286.7503	23.00	-9.02	2311.370	3.5	37174.680	3.5
286.7509	26.00	-4.64	23110.925	3.0	57974.160	2.0
286.7524	25.00	-3.61	23296.670	3.5	58159.730	2.5
286.7561	14.02	-2.11	214994.650	1.0	249857.260	0.0
286.7563	26.00	-1.65	12968.552	2.0	47831.132	2.0
286.7566	25.01	-4.88	30795.750	4.0	65658.300	5.0
286.7610	26.02	-4.87	144332.210	4.0	179194.220	4.0
286.7630	77.00	-.45	16454.134	0.0	51326.136	0.0
286.7641	24.01	-.30	11962.000	.5	46823.640	.5
286.7700	72.00	-.65	8872.327	0.0	43743.478	0.0
286.7733	26.01	-3.25	31811.870	2.5	66672.390	3.5
286.7764	23.00	-8.55	2424.890	4.5	37285.030	4.5
286.7767	17.01	-3.88	149798.300	2.0	184658.400	2.0
286.7770	28.01	-2.07	73903.250	.5	108763.320	.5
286.7821	26.02	-4.16	116898.220	2.0	151757.670	2.0
286.7852	26.00	-3.48	12560.933	3.0	47420.000	2.0
286.7868	22.00	-4.93	6598.749	2.0	41457.620	3.0
286.7916	25.01	-3.71	66643.010	4.0	101501.300	3.0
286.7924	24.01	-1.40	35569.020	2.5	70427.220	3.5
286.7942	24.01	-2.91	33619.130	4.5	68477.110	4.5
286.7989	25.01	.16	67845.930	5.0	102703.340	4.0
286.8022	10.03	-4.79	609118.000	1.5	643975.000	2.5
286.8030	17.01	-3.04	149798.300	2.0	184655.200	3.0
286.8036	26.01	-9.68	27314.930	3.5	62171.760	3.5
286.8039	28.02	-4.40	98238.200	4.0	133095.000	3.0
286.8073	23.01	-3.24	17910.980	4.0	52767.360	3.0
286.8075	18.01	-4.81	173393.380	2.5	208249.740	1.5
286.8083	22.00	-6.18	12118.394	4.0	46974.650	5.0
286.8088	26.01	-1.58	64832.000	4.5	99688.200	3.5
286.8100	26.01	-2.92	58631.650	4.5	93487.710	3.5
286.8103	25.01	-.55	66643.010	4.0	101499.030	4.0
286.8110	42.01	.26	25891.064	0.0	60757.230	0.0
286.8135	26.02	-1.55	105895.350	1.0	140750.980	2.0
286.8182	25.01	-1.46	66644.780	1.0	101499.840	2.0
286.8190	44.00	-.30	9033.642	0.0	43898.836	0.0
286.8195	27.01	-3.52	27585.300	1.0	62440.200	1.0
286.8212	26.00	-1.45	19757.020	3.0	54611.720	2.0
286.8276	23.01	-3.60	339.210	4.0	35193.130	5.0
286.8301	22.01	-3.15	30240.680	5.5	65094.290	4.5
286.8320	42.01	.27	26455.667	0.0	61319.281	0.0
286.8338	26.02	-4.82	179194.220	4.0	214047.380	4.0
286.8343	26.01	-2.97	58631.650	4.5	93484.750	4.5
286.8359	26.01	-2.75	49506.990	1.5	84359.900	1.5
286.8376	9.02	-1.65	355981.900	1.5	390844.600	2.5
286.8426	26.01	-1.92	38164.240	2.5	73016.330	3.5
286.8426	17.01	-.59	126782.800	3.0	161634.900	2.0
286.8434	30.02	-4.09	265256.100	3.0	300108.100	3.0
286.8450	24.01	-.62	54418.080	.5	89269.880	.5
286.8450	90.01	-.49	12340.601	0.0	47202.635	0.0
286.8454	26.00	-1.55	18378.187	2.0	53229.940	1.0
286.8456	26.00	-3.81	22845.856	5.0	57697.590	4.0
286.8467	13.01	-2.15	110087.500	2.0	144939.100	1.0
286.8491	26.00	-1.45	19562.435	4.0	54413.740	3.0
286.8520	41.01	.13	2581.041	0.0	37442.224	0.0
286.8650	73.00	-.72	3871.561	0.0	38731.164	0.0
286.8654	24.01	-.33	54625.760	2.5	89475.080	2.5
286.8661	24.01	-4.38	30307.600	1.5	65156.840	2.5
286.8680	90.01	-.86	8307.725	0.0	43166.963	0.0
286.8724	24.00	-4.54	27825.450	5.0	62673.920	6.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
286.8736	28.00	-1.43	15609.861	2.0	50458.187	1.0
286.8742	22.01	-.95	4628.610	2.5	39476.870	2.5
286.8767	24.01	-2.49	49646.250	3.5	84494.200	2.5
286.8788	30.02	.01	258075.700	3.0	292923.400	4.0
286.8788	30.02	-1.02	258075.700	3.0	292923.400	3.0
286.8871	26.01	-1.70	8391.920	2.5	43238.610	2.5
286.8874	25.00	-1.72	17282.000	3.5	52128.650	2.5
286.8885	28.01	-3.82	92373.450	2.5	127219.970	3.5
286.8901	23.01	-2.59	11908.270	2.0	46754.590	1.0
286.8903	25.01	-.11	66643.010	4.0	101489.310	5.0
286.8956	24.00	-.79	7593.160	2.0	42438.820	2.0
286.8956	24.00	-1.24	25038.610	5.0	59884.270	6.0
286.9029	26.02	-3.85	147635.950	3.0	182480.720	2.0
286.9031	26.02	-2.42	105906.230	2.0	140750.980	2.0
286.9121	23.01	.32	20363.220	6.0	55206.870	5.0
286.9132	28.01	-1.16	99442.860	4.5	134286.380	4.5
286.9153	26.01	-1.81	27314.930	3.5	62158.190	4.5
286.9156	9.02	-3.79	431432.270	1.5	466275.500	2.5
286.9175	17.01	-2.24	147605.700	3.0	182448.700	2.0
286.9184	7.01	-2.27	186511.580	2.0	221354.470	2.0
286.9217	22.00	-7.54	6742.757	4.0	41585.240	3.0
286.9234	28.01	-4.31	100592.980	3.5	135435.260	4.5
286.9251	25.01	-1.55	49465.130	3.0	84307.200	4.0
286.9257	30.02	-3.34	265256.100	3.0	300098.100	4.0
286.9308	26.00	-1.91	415.932	3.0	35257.309	4.0
286.9330	26.01	-.69	45044.210	1.5	79885.320	2.5
286.9383	26.01	-2.45	38214.500	1.5	73054.970	2.5
286.9390	76.00	-.59	12663.231	0.0	47513.844	0.0
286.9418	7.01	-3.17	186511.580	2.0	221351.630	1.0
286.9420	25.00	-3.26	23296.670	3.5	58136.690	3.5
286.9437	24.00	-3.45	24282.340	4.0	59122.150	3.0
286.9443	25.01	-2.14	67865.630	4.0	102705.370	3.0
286.9502	24.01	-2.11	51943.040	4.5	86782.070	3.5
286.9521	28.01	-.71	99442.860	4.5	134281.660	5.5
286.9528	18.01	-3.06	174409.830	1.5	209248.550	2.5
286.9558	23.01	-5.21	13741.610	3.0	48579.960	3.0
286.9560	42.00	-.38	12259.943	0.0	47108.491	0.0
286.9587	24.01	-.70	54499.700	1.5	89337.700	1.5
286.9610	25.01	-1.16	67865.630	4.0	102703.340	4.0
286.9625	25.01	.05	55759.270	3.0	90596.800	2.0
286.9654	22.01	-2.74	32767.020	3.5	67604.200	3.5
286.9695	26.01	-2.10	27314.930	3.5	62151.610	2.5
286.9700	77.00	-.65	10485.478	0.0	45332.326	0.0
286.9703	24.01	.18	54784.670	3.5	89621.250	3.5
286.9749	25.01	-1.73	36427.890	0.0	71263.920	1.0
286.9810	40.01	.44	7985.094	0.0	42830.606	0.0
286.9813	26.00	-1.60	19912.486	2.0	54747.740	1.0
286.9820	72.01	-1.16	2984.328	0.0	37829.719	0.0
286.9867	27.02	-4.86	138774.700	2.5	173609.300	1.5
286.9867	27.02	-4.86	138774.700	2.5	173609.300	1.5
286.9867	27.02	-3.95	138774.700	2.5	173609.300	1.5
286.9871	28.01	-4.49	101754.800	2.5	136589.350	3.5
286.9872	27.01	-.72	51512.200	3.0	86346.730	3.0
286.9900	27.02	-4.47	91715.100	2.5	126549.300	3.5
286.9903	25.01	-1.23	67845.930	5.0	102680.090	5.0
286.9924	28.00	-2.78	16017.317	0.0	50851.220	1.0
286.9944	20.02	-.24	242547.190	2.0	277380.860	2.0
286.9949	23.01	-1.63	2687.010	2.0	37520.610	3.0
286.9958	10.01	-.42	246192.450	2.5	281025.940	2.5
286.9995	9.02	-.63	360435.080	1.5	395268.130	1.5
287.0040	25.00	-.68	27201.540	2.5	62034.040	3.5
287.0087	25.01	.63	44315.170	6.0	79147.100	7.0
287.0100	24.00	-3.93	23163.270	0.0	57995.040	1.0
287.0101	28.01	-1.23	99442.860	4.5	134274.620	5.5
287.0105	23.01	-1.61	11908.270	2.0	46739.980	2.0
287.0132	23.02	-4.92	106903.350	5.5	141734.730	5.5
287.0142	25.02	-4.54	109841.120	3.5	144672.380	2.5
287.0180	42.00	-.79	12259.943	0.0	47100.963	0.0
287.0242	26.02	-4.61	147614.650	2.0	182444.700	3.0
287.0254	30.02	-2.09	260805.900	2.0	295635.800	3.0
287.0254	30.02	-.95	260805.900	2.0	295635.800	2.0
287.0349	25.01	-2.55	46903.260	2.0	81732.000	1.0
287.0350	28.01	-1.40	99442.860	4.5	134271.590	4.5
287.0393	24.00	-.97	25177.390	4.0	60005.600	5.0
287.0400	90.01	-.58	1774.465	0.0	36612.815	0.0
287.0431	24.01	-.05	19798.010	2.5	54625.760	2.5
287.0491	25.00	-1.64	27248.000	1.5	62075.020	2.5
287.0500	27.00	-3.42	7442.410	3.5	42269.320	4.5
287.0501	30.02	-3.48	265256.100	3.0	300083.000	3.0
287.0568	23.00	-.47	553.020	4.5	35379.110	3.5
287.0606	26.01	-4.44	25981.650	3.5	60807.280	4.5
287.0613	24.01	-1.29	49493.000	.5	84318.540	1.5
287.0623	28.01	-3.59	71457.740	3.5	106283.160	2.5
287.0640	28.01	-4.47	100619.260	4.5	135444.470	3.5
287.0651	28.01	-4.32	100845.410	.5	135670.490	.5
287.0679	25.01	-.44	66676.560	2.0	101501.300	3.0
287.0711	25.01	-1.89	70231.070	2.0	105055.430	2.0
287.0739	25.02	-3.80	195682.500	5.5	230506.520	5.5
287.0757	30.02	-1.13	260878.800	3.0	295702.600	4.0
287.0779	25.01	-1.80	69044.610	2.0	103868.140	1.0
287.0781	24.01	-3.26	31531.620	1.5	66355.130	1.5
287.0800	25.01	-1.06	66676.560	2.0	101499.840	2.0
287.0871	25.02	-3.34	173920.690	1.5	208743.100	2.5
287.0884	24.00	-3.04	24299.890	2.0	59122.150	3.0
287.0892	21.01	-.39	29823.920	2.0	64646.080	1.0
287.0900	42.00	-.19	21051.613	0.0	55883.896	0.0
287.0900	74.00	-.61	13227.833	0.0	48060.116	0.0
287.0905	28.02	-3.23	97996.300	3.0	132818.300	2.0
287.0920	26.02	-3.77	105929.160	3.0	140750.980	2.0
287.0947	28.01	-4.94	99559.330	2.5	134380.820	3.5
287.0959	26.01	-3.13	58666.360	3.5	93487.710	3.5
287.0990	9.02	-4.37	431432.270	1.5	466253.240	1.5
287.1014	24.00	-1.35	23933.900	4.0	58754.580	5.0
287.1020	25.00	-3.89	25281.040	2.5	60101.650	2.5
287.1026	18.01	-4.14	170400.940	2.5	205221.470	1.5
287.1028	24.01	-3.88	39684.000	3.5	74504.510	4.5
287.1058	26.01	-2.03	25805.320	4.5	60625.470	5.5
287.1067	27.00	-4.40	13795.520	2.5	48615.560	2.5
287.1070	30.02	-4.97	265256.100	3.0	300076.100	2.0
287.1080	58.01	-1.07	967.890	0.0	35797.989	0.0
287.1101	24.01	-1.81	35607.600	3.5	70427.220	3.5
287.1129	26.01	-1.81	26170.190	5.5	60989.480	4.5
287.1135	28.01	-2.21	99442.860	4.5	134262.070	3.5
287.1203	26.01	-4.23	58666.360	3.5	93484.750	4.5
287.1211	26.01	-2.06	65931.460	3.5	100749.750	2.5
287.1218	24.00	-3.03	24303.940	3.0	59122.150	3.0
287.1225	18.01	-3.70	161048.640	1.5	195866.760	1.5
287.1265	11.01	-.97	265693.290	1.0	300510.920	1.0
287.1292	26.00	-4.07	22996.661	4.0	57813.970	3.0
287.1334	30.02	-1.56	258075.700	3.0	292892.500	2.0
287.1334	30.02	-.44	258075.700	3.0	292892.500	3.0
287.1340	24.01	-3.66	35610.500	4.5	70427.220	3.5
287.1370	74.00	-1.13	4758.794	0.0	39585.375	0.0
287.1392	26.02	-4.35	179194.220	4.0	214010.320	5.0
287.1400	28.01	-3.38	100619.260	4.5	135435.260	4.5
287.1400	18.01	-2.76	161048.640	1.5	195864.640	2.5
287.1409	26.01	-2.55	37227.320	.5	72043.210	1.5
287.1420	73.00	-.78	1935.780	0.0	36761.755	0.0
287.1434	10.01	-1.78	294333.220	.5	329148.800	1.5
287.1438	24.01	-.44	42898.120	2.5	77713.660	1.5
287.1462	23.01	-1.09	19902.600	0.0	54717.850	1.0
287.1495	25.01	-.98	66686.450	3.0	101501.300	3.0
287.1510	42.01	1.16	12340.601	0.0	47165.484	0.0
287.1526	28.01	-4.35	99844.130	3.5	134658.600	4.5
287.1527	25.01	.04	67865.630	4.0	102680.090	5.0
287.1543	23.01	-1.60	19112.930	4.0	53927.190	3.0
287.1572	25.00	-2.45	25287.740	3.5	60101.650	2.5
287.1600	25.00	-2.74	23296.670	3.5	58110.240	4.5
287.1615	25.01	-2.18	66686.450	3.0	101499.840	2.0
287.1618	24.00	-1.14	8095.210	3.0	42908.570	4.0
287.1630	58.01	-1.44	0.000	0.0	34823.428	0.0
287.1682	25.01	-.38	66686.450	3.0	101499.030	4.0
287.1695	25.01	-3.95	43528.300	5.0	78340.720	6.0
287.1721	26.00	-1.96	19788.248	4.0	54600.350	3.0
287.1750	64.01	-1.04	4194.191	0.0	39016.164	0.0
287.1820	75.00	-.33	14115.066	0.0	48936.190	0.0
287.1887	18.01	-4.51	184191.710	.5	219001.800	1.5
287.1896	28.01	-1.86	99442.860	4.5	134252.850	3.5
287.1939	28.01	-4.56	101144.630	3.5	135954.090	3.5
287.1990	16.02	.47	169770.040	1.0	204578.890	2.0
287.1998	26.02	-4.81	147635.950	3.0	182444.700	3.0
287.2037	28.01	-2.17	101740.270	3.5	136548.550	2.5
287.2085	28.01	-3.59	100592.980	3.5	135400.670	3.5
287.2099	28.01	-4.71	100845.410	.5	135652.930	1.5
287.2101	17.02	-2.44	183042.700	2.5	217850.200	2.5
287.2152	23.01	-2.72	14461.730	3.0	49268.610	4.0
287.2154	28.01	-1.35	101740.270	3.5	136547.130	3.5
287.2159	30.02	.12	260878.800	3.0	295685.600	4.0
287.2159	30.02	-1.80	260878.800	3.0	295685.600	3.0
287.2191	27.00	-1.85	18389.570	1.5	53195.980	2.5
287.2206	28.01	-.67	101740.270	3.5	136546.500	4.5
287.2274	26.01	-1.06	45079.910	2.5	79885.320	2.5
287.2300	75.00	-.71	14921.641	0.0	49736.946	0.0
287.2312	26.00	-3.58	20641.110	4.0	55446.060	4.0
287.2322	28.01	-3.70	104298.230	4.5	139103.050	5.5
287.2334	26.02	-3.46	83358.880	2.0	118163.560	2.0
287.2335	26.00	-1.86	7728.058	3.0	42532.729	3.0
287.2382	26.01	-.64	26352.800	4.5	61156.900	3.5
287.2399	25.01	-1.54	36274.290	2.0	71078.180	1.0
287.2400	76.00	-1.55	0.000	0.0	34814.093	0.0
287.2439	28.01	-4.44	98822.550	6.5	133625.960	5.5
287.2448	23.03	-3.93	220343.500	1.0	255146.800	2.0
287.2492	27.00	-1.84	8460.810	2.5	43263.570	1.5
287.2494	26.00	-3.92	22838.320	2.0	57641.060	3.0
287.2524	24.00	-2.73	31377.960	4.0	66180.340	5.0
287.2530	40.01	-.54	7985.094	0.0	42797.611	0.0
287.2554	28.01	-1.53	101740.270	3.5	136542.280	3.5
287.2601	27.00	-4.40	14036.280	1.5	48837.720	.5
287.2614	27.01	-3.11	11651.310	2.0	46452.600	2.0
287.2648	26.01	-3.11	31811.870	2.5	66612.740	1.5
287.2666	10.00	-3.81	135888.717	1.0	170689.370	0.0
287.2670	75.00	-.75	15647.559	0.0	50458.380	0.0
287.2699	24.01	-3.82	39684.000	3.5	74484.250	2.5
287.2802	23.01	-3.83	20343.000	2.0	55142.010	3.0
287.2841	23.01	-5.53	12621.570	5.0	47420.100	4.0
287.2880	42.01	.63	27504.214	0.0	62312.490	0.0
287.2889	28.01	-4.48	99844.130	3.5	134642.090	3.5
287.2936	25.01	.40	44315.170	6.0	79112.560	5.0
287.2945	11.01	-1.12	298169.140	1.0	332966.420	2.0
287.2945	11.01	-1.12	298169.140	1.0	332966.420	2.0
287.2960	30.02	-4.22	265256.100	3.0	300053.200	2.0
287.2961	10.01	-1.37	246192.450	2.5	280989.530	1.5
287.2999	22.00	-5.15	6661.003	3.0	41457.620	3.0
287.3056	26.01	-3.36	65696.110	4.5	100492.040	3.5
287.3107	24.01	-3.86	51943.040	4.5	86738.360	3.5
287.3124	25.01	.04	67910.260	4.0	102705.370	3.0
287.3158	30.02	-3.34	265313.400	2.0	300108.100	3.0
287.3174	23.01	-1.59	19132.690	2.0	53927.190	3.0
287.3183	24.00	-.12	23933.900	4.0	58728.290	4.0
287.3194	26.02	-3.78	147614.650	2.0	182408.910	3.0
287.3292	25.01	-1.25	67910.260	4.0	102703.340	4.0
287.3320	82.00	.06	10566.135	0.0	45369.081	0.0
287.3332	27.00	-2.73	14036.280	1.5	48828.870	2.5
287.3360	73.00	-1.26	0.000	0.0	34802.461	0.0
287.3391	26.01	-.05	30764.460	3.5	65556.340	4.5
287.3393	25.02	.50	195343.100	8.5	230134.950	8.5
287.3417	25.01	-4.25	69044.610	2.0	103836.170	2.0
287.3420	76.00	-.15	11292.053	0.0	46093.788	0.0
287.3464	22.01	-3.40	32025.500	2.5	66816.490	1.5
287.3470	24.01	-.83	12032.720	1.5	46823.640	.5
287.3476	24.01	-.55	42986.730	1.5	77777.580	.5
287.3540	24.01	-3.07	32603.730	2.5	67393.800	3.5
287.3560	73.00	-.80	3871.561	0.0	38671.600	0.0
287.3562	22.01	-3.05	12676.990	4.5	47466.800	3.5
287.3577	25.01	-1.48	49517.580	5.0	84307.200	4.0
287.3579	25.01	-1.57	70231.070	2.0	105020.670	1.0
287.3589	26.02	-4.83	144968.500	4.0	179757.980	4.0
287.3602	8.01	-3.57	203942.210	.5	238731.540	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
287.3605	25.01	-1.79	47073.560	3.0	81862.840	4.0
287.3640	42.00	.08	24681.201	0.0	59480.271	0.0
287.3647	26.00	-1.16	20641.110	4.0	55429.890	5.0
287.3666	24.01	-.93	35610.500	4.5	70399.040	5.5
287.3717	23.02	-4.53	56922.500	2.5	91710.430	3.5
287.3733	24.01	-.98	49706.470	2.5	84494.200	2.5
287.3761	25.01	-.58	73385.150	1.0	108172.540	1.0
287.3783	26.02	-1.42	105906.230	2.0	140693.360	3.0
287.3799	24.00	-2.01	31393.400	5.0	66180.340	5.0
287.3805	24.01	-2.63	35607.600	3.5	70394.460	4.5
287.3810	24.01	-.57	19631.280	1.5	54418.080	.5
287.3841	28.01	-3.66	66579.710	1.5	101366.140	2.5
287.3876	30.02	-1.55	258075.700	3.0	292861.700	2.0
287.3880	23.00	-6.95	2424.890	4.5	37210.850	5.5
287.3895	27.01	-1.66	50381.600	3.0	85167.380	3.0
287.3920	26.00	-3.73	17726.985	2.0	52512.460	1.0
287.3934	25.01	-.95	73385.150	1.0	108170.450	2.0
287.3987	7.01	-2.09	186511.580	2.0	221296.240	2.0
287.4027	26.00	-1.80	21999.132	4.0	56783.306	3.0
287.4029	28.01	-1.93	101740.270	3.5	136524.420	4.5
287.4045	24.01	-.88	35610.500	4.5	70394.460	4.5
287.4077	24.01	-2.25	32603.730	2.5	67387.300	2.5
287.4084	7.01	-3.31	186570.980	3.0	221354.470	2.0
287.4099	22.01	-1.87	8997.690	3.5	43780.990	4.5
287.4145	26.02	-3.62	147635.950	3.0	182418.700	4.0
287.4150	76.00	-.22	12905.203	0.0	47698.098	0.0
287.4154	24.01	-2.67	33694.470	5.5	68477.110	4.5
287.4170	73.00	-.64	5968.656	0.0	40761.309	0.0
287.4173	26.00	-1.74	0.000	4.0	34782.406	5.0
287.4179	23.01	-5.06	16340.970	3.0	51123.310	2.0
287.4194	23.01	-2.20	11908.270	2.0	46690.430	1.0
287.4195	27.00	-4.18	8460.810	2.5	43242.950	2.5
287.4234	26.00	-4.42	23192.486	2.0	57974.160	2.0
287.4240	31.00	-.14	0.000	0.0	34791.806	0.0
287.4256	28.01	-4.08	100619.260	4.5	135400.670	3.5
287.4264	25.01	-4.38	38901.800	4.0	73683.110	4.0
287.4276	22.00	-6.02	6842.964	5.0	41624.130	4.0
287.4286	24.00	-3.97	21810.840	1.0	56591.880	2.0
287.4312	7.01	-2.37	186511.580	2.0	221292.310	3.0
287.4322	22.00	-5.14	6556.828	1.0	41337.430	2.0
287.4398	18.03	-.24	251972.000	2.5	286751.680	2.5
287.4399	26.02	-4.89	144968.500	4.0	179748.170	5.0
287.4405	28.02	-2.37	82826.900	4.0	117606.500	3.0
287.4523	28.01	-3.39	100845.410	.5	135623.590	1.5
287.4570	41.00	-.71	1129.205	0.0	35917.017	0.0
287.4582	18.01	-1.80	161089.310	.5	195866.760	1.5
287.4590	76.00	-.30	16131.504	0.0	50919.074	0.0
287.4626	14.02	-1.13	214989.270	2.0	249766.190	1.0
287.4635	18.02	-2.02	174375.000	2.0	209151.820	2.0
287.4645	26.02	-4.34	147635.950	3.0	182412.650	4.0
287.4656	25.01	-1.18	73395.970	2.0	108172.540	1.0
287.4687	24.01	-1.98	32603.730	2.5	67379.920	1.5
287.4758	25.01	-1.56	73395.120	3.0	108170.450	2.0
287.4793	23.03	-.83	257143.200	2.0	291918.100	2.0
287.4827	28.01	-4.27	100845.410	.5	135619.910	1.5
287.4828	25.01	-.38	73395.970	2.0	108170.450	2.0
287.4850	26.01	-2.95	8846.760	.5	43620.980	1.5
287.4851	25.01	-1.06	44138.960	1.0	78913.170	2.0
287.4883	8.02	-3.56	331820.200	3.0	366594.010	2.0
287.4890	26.00	-1.62	19350.882	5.0	54124.620	4.0
287.4960	76.00	-.16	8630.355	0.0	43413.448	0.0
287.4980	44.00	-.08	0.000	0.0	34782.851	0.0
287.5042	24.01	-3.17	39684.000	3.5	74455.900	4.5
287.5071	14.02	-1.44	214994.650	1.0	249766.190	1.0
287.5083	30.02	-.41	258171.200	5.0	292942.600	5.0
287.5083	30.02	-2.15	258171.200	5.0	292942.600	4.0
287.5137	25.02	-2.64	174048.890	2.5	208819.640	3.5
287.5138	14.02	-1.83	214995.460	0.0	249766.190	1.0
287.5184	24.01	-.42	54499.700	1.5	89269.880	.5
287.5200	92.01	-1.06	887.233	0.0	35667.422	0.0
287.5205	25.01	-3.46	30795.750	4.0	65565.680	4.0
287.5210	74.00	-.23	12098.628	0.0	46878.696	0.0
287.5213	25.01	-3.04	67910.260	4.0	102680.090	5.0
287.5232	30.02	-4.29	265313.400	2.0	300083.000	3.0
287.5280	75.00	-.49	11534.025	0.0	46313.247	0.0
287.5303	26.00	-1.52	11976.239	4.0	46744.975	3.0
287.5344	26.01	-.79	27314.930	3.5	62083.170	4.5
287.5390	41.01	.38	2984.328	0.0	37762.219	0.0
287.5392	24.00	-2.69	25038.610	5.0	59806.270	5.0
287.5417	24.01	-3.96	30156.940	3.5	64924.300	3.5
287.5425	25.01	-1.09	44745.460	2.0	79512.730	3.0
287.5441	24.00	-1.34	24093.160	2.0	58860.230	2.0
287.5459	26.02	-4.61	179207.570	5.0	213974.420	6.0
287.5513	30.02	.30	258171.200	5.0	292937.400	6.0
287.5513	30.02	-1.53	258171.200	5.0	292937.400	5.0
287.5600	77.00	-.07	9759.560	0.0	44534.911	0.0
287.5670	30.02	.18	258178.300	4.0	292942.600	5.0
287.5670	30.02	-1.46	258178.300	4.0	292942.600	4.0
287.5679	26.02	-2.46	105929.160	3.0	140693.360	3.0
287.5679	23.01	-1.54	2604.820	1.0	37369.010	2.0
287.5712	25.01	-1.95	70150.390	1.0	104914.180	0.0
287.5748	9.02	-1.10	421005.360	.5	455768.720	.5
287.5789	25.01	-2.67	33147.390	5.0	67910.260	4.0
287.5803	30.02	-4.86	265313.400	2.0	300076.100	2.0
287.5865	26.00	-4.63	22946.810	1.0	57708.760	2.0
287.5980	40.00	-.13	1209.863	0.0	35980.619	0.0
287.5980	77.00	.22	12098.628	0.0	46869.384	0.0
287.5986	24.01	.26	20024.180	3.5	54784.670	3.5
287.5993	19.02	-1.34	208687.800	1.5	243448.200	1.5
287.6060	63.01	-1.85	1613.150	0.0	36382.939	0.0
287.6081	28.00	-2.75	879.813	2.0	35639.148	3.0
287.6110	73.00	-.37	9678.902	0.0	44448.087	0.0
287.6123	25.01	-1.23	69044.610	2.0	103803.440	3.0
287.6231	24.01	-.79	12148.000	2.5	46905.520	1.5
287.6274	30.02	-.81	260878.800	3.0	295635.800	3.0
287.6274	30.02	-2.28	260878.800	3.0	295635.800	2.0
287.6302	24.01	.72	40202.140	6.5	74958.800	7.5
287.6307	26.02	-4.91	147635.950	3.0	182392.550	2.0
287.6318	28.01	-3.22	101366.140	2.5	136122.610	2.5
287.6329	10.01	-.51	246415.040	1.5	281171.380	2.5
287.6330	72.01	.28	15002.299	0.0	49768.824	0.0
287.6337	25.01	-2.98	46903.260	2.0	81659.500	3.0
287.6356	23.00	-7.02	2424.890	4.5	37180.900	4.5
287.6382	24.00	-4.84	27935.260	4.0	62690.960	5.0
287.6394	26.00	-3.46	17927.378	1.0	52682.930	2.0
287.6410	90.01	-.97	6129.972	0.0	40895.530	0.0
287.6469	10.01	-.70	246192.450	2.5	280947.100	1.5
287.6540	42.00	.04	21051.613	0.0	55815.600	0.0
287.6544	24.01	-1.11	49564.800	1.5	84318.540	1.5
287.6557	28.01	-3.36	100845.410	.5	135599.000	.5
287.6608	26.02	-4.90	179221.450	7.0	213974.420	6.0
287.6639	18.02	-2.01	196589.200	1.0	231341.800	2.0
287.6672	30.02	-1.56	258171.200	5.0	292923.400	4.0
287.6677	24.01	-2.53	39684.000	3.5	74436.140	2.5
287.6685	18.02	-2.68	174375.000	2.0	209127.040	1.0
287.6694	23.01	-2.52	12545.150	4.0	47297.080	5.0
287.6710	26.00	-2.38	21038.987	2.0	55790.720	3.0
287.6780	24.01	-3.33	45669.540	1.5	80420.430	2.5
287.6801	26.01	-1.12	27314.930	3.5	62065.570	3.5
287.6808	27.00	-2.81	13795.520	2.5	48546.070	1.5
287.6819	24.01	-1.24	36101.820	3.5	70852.240	3.5
287.6819	13.02	-2.31	170637.350	.5	205387.770	1.5
287.6871	23.00	-7.23	2424.890	4.5	37174.680	3.5
287.6871	27.00	-1.82	16195.680	.5	50945.470	.5
287.6886	18.01	-4.32	173393.380	2.5	208142.990	3.5
287.6932	23.01	-1.13	14461.730	3.0	49210.780	3.0
287.6950	41.01	-.04	3468.273	0.0	38227.306	0.0
287.6986	25.03	-3.20	138123.100	6.0	172871.500	5.0
287.7018	24.01	-2.15	35569.020	2.5	70317.040	2.5
287.7030	41.01	.15	2581.041	0.0	37339.107	0.0
287.7050	73.01	.78	13389.148	0.0	48146.973	0.0
287.7081	28.00	-2.53	28068.091	4.0	62815.340	5.0
287.7120	26.00	-4.25	17550.180	3.0	52296.960	2.0
287.7138	23.01	-3.29	13511.710	1.0	48258.280	0.0
287.7141	23.01	-3.64	17910.980	4.0	52657.510	4.0
287.7153	25.02	-4.09	86520.940	2.5	121267.320	2.5
287.7160	72.00	-.55	10404.820	0.0	45161.316	0.0
287.7259	30.02	-.37	258178.300	4.0	292923.400	4.0
287.7259	30.02	-1.91	258178.300	4.0	292923.400	3.0
287.7284	23.01	-5.05	16340.970	3.0	51085.770	3.0
287.7302	26.00	-1.19	11976.239	4.0	46720.824	4.0
287.7322	9.02	-1.00	395268.130	1.5	430012.480	1.5
287.7350	76.00	-.16	10969.423	0.0	45723.624	0.0
287.7351	24.00	-3.49	21847.880	2.0	56591.880	2.0
287.7401	19.02	-1.37	207421.900	2.5	242165.300	1.5
287.7427	22.01	-.28	8997.690	3.5	43740.770	3.5
287.7460	24.01	-1.91	70679.220	4.5	105421.900	5.5
287.7525	24.01	-4.49	39742.360	2.5	74484.250	2.5
287.7550	40.01	-.73	3226.301	0.0	37978.086	0.0
287.7590	26.01	-2.92	64832.000	4.5	99573.110	4.5
287.7625	24.01	-2.81	32603.730	2.5	67344.420	2.5
287.7671	7.01	-.48	186570.980	3.0	221311.110	4.0
287.7680	77.00	-.72	5726.684	0.0	40476.899	0.0
287.7688	23.01	-.22	14461.730	3.0	49201.660	2.0
287.7690	73.01	.41	9598.245	0.0	44348.340	0.0
287.7695	24.01	-3.38	39684.000	3.5	74423.840	3.5
287.7698	30.02	-3.63	265313.400	2.0	300053.200	2.0
287.7699	29.01	-1.02	73595.640	1.0	108335.430	2.0
287.7737	25.01	-4.94	47073.560	3.0	81812.900	2.0
287.7778	27.00	-2.88	8460.810	2.5	43199.650	2.5
287.7791	22.00	-5.89	6598.749	2.0	41337.430	2.0
287.7816	13.02	-2.61	170637.350	.5	205375.740	.5
287.7876	23.01	-3.77	208.890	3.0	34946.550	4.0
287.7920	51.00	-.15	8469.040	0.0	43216.358	0.0
287.7967	24.01	-.92	12303.980	3.5	47040.540	2.5
287.8018	23.01	-.59	19132.690	2.0	53868.630	2.0
287.8041	28.01	-1.29	99559.330	2.5	134294.990	2.5
287.8098	25.02	-.13	100054.100	.5	134789.080	.5
287.8110	10.01	-1.89	246597.710	.5	281332.550	.5
287.8114	28.01	-3.88	101144.630	3.5	135879.410	3.5
287.8159	26.01	-8.32	27314.930	3.5	62049.170	2.5
287.8262	25.00	-.42	17282.000	3.5	52015.000	3.5
287.8297	23.01	-2.34	20617.050	2.0	55349.630	3.0
287.8380	42.00	-.70	11775.998	0.0	46517.762	0.0
287.8400	76.00	-.61	5726.684	0.0	40468.207	0.0
287.8452	24.01	-1.26	12496.790	4.5	47227.500	3.5
287.8472	24.01	-2.62	32603.730	2.5	67334.200	3.5
287.8472	22.00	-6.79	7255.369	2.0	41985.830	3.0
287.8533	24.00	-2.41	31364.330	3.0	66094.060	4.0
287.8558	27.00	-1.24	16195.680	.5	50925.110	1.5
287.8566	26.00	-4.87	23244.826	1.0	57974.160	2.0
287.8573	26.01	-2.96	58666.360	3.5	93395.600	2.5
287.8596	8.02	-3.02	366801.040	3.0	401530.000	2.0
287.8660	45.00	-1.17	3226.301	0.0	37964.686	0.0
287.8669	26.00	-1.87	20019.648	1.0	54747.740	1.0
287.8685	18.02	-.59	196613.910	2.0	231341.800	2.0
287.8720	74.00	-1.08	3306.958	0.0	38044.619	0.0
287.8740	41.01	-1.05	80.658	0.0	34818.078	0.0
287.8765	24.01	-.56	42986.730	1.5	77713.660	1.5
287.8775	23.03	-2.30	257690.800	3.0	292417.600	3.0
287.8789	23.01	-2.88	20622.990	3.0	55349.630	3.0
287.8803	26.02	-4.62	87901.870	3.0	122628.340	2.0
287.8870	63.00	-.57	0.000	0.0	34735.851	0.0
287.8900	28.02	-3.29	103306.100	3.0	138031.400	4.0
287.8903	7.01	-2.62	186570.980	3.0	221296.240	2.0
287.8913	24.01	-2.41	31531.620	1.5	66256.770	.5
287.8947	26.00	-2.62	12968.552	2.0	47693.289	3.0
287.8991	28.02	-3.93	75646.900	4.0	110371.100	4.0
287.8994	28.00	-2.08	15734.018	1.0	50458.187	1.0
287.9017	23.01	-1.55	20089.560	1.0	54813.450	0.0
287.9019	25.02	-2.09	144959.740	4.5	179683.610	4.5
287.9050	42.01	1.08	30246.570	0.0	64980.250	0.0
287.9050	73.01	-.11	6775.232	0.0	41508.912	0.0
287.9110	72.01	-.47	11856.655	0.0	46589.611	0.0
287.9110	74.00	-.70	2903.671	0.0	37636.627	0.0
287.9146	23.01	-1.23	2808.760	3.0	37531.090	4.0
287.9168	24.01	-.89	30307.600	1.5	65029.670	.5
287.9190	90.01	-1.73	1774.465	0.0	36506.456	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
287.9229	7.01	-3.66	186570.980	3.0	221292.310	3.0
287.9232	28.02	-3.55	121802.800	3.0	156524.100	2.0
287.9243	26.01	-1.29	30388.550	4.5	65109.710	3.5
287.9270	75.00	-.54	16212.162	0.0	50943.188	0.0
287.9274	24.00	-.78	7927.470	2.0	42648.260	3.0
287.9282	30.02	.13	260981.900	3.0	295702.600	4.0
287.9306	25.02	-4.21	144619.190	1.5	179339.590	2.5
287.9318	28.01	-4.38	99132.780	5.5	133853.040	4.5
287.9360	41.01	-1.13	725.918	0.0	35455.858	0.0
287.9365	22.00	-2.90	12118.394	4.0	46838.090	4.0
287.9376	25.01	-1.02	72247.380	3.0	106966.940	2.0
287.9381	28.01	-2.17	57080.550	3.5	91800.050	4.5
287.9390	74.00	-1.06	0.000	0.0	34729.578	0.0
287.9390	76.01	.74	11534.025	0.0	46263.603	0.0
287.9402	24.00	-1.40	24056.110	5.0	58775.360	6.0
287.9410	77.00	-.52	9759.560	0.0	44488.897	0.0
287.9453	26.00	-1.72	19552.474	1.0	54271.110	1.0
287.9486	25.01	.17	33147.390	5.0	67865.630	4.0
287.9490	41.00	-.81	2742.356	0.0	37470.728	0.0
287.9520	73.00	-.55	13227.833	0.0	47955.843	0.0
287.9530	90.01	-1.18	8307.725	0.0	43035.615	0.0
287.9549	26.01	-2.97	26170.190	5.5	60887.660	5.5
287.9552	27.00	-2.29	14036.280	1.5	48753.720	1.5
287.9611	27.00	-2.48	16467.900	4.5	51184.630	3.5
287.9626	26.02	-4.35	165939.470	5.0	200656.020	6.0
287.9654	23.01	-2.15	34228.790	3.0	68945.000	3.0
287.9663	24.00	-2.51	31377.960	4.0	66094.060	4.0
287.9705	27.02	-4.81	137661.400	4.5	172377.000	3.5
287.9729	26.00	-1.78	21038.987	2.0	55754.290	2.0
287.9731	24.01	-1.30	49493.000	.5	84208.280	.5
287.9740	73.00	-1.14	3871.561	0.0	38596.918	0.0
287.9748	7.01	-.34	186511.580	2.0	221226.650	3.0
287.9760	44.00	-.20	6452.602	0.0	41177.718	0.0
287.9763	30.02	-3.53	258171.200	5.0	292886.100	6.0
287.9766	22.00	-7.25	6742.757	4.0	41457.620	3.0
287.9810	26.01	-2.03	65109.710	3.5	99824.040	2.5
287.9821	30.02	.25	260988.400	4.0	295702.600	5.0
287.9821	30.02	-1.44	258178.300	4.0	292892.500	3.0
287.9821	30.02	-1.40	260988.400	4.0	295702.600	4.0
287.9847	25.01	-.45	36364.300	1.0	71078.180	1.0
287.9848	26.01	-2.55	31364.470	1.5	66078.340	2.5
287.9927	25.01	-.69	44745.460	2.0	79458.380	2.0
287.9933	25.01	-1.27	70342.580	3.0	105055.430	2.0
287.9960	23.01	-1.54	14556.090	4.0	49268.610	4.0
287.9984	26.02	-4.63	167207.300	4.0	201919.530	4.0
288.0008	24.01	-.24	54625.760	2.5	89337.700	1.5
288.0016	23.01	-.54	2808.760	3.0	37520.610	3.0
288.0020	73.00	-.44	5565.369	0.0	40287.350	0.0
288.0098	27.01	-.86	52229.600	2.0	86940.460	2.0
288.0132	26.01	-2.96	31811.870	2.5	66522.320	2.5
288.0200	76.01	1.16	17099.394	0.0	51819.205	0.0
288.0216	24.01	-3.33	35607.600	3.5	70317.040	2.5
288.0275	25.00	-1.60	25281.040	2.5	59989.770	1.5
288.0281	22.01	-1.40	12758.150	2.5	47466.800	3.5
288.0296	10.00	-3.19	135888.717	1.0	170597.190	2.0
288.0303	6.00	-3.54	85169.610	0.0	119878.000	1.0
288.0373	26.00	-1.78	21715.735	5.0	56423.276	4.0
288.0407	25.01	-2.35	47073.560	3.0	81780.700	3.0
288.0407	25.01	-.11	73395.120	3.0	108102.250	3.0
288.0418	24.00	-3.03	27223.050	2.0	61930.050	3.0
288.0441	28.01	-2.06	101247.370	2.5	135954.090	3.5
288.0478	25.01	-.88	73395.970	2.0	108102.250	3.0
288.0501	17.01	-3.41	149952.400	1.0	184658.400	2.0
288.0522	23.00	-6.00	2220.130	2.5	36925.880	3.5
288.0563	24.01	-3.31	30219.040	4.5	64924.300	3.5
288.0581	26.00	-3.02	8154.713	1.0	42859.756	2.0
288.0623	24.00	-3.86	7810.820	1.0	42515.350	2.0
288.0630	74.00	-1.47	6129.972	0.0	40844.600	0.0
288.0640	58.01	-.24	5887.999	0.0	40602.507	0.0
288.0650	57.01	.53	20245.038	0.0	54959.425	0.0
288.0673	26.02	-4.47	184951.620	3.0	219655.550	2.0
288.0677	25.02	-3.61	100085.200	1.5	134789.080	.5
288.0692	30.02	-1.44	260981.900	3.0	295685.600	4.0
288.0692	30.02	-.71	260981.900	3.0	295685.600	3.0
288.0714	29.01	-4.06	85388.770	2.0	120092.200	2.0
288.0720	41.01	.44	10808.108	0.0	45521.652	0.0
288.0746	26.00	-4.13	23110.925	3.0	57813.970	3.0
288.0750	30.02	-2.14	258239.600	4.0	292942.600	5.0
288.0750	30.02	-.50	258739.600	4.0	292942.600	4.0
288.0751	26.01	-1.20	7955.240	3.5	42658.230	3.5
288.0760	45.00	-1.34	3226.301	0.0	37939.363	0.0
288.0762	25.01	-1.02	72247.380	3.0	106950.240	3.0
288.0770	48.00	-.76	30488.543	0.0	65201.484	0.0
288.0772	28.01	-2.60	99559.330	2.5	134262.070	3.5
288.0778	28.01	-4.54	98467.250	3.5	133169.920	3.5
288.0793	23.00	-6.30	2112.320	.5	36814.800	1.5
288.0797	23.01	-1.76	19166.190	1.0	53868.630	2.0
288.0824	26.01	-1.16	27620.390	2.5	62322.500	3.5
288.0830	40.00	-.80	5000.766	0.0	39712.984	0.0
288.0859	24.01	-.40	19798.010	2.5	54499.700	1.5
288.0922	26.00	-4.15	22996.661	4.0	57697.590	4.0
288.0944	24.00	-3.73	31393.400	5.0	66094.060	4.0
288.1016	24.00	-1.51	7593.160	2.0	42292.960	1.0
288.1043	29.01	-3.47	88605.160	1.0	123304.630	1.0
288.1063	26.00	-4.77	19912.486	2.0	54611.720	2.0
288.1120	25.01	-1.29	33147.390	5.0	67845.930	5.0
288.1126	24.00	-.00	24056.110	5.0	58754.580	5.0
288.1130	58.01	-.38	7259.177	0.0	41967.781	0.0
288.1141	11.01	-.48	265693.290	1.0	300391.590	0.0
288.1146	28.01	-3.93	99154.810	4.5	133853.040	4.5
288.1160	77.00	-.60	12421.258	0.0	47129.501	0.0
288.1178	28.01	-2.20	68965.650	1.5	103663.500	1.5
288.1182	30.02	.22	258239.600	4.0	292937.400	5.0
288.1230	48.00	-1.36	30488.543	0.0	65195.942	0.0
288.1230	73.00	-.98	9598.245	0.0	44305.644	0.0
288.1232	30.02	-.68	260988.400	4.0	295685.600	4.0
288.1232	30.02	-2.22	260988.400	4.0	295685.600	3.0
288.1246	28.01	-2.94	23796.180	1.5	58493.210	2.5
288.1272	28.01	-2.65	99559.330	2.5	134256.050	2.5
288.1280	44.00	-1.31	3064.986	0.0	37771.783	0.0
288.1305	10.00	-3.57	135888.717	1.0	170585.040	1.0
288.1330	28.01	-3.85	99154.810	4.5	133850.830	3.5
288.1330	64.01	.09	4758.794	0.0	39464.989	0.0
288.1385	28.01	-1.66	99559.330	2.5	134254.690	1.5
288.1390	30.02	-4.49	265313.400	2.0	300008.700	1.0
288.1391	15.01	-4.47	76813.220	1.0	111508.500	0.0
288.1465	13.01	-2.64	110087.500	2.0	144781.900	3.0
288.1480	25.02	-3.42	174048.890	2.5	208743.100	2.5
288.1516	24.01	-1.97	39742.360	2.5	74436.140	2.5
288.1537	28.01	-1.37	99559.330	2.5	134252.850	3.5
288.1578	14.00	-.13	6298.850	2.0	40991.884	1.0
288.1582	26.02	-3.98	144968.500	4.0	179661.480	3.0
288.1614	17.02	-2.47	205037.300	1.5	239729.900	2.5
288.1618	25.02	-2.29	174243.330	3.5	208935.880	4.5
288.1668	8.01	-2.09	231296.050	1.5	265988.000	2.5
288.1715	24.01	-1.35	35707.660	5.5	70399.040	5.5
288.1783	20.02	-.33	243930.440	1.0	278621.010	1.0
288.1796	24.01	-.26	54784.670	3.5	89475.080	2.5
288.1797	28.01	-2.97	99559.330	2.5	134249.720	1.5
288.1800	26.01	-2.88	31387.980	2.5	66078.340	2.5
288.1856	24.01	.25	45730.740	2.5	80420.430	2.5
288.1857	10.00	-3.87	135888.717	1.0	170578.390	1.0
288.1877	27.00	-1.59	16470.600	1.5	51160.030	2.5
288.1904	26.02	-3.35	117068.560	3.0	151757.670	2.0
288.1923	24.01	-.17	34659.480	.5	69348.360	1.5
288.1948	22.00	-2.66	7255.369	2.0	41943.950	1.0
288.2000	90.01	-.47	11453.368	0.0	46151.494	0.0
288.2087	25.01	-3.50	30795.750	4.0	65482.660	3.0
288.2090	40.01	-1.02	4194.191	0.0	38891.234	0.0
288.2096	24.01	-2.01	35707.660	5.5	70394.460	4.5
288.2106	28.01	-4.65	66571.340	2.5	101258.010	1.5
288.2130	64.01	-1.02	4436.164	0.0	39132.725	0.0
288.2164	24.01	-.11	70679.220	4.5	105365.200	4.5
288.2188	26.02	-4.42	82382.870	3.0	117068.560	3.0
288.2195	27.00	-2.95	1406.840	2.5	36092.440	2.5
288.2205	26.01	-1.62	44753.820	3.5	79439.300	3.5
288.2216	27.00	-.95	18389.570	1.5	53074.920	1.5
288.2228	24.01	-1.15	34813.060	5.5	69498.270	4.5
288.2312	27.02	-4.08	72270.500	3.5	106954.700	2.5
288.2319	28.01	-1.27	58705.950	1.5	93390.060	2.5
288.2320	8.01	-4.15	203942.210	.5	238626.320	.5
288.2330	73.01	-.06	9678.902	0.0	44373.056	0.0
288.2345	30.02	-3.20	258239.600	4.0	292923.400	4.0
288.2345	30.02	-1.66	258239.600	4.0	292923.400	3.0
288.2352	24.00	-4.56	20523.690	4.0	55207.400	4.0
288.2370	45.00	-.36	9114.300	0.0	43807.972	0.0
288.2373	24.00	-4.07	20523.940	5.0	55207.400	4.0
288.2465	23.01	-.89	20980.920	2.0	55663.270	1.0
288.2475	27.01	-1.97	50913.800	2.0	85596.030	2.0
288.2495	23.01	-.47	2687.010	2.0	37369.010	2.0
288.2507	19.00	-2.67	0.000	.5	34681.840	1.5
288.2507	19.00	-2.97	0.000	.5	34681.840	.5
288.2510	90.01	-.91	8549.697	0.0	43241.684	0.0
288.2519	26.01	.24	73966.940	6.5	108648.640	6.5
288.2520	26.02	-4.29	185061.350	1.0	219743.040	1.0
288.2528	27.02	-3.83	72083.300	4.5	106764.900	4.5
288.2538	24.01	-4.22	39742.360	2.5	74423.840	3.5
288.2540	42.00	-.08	20003.065	0.0	54694.691	0.0
288.2549	23.01	-2.77	20622.990	3.0	55304.340	4.0
288.2563	25.02	-3.47	109841.120	3.5	144522.300	4.5
288.2610	58.01	-.17	6452.602	0.0	41143.386	0.0
288.2631	26.00	-2.64	19621.004	5.0	54301.360	4.0
288.2640	77.00	-.61	2823.013	0.0	37513.436	0.0
288.2750	26.01	-1.45	73969.710	5.5	108648.640	6.5
288.2790	24.01	-2.67	30864.610	2.5	65543.060	3.5
288.2802	28.01	-3.92	66579.710	1.5	101258.010	1.5
288.2899	25.00	-.87	17451.520	2.5	52128.650	2.5
288.2920	26.02	-4.92	144501.740	2.0	179178.620	3.0
288.2927	27.02	-4.11	73726.600	2.5	108403.400	1.5
288.2934	29.00	-2.02	11211.395	0.0	45898.280	0.0
288.2958	22.00	-6.78	6661.003	3.0	41337.430	2.0
288.2976	9.03	-1.71	417143.400	2.0	451819.600	1.0
288.2991	28.01	-2.68	66571.340	2.5	101247.370	2.5
288.3034	23.01	-5.69	12621.570	5.0	47297.080	5.0
288.3112	28.00	-2.00	14728.847	0.0	49403.420	1.0
288.3129	6.00	-4.41	85203.640	2.0	119878.000	1.0
288.3180	41.01	.29	3468.273	0.0	38152.198	0.0
288.3209	26.02	-3.86	114339.950	4.0	149013.360	4.0
288.3220	26.01	-4.32	31999.120	3.5	66672.390	3.5
288.3230	22.00	-2.94	7255.369	2.0	41928.528	2.0
288.3311	24.00	-1.85	24056.110	5.0	58728.290	4.0
288.3375	26.01	-2.09	66078.340	2.5	100749.750	2.5
288.3434	27.01	-3.31	10708.100	3.0	45378.800	4.0
288.3440	75.00	.01	17180.052	0.0	51860.850	0.0
288.3450	79.00	-1.33	21293.585	0.0	55974.263	0.0
288.3540	9.01	-3.22	254014.830	1.0	288684.250	2.0
288.3588	9.01	-3.87	254015.400	2.0	288684.250	2.0
288.3600	44.00	-.99	2016.438	0.0	36695.312	0.0
288.3610	90.01	-1.02	9678.902	0.0	44357.655	0.0
288.3687	28.01	-3.13	66579.710	1.5	101247.370	2.5
288.3709	26.01	-.68	26170.190	5.5	60837.590	6.5
288.3724	25.02	-2.31	144672.380	2.5	179339.590	2.5
288.3748	26.00	-1.36	21715.735	5.0	56382.664	5.0
288.3767	27.02	-2.92	91715.100	2.5	126381.800	1.5
288.3788	28.01	-2.15	66579.710	1.5	101246.160	.5
288.3800	27.01	-2.52	49348.200	4.0	84014.500	5.0
288.3800	40.01	-.40	7743.122	0.0	42419.591	0.0
288.3829	25.01	-.45	36274.290	2.0	70940.240	2.0
288.3883	15.02	-.40	141375.700	.5	176041.000	.5
288.3912	8.01	-2.06	231296.050	1.5	265961.000	2.5
288.3917	30.02	.06	258277.700	3.0	292942.600	4.0
288.3940	76.00	-.60	13953.751	0.0	48628.536	0.0
288.3970	23.01	-3.37	16421.510	4.0	51085.770	3.0
288.3985	28.01	-3.92	52205.950	3.5	86870.030	4.5
288.3993	18.01	-4.52	173347.830	1.5	208011.810	1.5
288.4040	75.00	-.18	23793.968	0.0	58467.551	0.0
288.4050	23.01	-.16	30267.460	2.0	64930.760	1.0
288.4050	26.01	-1.27	73966.940	6.5	108630.240	5.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
288.4071	27.00	-1.94	15184.040	2.5	49847.080	2.5
288.4072	26.00	-3.41	17550.180	3.0	52213.207	3.0
288.4088	22.01	-.16	9118.150	4.5	43780.990	4.5
288.4135	26.02	-4.46	144968.500	4.0	179630.770	4.0
288.4158	18.02	.22	196679.800	3.0	231341.800	2.0
288.4163	25.01	-1.19	33248.320	4.0	67910.260	4.0
288.4180	74.00	.16	19519.120	0.0	54191.020	0.0
288.4191	23.00	-6.53	2153.200	1.5	36814.800	1.5
288.4196	29.01	-1.55	73353.120	2.0	108014.660	3.0
288.4204	26.02	-4.02	114351.920	3.0	149013.360	4.0
288.4222	15.01	-1.68	103166.370	1.0	137827.600	1.0
288.4245	24.00	-3.87	7593.160	2.0	42254.110	3.0
288.4246	7.01	-.56	186570.980	3.0	221231.920	4.0
288.4280	26.01	.17	73969.710	5.5	108630.240	5.5
288.4290	90.01	-.51	4436.164	0.0	39106.742	0.0
288.4313	25.01	-3.12	72306.810	2.0	106966.940	2.0
288.4410	76.00	-.80	8630.355	0.0	43299.490	0.0
288.4439	7.01	-1.66	186652.490	4.0	221311.110	4.0
288.4507	23.03	-2.76	223033.000	3.0	257690.800	3.0
288.4510	44.00	-.42	9114.300	0.0	43782.233	0.0
288.4522	26.02	-4.31	82410.940	2.0	117068.560	3.0
288.4566	9.01	-3.62	254016.480	3.0	288673.570	4.0
288.4597	26.00	-1.86	19757.020	3.0	54413.740	3.0
288.4629	24.01	-3.96	32355.940	3.5	67012.280	2.5
288.4678	25.01	-1.49	72306.810	2.0	106962.560	1.0
288.4685	7.01	-1.07	186570.980	3.0	221226.650	3.0
288.4721	6.01	-.53	196557.870	.5	231213.100	1.5
288.4766	23.01	-.38	14556.090	4.0	49210.780	3.0
288.4774	23.01	-.58	2604.820	1.0	37259.420	1.0
288.4774	29.01	-3.71	88362.030	2.0	123016.630	3.0
288.4780	26.01	-.73	44784.780	2.5	79439.300	3.5
288.4832	30.02	-2.23	260981.900	3.0	295635.800	3.0
288.4832	30.02	-2.14	260981.900	3.0	295635.800	2.0
288.4836	24.00	-.98	24833.860	3.0	59487.710	4.0
288.4845	24.00	-3.57	31355.210	2.0	66008.950	3.0
288.4881	6.01	-.14	196571.820	2.5	231225.130	3.5
288.4890	6.01	-.33	196563.410	1.5	231216.620	2.5
288.4907	27.01	-6.22	18031.500	2.0	52684.500	1.0
288.4924	23.03	-1.96	257143.200	2.0	291796.000	1.0
288.4956	25.01	-2.31	69215.730	1.0	103868.140	1.0
288.4970	41.00	.53	12421.258	0.0	47083.664	0.0
288.4974	26.02	-4.19	185003.350	2.0	219655.550	2.0
288.5000	24.01	-2.29	32854.460	4.5	67506.340	5.5
288.5062	22.00	-7.35	7255.369	2.0	41906.510	2.0
288.5087	24.00	-1.39	23512.000	1.0	58162.640	2.0
288.5107	27.01	-5.59	11321.500	2.0	45972.100	3.0
288.5133	25.01	-.38	36427.890	0.0	71078.180	1.0
288.5140	57.01	.75	21212.928	0.0	55873.291	0.0
288.5183	6.01	-.93	196563.410	1.5	231213.100	1.5
288.5211	9.01	-4.31	254015.400	2.0	288664.750	3.0
288.5242	28.01	-4.41	99559.330	2.5	134208.300	2.5
288.5247	8.01	-3.39	231350.080	2.5	265999.000	3.5
288.5273	7.01	.13	186652.490	4.0	221301.100	5.0
288.5303	27.00	-2.61	13795.520	2.5	48443.760	2.5
288.5308	9.01	-3.95	254015.400	2.0	288663.580	2.0
288.5336	28.01	-2.91	100845.410	.5	135493.260	1.5
288.5373	30.02	-2.22	260988.400	4.0	295635.800	3.0
288.5378	26.02	-4.31	147161.360	4.0	181808.700	5.0
288.5390	9.02	-1.73	380250.520	2.5	414897.720	3.5
288.5398	9.01	-4.28	254016.480	3.0	288663.580	2.0
288.5400	73.01	-.17	5565.369	0.0	40222.609	0.0
288.5431	6.01	.02	196581.960	3.5	231228.670	4.5
288.5463	25.01	-1.52	72320.620	1.0	106966.940	2.0
288.5470	72.01	-.23	14276.381	0.0	48932.780	0.0
288.5515	30.02	-1.03	258277.700	3.0	292923.400	4.0
288.5515	30.02	-.56	258277.700	3.0	292923.400	3.0
288.5523	17.02	-2.79	209182.800	1.5	243828.400	2.5
288.5543	28.01	-2.35	73903.250	.5	108548.610	1.5
288.5583	24.00	-4.21	7593.160	2.0	42238.040	2.0
288.5590	25.01	-1.00	59537.400	4.0	94182.200	3.0
288.5590	6.01	-.81	196571.820	2.5	231216.620	2.5
288.5605	24.00	-2.94	31364.330	3.0	66008.950	3.0
288.5678	10.01	-4.72	219648.440	1.5	254292.190	.5
288.5700	24.01	-1.84	49564.800	1.5	84208.280	.5
288.5704	25.01	-.28	72306.810	2.0	106950.240	3.0
288.5714	9.02	-.79	421005.360	.5	455648.670	1.5
288.5726	6.01	-.92	196581.960	3.5	231225.130	3.5
288.5740	42.00	.30	25407.119	0.0	60060.276	0.0
288.5758	19.00	-2.77	0.000	.5	34642.780	1.5
288.5758	19.00	-3.08	0.000	.5	34642.780	.5
288.5762	28.01	-3.63	100619.260	4.5	135261.990	4.5
288.5785	25.01	-3.57	49291.310	3.0	83933.770	3.0
288.5828	25.01	-.89	72320.620	1.0	106962.560	1.0
288.5883	6.01	-2.08	196571.820	2.5	231213.100	1.5
288.5885	15.01	-.82	103668.740	3.0	138310.000	2.0
288.5928	26.01	-1.67	32875.630	6.5	67516.370	5.5
288.5949	25.01	-.93	72322.070	0.0	106962.560	1.0
288.5970	45.00	-.80	7743.122	0.0	42393.517	0.0
288.5970	70.01	-.72	33311.556	0.0	67961.951	0.0
288.6005	7.01	-2.18	186652.490	4.0	221292.310	3.0
288.6060	76.00	-.42	19277.147	0.0	53926.461	0.0
288.6065	23.01	-4.15	106.630	2.0	34745.720	3.0
288.6090	27.02	-4.77	138970.500	1.5	173609.300	1.5
288.6090	27.02	-4.77	138970.500	1.5	173609.300	1.5
288.6090	27.02	-2.98	138970.500	1.5	173609.300	1.5
288.6108	9.01	-3.06	254015.400	2.0	288653.990	3.0
288.6113	25.01	-.24	72247.380	3.0	106885.900	4.0
288.6118	26.02	-3.30	116898.220	2.0	151536.680	1.0
288.6133	26.02	-4.25	145038.610	3.0	179676.890	2.0
288.6138	14.01	-3.38	79338.760	1.5	113976.980	1.5
288.6163	8.01	-2.46	231350.080	2.5	265988.000	2.5
288.6198	9.01	-3.88	254016.480	3.0	288653.990	3.0
288.6230	90.01	-1.09	6613.917	0.0	41261.190	0.0
288.6232	26.01	-4.90	26170.190	5.5	60807.280	4.5
288.6247	11.01	-.39	298169.140	1.0	332806.060	2.0
288.6247	11.01	-.39	298169.140	1.0	332806.060	2.0
288.6260	70.01	-.36	30407.885	0.0	65054.798	0.0
288.6266	26.02	-4.95	116898.220	2.0	151534.900	2.0
288.6266	26.01	-4.49	26352.800	4.5	60989.480	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
288.6317	26.00	-2.56	12560.933	3.0	47197.000	2.0
288.6321	23.01	-5.68	12545.150	4.0	47181.170	3.0
288.6330	26.02	-3.39	116898.220	2.0	151534.130	3.0
288.6340	25.01	-.72	72320.620	1.0	106956.420	0.0
288.6387	24.00	-4.74	20517.400	2.0	55152.630	2.0
288.6413	8.01	-2.36	231350.080	2.5	265985.000	3.5
288.6418	24.01	-2.57	39684.000	3.5	74318.860	2.5
288.6435	6.01	-2.22	196581.960	3.5	231216.620	2.5
288.6443	27.00	-1.66	816.000	3.5	35450.560	3.5
288.6450	92.01	-1.20	241.973	0.0	34886.606	0.0
288.6460	69.01	-1.61	161.315	0.0	34805.828	0.0
288.6480	39.00	.28	11292.053	0.0	45936.326	0.0
288.6500	76.00	-.41	14760.326	0.0	49404.359	0.0
288.6540	44.00	-.16	2661.698	0.0	37305.250	0.0
288.6591	28.01	-3.91	99340.550	3.5	133973.330	2.5
288.6610	42.00	.31	21212.928	0.0	55855.640	0.0
288.6640	28.02	-3.35	78303.100	2.0	112935.300	3.0
288.6646	24.00	-4.00	24093.160	2.0	58725.280	1.0
288.6653	28.01	-2.37	101247.370	2.5	135879.410	3.5
288.6660	8.01	-1.73	231296.050	1.5	265928.000	1.5
288.6667	25.01	.22	33278.390	3.0	67910.260	4.0
288.6681	24.00	-3.07	20520.920	3.0	55152.630	2.0
288.6708	24.01	-1.29	39824.520	4.5	74455.900	4.5
288.6723	29.01	-4.56	114000.000	3.0	148631.200	3.0
288.6916	24.00	-3.33	25177.390	4.0	59806.270	5.0
288.6966	23.01	-.75	20089.560	1.0	54717.850	1.0
288.6990	24.00	-.60	7810.820	1.0	42438.820	2.0
288.7045	25.02	-2.24	174464.070	4.5	209091.410	5.5
288.7054	24.01	-2.56	39877.280	3.5	74504.510	4.5
288.7060	9.01	-4.79	254014.830	1.0	288641.980	0.0
288.7088	9.02	-1.81	395385.660	2.5	430012.480	1.5
288.7140	72.00	-.61	4516.821	0.0	39153.174	0.0
288.7145	27.00	-3.66	14399.280	.5	49025.420	1.5
288.7151	23.01	-1.02	20089.560	1.0	54715.630	2.0
288.7202	9.01	-4.78	254015.400	2.0	288640.850	1.0
288.7308	26.01	-4.03	27620.390	2.5	62244.570	1.5
288.7310	75.00	-.47	17180.052	0.0	51814.366	0.0
288.7321	21.01	-1.54	29742.120	1.0	64366.150	2.0
288.7355	26.00	-4.71	19390.165	6.0	54013.780	5.0
288.7358	14.01	-2.68	79338.760	1.5	113962.340	.5
288.7381	17.01	-2.73	126725.100	1.0	161348.400	1.0
288.7438	22.01	-1.97	9118.150	4.5	43740.770	3.5
288.7515	14.01	-2.43	79355.280	2.5	113976.980	1.5
288.7533	26.00	-4.78	23192.486	2.0	57813.970	3.0
288.7540	72.00	-.70	6533.259	0.0	41164.814	0.0
288.7564	15.01	-1.37	105303.190	1.0	139924.300	2.0
288.7620	25.01	-1.73	69215.730	1.0	103836.170	2.0
288.7620	42.00	-1.01	10646.793	0.0	45277.388	0.0
288.7660	74.00	-.28	13227.833	0.0	47857.949	0.0
288.7664	26.01	-1.87	63948.840	4.5	98568.750	3.5
288.7680	75.00	.68	11695.340	0.0	46325.216	0.0
288.7690	41.01	.20	14518.354	0.0	49148.110	0.0
288.7697	23.00	-2.13	0.000	1.5	34619.520	2.5
288.7720	9.01	-4.68	254014.830	1.0	288634.070	2.0
288.7722	9.01	-3.99	254015.400	2.0	288634.620	3.0
288.7760	23.01	-1.38	19132.690	2.0	53751.460	1.0
288.7765	24.01	.03	45669.540	1.5	80288.250	1.5
288.7768	9.01	-3.71	254015.400	2.0	288634.070	2.0
288.7801	26.00	-.16	21715.735	5.0	56334.010	6.0
288.7810	25.01	-2.35	48317.850	4.0	82936.010	3.0
288.7812	9.01	-3.22	254016.480	3.0	288634.620	3.0
288.7850	63.01	-1.94	0.000	0.0	34627.837	0.0
288.7858	9.01	-4.24	254016.480	3.0	288634.070	2.0
288.7881	25.01	-.84	33248.320	4.0	67865.630	4.0
288.7953	26.00	-1.56	19621.004	5.0	54237.460	4.0
288.7971	9.01	-4.47	254014.830	1.0	288631.070	1.0
288.8000	44.00	-1.34	1129.205	0.0	35755.244	0.0
288.8030	70.01	.02	26616.982	0.0	61242.661	0.0
288.8040	40.01	-.40	6049.314	0.0	40674.873	0.0
288.8060	75.01	.56	14760.326	0.0	49385.645	0.0
288.8091	30.02	-1.74	258277.700	3.0	292892.500	2.0
288.8091	30.02	-1.64	258277.700	3.0	292892.500	3.0
288.8092	26.01	-1.16	25787.600	1.5	60402.380	2.5
288.8115	23.00	-6.05	2311.370	3.5	36925.880	3.5
288.8119	26.02	-4.78	184951.620	3.0	219566.080	3.0
288.8150	42.01	.57	32988.926	0.0	67613.166	0.0
288.8168	9.01	-3.91	254016.480	3.0	288630.350	4.0
288.8178	9.01	-4.81	254014.830	1.0	288628.580	2.0
288.8181	9.01	-4.39	254015.400	2.0	288629.120	3.0
288.8200	78.00	-1.13	10001.532	0.0	44625.173	0.0
288.8226	9.01	-4.39	254015.400	2.0	288628.580	2.0
288.8243	23.01	-.17	14655.630	5.0	49268.610	4.0
288.8248	25.01	-.73	44899.820	3.0	79512.730	3.0
288.8258	27.02	-1.95	72341.900	1.5	106954.700	2.5
288.8271	9.01	-4.83	254016.480	3.0	288629.120	3.0
288.8316	9.01	-4.41	254016.480	3.0	288628.580	2.0
288.8319	24.01	-1.74	49706.470	2.5	84318.540	1.5
288.8326	24.01	-1.44	32836.840	3.5	67448.820	4.5
288.8380	26.02	-4.82	144968.500	4.0	179579.830	5.0
288.8380	24.00	-2.78	7927.470	2.0	42538.810	3.0
288.8410	29.01	-2.62	115639.020	2.0	150250.000	2.0
288.8415	8.01	-2.13	231350.080	2.5	265961.000	2.5
288.8416	10.01	-.50	246415.040	1.5	281025.940	2.5
288.8420	9.01	-2.96	254016.480	3.0	288627.330	4.0
288.8447	25.00	-3.83	23549.200	2.5	58159.730	2.5
288.8474	23.00	-6.47	2153.200	1.5	36763.410	2.5
288.8518	23.00	-2.23	137.380	2.5	34747.060	3.5
288.8533	25.02	-2.47	144619.190	1.5	179228.690	1.5
288.8556	26.00	-2.25	22249.430	3.0	56858.650	2.0
288.8600	28.01	-4.68	98561.220	2.5	133169.920	3.5
288.8672	24.01	-.01	48632.360	3.5	83240.200	4.5
288.8713	23.01	-4.31	339.210	4.0	34946.550	4.0
288.8718	24.01	-.37	36272.660	4.5	70879.950	5.5
288.8740	22.00	-3.69	12118.394	4.0	46725.420	3.0
288.8744	24.01	-3.36	39877.280	3.5	74484.250	2.5
288.8784	26.01	-3.18	32909.870	5.5	67516.370	5.5
288.8821	25.01	-.47	66893.790	1.0	101499.840	2.0
288.8830	41.01	-.17	2339.068	0.0	36955.158	0.0
288.8900	17.01	-2.34	126743.300	2.0	161348.400	1.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
288.8923	22.01	-1.83	4628.610	2.5	39233.440	1.5
288.8925	10.01	-2.08	246192.450	2.5	280797.260	2.5
288.8948	9.02	-3.58	356371.820	2.5	390976.350	1.5
288.8949	25.01	-3.44	29889.310	3.0	64493.830	4.0
288.8966	25.02	-4.36	86486.770	1.5	121091.080	1.5
288.8991	25.01	-6.41	29869.110	2.0	64473.130	3.0
288.8991	26.01	-2.59	26352.800	4.5	60956.820	3.5
288.9098	23.00	-5.74	2220.130	2.5	36822.860	3.5
288.9110	45.00	-1.57	1451.835	0.0	36064.570	0.0
288.9156	28.01	-4.47	101247.370	2.5	135849.410	2.5
288.9188	25.02	-.62	174048.890	2.5	208650.540	3.5
288.9194	24.01	-.46	20024.180	3.5	54625.760	2.5
288.9207	28.01	-4.93	101144.630	3.5	135746.060	3.5
288.9243	24.00	-.16	8307.570	4.0	42908.570	4.0
288.9298	26.02	-3.67	116937.570	1.0	151537.910	0.0
288.9313	25.01	-.84	66901.140	2.0	101501.300	3.0
288.9383	24.01	-1.29	39824.520	4.5	74423.840	3.5
288.9401	26.02	-4.35	116937.570	1.0	151536.680	1.0
288.9427	22.00	-5.89	6742.757	4.0	41341.553	5.0
288.9430	40.01	-1.13	2500.383	0.0	37109.285	0.0
288.9435	25.01	-1.49	66901.140	2.0	101499.840	2.0
288.9440	22.00	-7.58	7255.369	2.0	41854.010	1.0
288.9450	75.00	-.83	11695.340	0.0	46304.003	0.0
288.9482	24.01	-1.36	35356.060	1.5	69954.200	2.5
288.9526	25.01	.32	33248.320	4.0	67845.930	5.0
288.9549	26.02	-4.31	116937.570	1.0	151534.900	2.0
288.9557	24.01	-.87	39824.520	4.5	74421.760	5.5
288.9603	25.01	.35	33147.390	5.0	67744.080	6.0
288.9611	23.01	-.51	2604.820	1.0	37201.410	0.0
288.9620	72.00	-.60	0.000	0.0	34606.626	0.0
288.9630	92.01	-.41	241.973	0.0	34848.480	0.0
288.9638	19.00	-2.88	0.000	.5	34596.270	1.5
288.9638	19.00	-3.18	0.000	.5	34596.270	.5
288.9640	69.01	-.72	8711.012	0.0	43317.399	0.0
288.9702	13.01	-4.82	91271.200	1.0	125866.700	1.0
288.9704	26.01	-2.89	45289.840	1.5	79885.320	2.5
288.9732	26.01	-4.25	31483.200	3.5	66078.340	2.5
288.9771	23.00	-7.82	2220.130	2.5	36814.800	1.5
288.9794	22.00	-5.90	6661.003	3.0	41255.400	4.0
288.9797	24.01	-.52	32854.460	4.5	67448.820	4.5
288.9811	26.02	-3.37	185061.350	1.0	219655.550	2.0
288.9840	45.00	-1.06	5646.026	0.0	40250.018	0.0
288.9840	42.00	-.71	11775.998	0.0	46379.990	0.0
288.9858	26.00	-1.26	21999.132	4.0	56592.760	4.0
288.9900	26.00	-1.32	19390.165	6.0	53983.300	5.0
288.9900	41.00	-1.12	1532.493	0.0	36135.766	0.0
288.9924	26.02	-4.04	167299.600	5.0	201892.440	5.0
288.9979	26.02	-2.94	82382.870	3.0	116975.050	2.0
288.9988	26.00	-1.51	20019.648	1.0	54611.720	2.0
289.0017	15.01	-1.42	103166.370	1.0	137758.100	0.0
289.0045	28.01	-3.67	101258.010	1.5	135849.410	2.5
289.0075	25.01	-2.28	44521.520	4.0	79112.560	5.0
289.0084	23.01	-2.00	12706.150	6.0	47297.080	5.0
289.0120	27.01	-6.06	13404.600	1.0	47995.100	0.0
289.0146	23.01	-1.38	19161.270	0.0	53751.460	1.0
289.0148	24.00	-.18	24897.550	4.0	59487.710	4.0
289.0157	26.01	-3.30	31999.120	3.5	66589.170	4.5
289.0250	73.01	-.59	2581.041	0.0	37180.124	0.0
289.0333	28.01	-2.64	101366.140	2.5	135954.090	3.5
289.0339	24.00	-4.23	7927.470	2.0	42515.350	2.0
289.0371	25.00	-2.85	23549.200	2.5	58136.690	3.5
289.0379	27.01	-6.10	13261.100	2.0	47848.500	1.0
289.0392	25.01	-1.85	33278.390	3.0	67865.630	4.0
289.0394	25.01	-8.18	29869.110	2.0	64456.330	2.0
289.0410	26.00	-2.77	12968.552	2.0	47555.584	1.0
289.0453	23.00	-4.98	2311.370	3.5	36897.680	4.5
289.0501	25.01	-3.73	47073.560	3.0	81659.500	3.0
289.0557	23.01	-.80	19166.190	1.0	53751.460	1.0
289.0573	26.00	-4.64	17927.378	1.0	52512.460	1.0
289.0624	24.00	-3.91	20517.400	2.0	55101.870	3.0
289.0630	25.00	-2.18	27201.540	2.5	61785.940	3.5
289.0639	25.02	-4.66	100054.100	.5	134638.390	1.5
289.0650	25.01	-.78	49291.310	3.0	83875.460	4.0
289.0663	30.02	-3.01	258277.700	3.0	292861.700	2.0
289.0664	26.01	-3.24	68000.820	4.5	102584.810	5.5
289.0678	25.01	-4.82	29889.310	3.0	64473.130	3.0
289.0732	23.00	-6.94	2112.320	.5	36695.490	.5
289.0734	24.00	-.36	24833.860	3.0	59417.010	3.0
289.0840	29.00	-1.06	44442.294	0.0	79034.316	0.0
289.0850	26.00	-2.58	26224.961	3.0	60806.720	3.0
289.0850	76.00	-1.66	4113.534	0.0	38705.436	0.0
289.0851	10.01	-4.73	279137.620	3.5	313719.370	2.5
289.0882	10.01	-3.32	279137.620	3.5	313718.990	3.5
289.0918	24.00	-3.41	20520.920	3.0	55101.870	3.0
289.0990	42.01	.96	11937.313	0.0	46527.540	0.0
289.1033	24.01	-.17	36272.660	4.5	70852.240	3.5
289.1040	73.00	-.16	13227.833	0.0	47817.462	0.0
289.1045	7.01	-.86	186652.490	4.0	221231.920	4.0
289.1058	27.00	-8.06	14036.280	1.5	48615.560	2.5
289.1058	22.01	-1.74	4897.600	3.5	39476.870	2.5
289.1073	25.01	-3.98	55371.300	3.0	89950.400	3.0
289.1113	24.01	.35	39877.280	3.5	74455.900	4.5
289.1124	26.01	-2.23	65109.710	3.5	99688.200	3.5
289.1165	25.03	-3.53	152700.500	4.0	187278.500	5.0
289.1171	8.01	-2.23	231350.080	2.5	265928.000	1.5
289.1215	24.01	-.55	36101.820	3.5	70679.220	4.5
289.1280	42.01	.26	16696.107	0.0	51282.864	0.0
289.1290	24.01	-3.85	39742.360	2.5	74318.860	2.5
289.1306	25.02	-2.99	174243.330	3.5	208819.640	3.5
289.1337	25.01	-.05	36364.300	1.0	70940.240	2.0
289.1380	70.01	-1.03	0.000	0.0	34585.561	0.0
289.1387	24.01	-.59	34813.060	5.5	69388.400	6.5
289.1405	26.00	-3.30	12560.933	3.0	47136.058	2.0
289.1405	24.00	.10	24200.230	6.0	58775.360	6.0
289.1458	10.01	-2.53	246415.040	1.5	280989.530	1.5
289.1480	75.00	-.34	16534.792	0.0	51119.157	0.0
289.1485	7.01	-2.44	186652.490	4.0	221226.650	3.0
289.1525	24.00	-3.34	24286.540	1.0	58860.230	2.0
289.1559	28.01	-3.77	66571.340	2.5	101144.630	3.5
289.1608	28.02	-3.81	83033.800	2.0	117606.500	3.0
289.1611	18.01	-1.41	138243.550	1.5	172816.210	.5
289.1632	23.01	-.21	2687.010	2.0	37259.420	1.0
289.1640	29.00	-1.11	44522.951	0.0	79105.402	0.0
289.1650	44.00	.02	15405.586	0.0	49987.918	0.0
289.1660	25.01	-2.59	66929.220	2.0	101501.300	3.0
289.1689	14.02	-2.09	214532.170	1.0	249103.900	2.0
289.1702	26.00	-1.88	20874.482	3.0	55446.060	4.0
289.1728	26.00	-1.26	26105.908	6.0	60677.230	5.0
289.1729	22.00	-6.35	6598.749	2.0	41170.003	3.0
289.1749	8.01	-1.61	231427.990	3.5	265999.000	3.5
289.1749	8.01	-1.99	231427.990	3.5	265999.000	4.5
289.1782	25.01	-3.27	66929.220	2.0	101499.840	2.0
289.1822	25.02	-4.84	86520.940	2.5	121091.080	1.5
289.1830	76.00	.18	24842.516	0.0	59422.695	0.0
289.1836	26.00	-2.77	17726.985	2.0	52296.960	2.0
289.1840	73.00	-.59	1935.780	0.0	36515.840	0.0
289.1868	24.01	-.35	40415.340	.5	74984.930	1.5
289.1880	75.00	-.28	14115.066	0.0	48694.647	0.0
289.1925	23.01	-3.01	34228.790	3.0	68797.700	2.0
289.1929	26.01	-1.93	63876.380	5.5	98445.240	4.5
289.1950	25.00	-1.06	30419.610	2.5	64988.220	3.5
289.1982	25.02	-.37	174464.070	4.5	209032.300	5.5
289.2030	58.01	-1.09	4194.191	0.0	38771.979	0.0
289.2083	25.01	-5.66	29889.310	3.0	64456.330	2.0
289.2150	58.01	-.81	6452.602	0.0	41028.955	0.0
289.2158	25.00	-3.15	30354.210	3.5	64920.330	3.5
289.2170	90.01	-.84	9194.957	0.0	43771.071	0.0
289.2210	26.01	-4.19	31811.870	2.5	66377.370	3.5
289.2260	40.00	-.74	1209.863	0.0	35784.901	0.0
289.2273	9.02	-4.10	430374.750	2.5	464939.500	2.5
289.2327	26.02	-3.94	82410.940	2.0	116975.050	2.0
289.2350	76.00	-.63	10082.190	0.0	44656.152	0.0
289.2357	28.01	-4.67	98467.250	3.5	133031.000	4.5
289.2379	25.00	-4.22	17451.520	2.5	52015.000	1.5
289.2379	25.00	-.60	17451.520	2.5	52015.000	3.5
289.2383	25.01	.09	33248.320	4.0	67811.750	3.0
289.2424	8.01	-3.18	231296.050	1.5	265859.000	.5
289.2430	23.01	-.26	2968.220	4.0	37531.090	4.0
289.2442	26.02	-2.85	185003.350	2.0	219566.080	3.0
289.2488	26.00	-1.25	19562.435	4.0	54124.620	4.0
289.2491	25.00	-1.81	25265.740	5.5	59827.880	5.5
289.2540	63.00	-.28	0.000	0.0	34571.691	0.0
289.2559	14.02	-2.53	214532.170	1.0	249093.500	1.0
289.2569	23.01	-1.59	20156.640	0.0	54717.850	1.0
289.2622	26.01	-3.72	65931.460	3.5	100492.040	3.5
289.2630	75.00	.01	19357.805	0.0	53928.421	0.0
289.2642	24.00	-2.38	24299.890	2.0	58860.230	2.0
289.2650	23.01	-.01	2808.760	3.0	37369.010	2.0
289.2656	25.00	-.75	17568.480	1.5	52128.650	2.5
289.2670	8.01	-2.82	231427.990	3.5	265988.000	2.5
289.2693	26.00	-3.24	19552.474	1.0	54112.203	2.0
289.2766	24.01	.05	39877.280	3.5	74436.140	2.5
289.2791	25.01	-2.06	44899.820	3.0	79458.380	2.0
289.2810	42.01	.58	17099.394	0.0	51667.859	0.0
289.2826	26.01	-2.29	8680.470	1.5	43238.610	2.5
289.2868	7.01	-.51	186511.580	2.0	221069.220	3.0
289.2879	24.01	-.98	45730.740	2.5	80288.250	1.5
289.2921	8.01	-1.22	231427.990	3.5	265985.000	3.5
289.2925	24.01	-1.23	32836.840	3.5	67393.800	3.5
289.2949	23.01	-4.74	36.050	1.0	34592.720	2.0
289.2959	23.00	-4.50	8412.940	.5	42969.490	1.5
289.2972	24.01	-2.79	54499.700	1.5	89056.100	2.5
289.2979	25.02	-3.35	144672.380	2.5	179228.690	1.5
289.2981	24.00	-2.72	24303.940	3.0	58860.230	2.0
289.3030	63.00	-.44	0.000	0.0	34565.836	0.0
289.3070	57.01	.86	22180.818	0.0	56746.176	0.0
289.3120	74.00	-.29	17583.339	0.0	52148.100	0.0
289.3144	24.00	-1.91	24200.230	6.0	58754.580	5.0
289.3173	10.03	-4.87	609118.000	1.5	643672.000	1.5
289.3173	10.03	-4.20	609118.000	2.5	643672.000	1.5
289.3180	25.01	-4.46	29919.220	2.0	64473.130	3.0
289.3220	78.00	-.56	15405.586	0.0	49969.152	0.0
289.3223	12.02	-1.64	530178.200	2.0	564731.600	1.0
289.3230	42.00	.31	25487.776	0.0	60051.222	0.0
289.3241	25.02	-3.26	100085.200	1.5	134638.390	1.5
289.3252	24.00	-.12	8095.210	3.0	42648.260	3.0
289.3308	23.01	.09	2968.220	4.0	37520.610	3.0
289.3357	24.00	-3.84	23512.000	1.0	58063.800	2.0
289.3406	27.01	-2.47	50035.900	3.0	84587.120	4.0
289.3469	24.01	-2.39	32836.840	3.5	67387.300	2.5
289.3524	24.01	-.27	48491.390	2.5	83041.200	3.5
289.3581	25.01	-3.66	69319.010	0.0	103868.140	1.0
289.3600	80.00	-.63	39199.555	0.0	73758.582	0.0
289.3630	70.01	-.53	34844.049	0.0	69402.718	0.0
289.3647	24.01	-2.53	54625.760	2.5	89174.100	3.5
289.3650	25.01	-4.33	43536.900	4.0	78085.200	5.0
289.3710	23.00	-7.15	2153.200	1.5	36700.780	2.5
289.3751	25.03	-3.72	137930.100	5.0	172477.200	4.0
289.3760	9.02	-2.36	430374.750	2.5	464921.740	3.5
289.3764	26.00	-2.91	7985.783	2.0	42532.729	3.0
289.3770	26.02	-3.01	105906.230	2.0	140453.100	3.0
289.3776	29.01	-4.45	111876.600	3.0	146423.400	4.0
289.3796	24.01	-4.35	39877.280	3.5	74423.840	3.5
289.3838	25.01	.10	49882.150	4.0	84428.210	5.0
289.3860	26.02	-2.77	109570.840	2.0	144116.640	3.0
289.3860	78.00	-.90	725.918	0.0	35261.840	0.0
289.3882	26.00	-2.02	12560.933	3.0	47106.463	4.0
289.3891	7.01	-1.50	186511.580	2.0	221057.010	2.0
289.3942	11.01	-.63	298169.140	1.0	332713.960	0.0
289.3986	18.01	-2.34	158167.710	1.5	192712.000	1.5
289.4054	26.01	-1.95	31387.980	2.5	65931.460	3.5
289.4071	23.00	-6.45	2220.130	2.5	36763.410	2.5
289.4090	58.01	-.63	4194.191	0.0	38747.367	0.0
289.4101	7.01	-1.43	186511.580	2.0	221054.500	3.0
289.4140	25.00	-2.67	25285.430	4.5	59827.880	5.5
289.4146	24.01	-1.78	32844.920	1.5	67387.300	2.5
289.4150	73.00	-.49	9920.875	0.0	44473.334	0.0
289.4154	23.00	-7.97	2153.200	1.5	36695.490	.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
289.4159	21.01	-2.42	29823.920	2.0	64366.150	2.0
289.4163	24.00	-.74	7750.780	0.0	42292.960	1.0
289.4166	21.01	-6.42	4802.750	2.0	39344.900	2.0
289.4182	24.01	-.09	70879.950	5.5	105421.900	5.5
289.4211	27.02	-3.08	73861.800	1.5	108403.400	1.5
289.4220	58.01	-.77	2339.068	0.0	36890.692	0.0
289.4246	24.01	.20	40202.140	6.5	74743.330	6.5
289.4250	74.00	-.59	13711.778	0.0	48263.043	0.0
289.4268	24.01	-2.62	54784.670	3.5	89325.600	4.5
289.4309	19.00	-2.99	0.000	.5	34540.440	1.5
289.4320	75.00	-.36	15647.559	0.0	50197.989	0.0
289.4327	19.00	-3.29	0.000	.5	34540.230	.5
289.4386	28.01	-3.89	92792.080	3.5	127331.600	2.5
289.4391	24.01	-1.12	34631.140	4.5	69170.600	5.5
289.4401	24.01	-2.44	32854.460	4.5	67393.800	3.5
289.4420	41.01	.02	10727.450	0.0	45276.686	0.0
289.4442	27.00	-3.59	13795.520	2.5	48334.370	1.5
289.4450	42.01	.98	13389.148	0.0	47938.026	0.0
289.4454	24.01	-.92	32855.090	2.5	67393.800	3.5
289.4506	26.00	-.56	18378.187	2.0	52916.278	2.0
289.4514	22.01	-3.62	34543.360	3.5	69081.350	4.5
289.4537	25.01	-3.57	70517.720	3.0	105055.430	2.0
289.4579	23.00	-1.00	0.000	1.5	34537.210	1.5
289.4584	28.01	-3.58	103025.580	2.5	137562.740	3.5
289.4588	25.01	-5.09	29919.220	2.0	64456.330	2.0
289.4605	27.02	-3.68	139314.200	.5	173851.100	.5
289.4605	27.02	-3.68	139314.200	.5	173851.100	.5
289.4605	27.02	-3.07	139314.200	.5	173851.100	.5
289.4611	23.01	-4.35	208.890	3.0	34745.720	3.0
289.4625	23.01	-1.02	30267.460	2.0	64804.130	2.0
289.4625	25.00	-1.19	25281.040	2.5	59817.700	2.5
289.4662	9.01	-2.74	255606.240	1.0	290142.460	2.0
289.4724	27.00	-3.43	14036.280	1.5	48571.770	.5
289.4765	24.01	-1.18	32844.920	1.5	67379.920	1.5
289.4776	26.01	-1.11	26352.800	4.5	60887.660	5.5
289.4822	26.01	-2.63	33466.500	4.5	68000.820	4.5
289.4827	23.01	-2.16	18269.490	1.0	52803.750	1.0
289.4840	71.01	.70	14115.066	0.0	48659.290	0.0
289.4840	72.00	-1.16	8872.327	0.0	43416.551	0.0
289.4859	26.00	-2.03	22249.430	3.0	56783.306	3.0
289.4866	25.00	-2.35	30354.210	3.5	64888.000	4.5
289.4902	25.01	-.84	33278.390	3.0	67811.750	3.0
289.4931	8.01	-2.45	231427.990	3.5	265961.000	2.5
289.4937	28.00	-3.46	15609.861	2.0	50142.800	3.0
289.4956	26.00	-2.47	26224.961	3.0	60757.680	4.0
289.4999	24.01	-1.29	32855.090	2.5	67387.300	2.5
289.4999	29.02	-4.60	89017.700	4.5	123549.900	4.5
289.5011	10.01	-1.97	246415.040	1.5	280947.100	1.5
289.5036	26.00	-1.44	12560.933	3.0	47092.693	3.0
289.5060	76.00	-.47	10969.423	0.0	45511.021	0.0
289.5082	26.01	-1.83	27620.390	2.5	62151.610	2.5
289.5083	26.02	-1.25	90423.680	2.0	124954.880	1.0
289.5090	24.01	-2.94	39742.360	2.5	74273.480	1.5
289.5100	73.00	-.01	12743.888	0.0	47285.009	0.0
289.5129	14.03	-1.29	293718.990	3.5	328249.640	3.5
289.5129	14.03	.25	293718.990	3.5	328249.640	4.5
289.5129	14.03	.14	293718.990	2.5	328249.640	3.5
289.5130	90.01	-1.25	1774.465	0.0	36315.228	0.0
289.5187	25.00	-1.22	25287.740	3.5	59817.700	2.5
289.5205	26.00	-3.33	26224.961	3.0	60754.710	4.0
289.5215	26.01	-.69	31483.200	3.5	66012.830	4.5
289.5334	15.02	-.10	141512.800	1.5	176041.000	.5
289.5369	26.01	-1.13	64040.960	3.5	98568.750	3.5
289.5393	8.03	-1.43	554001.600	4.5	588529.100	4.5
289.5393	8.03	.30	554001.600	4.5	588529.100	5.5
289.5393	8.03	.21	554001.600	3.5	588529.100	4.5
289.5409	27.00	-3.57	8460.810	2.5	42988.120	3.5
289.5461	26.02	-1.90	84159.550	4.0	118686.250	4.0
289.5466	26.02	-2.60	82410.940	2.0	116937.570	1.0
289.5479	27.00	-2.25	7442.410	3.5	41968.890	2.5
289.5516	25.02	-4.47	143161.500	4.5	177687.540	3.5
289.5526	25.00	-1.22	27201.540	2.5	61727.460	2.5
289.5572	20.02	-2.42	336749.110	1.0	371274.480	2.0
289.5606	23.01	-.28	20617.050	2.0	55142.010	3.0
289.5617	24.01	-2.01	32855.090	2.5	67379.920	1.5
289.5650	75.00	-.82	14921.641	0.0	49456.201	0.0
289.5684	24.00	-.73	24833.860	3.0	59357.900	2.0
289.5692	26.02	-4.52	105929.160	3.0	140453.100	3.0
289.5754	26.01	-3.77	31999.120	3.5	66522.320	2.5
289.5768	22.01	-3.13	225.470	3.5	34748.500	4.5
289.5862	25.02	-3.31	144817.680	3.5	179339.590	2.5
289.5884	27.00	-3.86	13795.520	2.5	48317.170	3.5
289.5978	27.00	-3.91	1809.330	1.5	36329.860	2.5
289.6010	74.00	-1.01	1613.150	0.0	36143.418	0.0
289.6010	75.00	-1.55	0.000	0.0	34530.268	0.0
289.6049	29.01	-4.52	110363.400	2.0	144883.090	2.0
289.6060	76.00	.19	12905.203	0.0	47434.874	0.0
289.6068	24.00	-.65	24897.550	4.0	59417.010	3.0
289.6105	23.01	-1.73	20622.990	3.0	55142.010	3.0
289.6190	23.01	-.63	2687.010	2.0	37205.010	3.0
289.6294	24.01	-.51	32836.840	3.5	67353.600	4.5
289.6309	26.02	-3.69	83646.980	1.0	118163.560	2.0
289.6310	10.01	-4.19	219648.440	1.5	254165.010	1.5
289.6392	29.01	-3.93	114000.000	3.0	148515.600	4.0
289.6413	26.02	-2.89	82382.870	3.0	116898.220	2.0
289.6440	42.00	-.82	12259.943	0.0	46785.084	0.0
289.6450	74.00	-.31	2903.671	0.0	37428.693	0.0
289.6451	24.01	.46	40228.440	5.5	74743.330	6.5
289.6453	24.01	-.38	32854.460	4.5	67369.330	5.5
289.6530	44.00	-1.12	3064.986	0.0	37589.054	0.0
289.6561	18.01	-.43	174409.830	1.5	208923.410	2.5
289.6565	23.00	-4.42	2424.890	4.5	36938.420	5.5
289.6587	28.01	-2.92	101366.140	2.5	135879.410	3.5
289.6601	26.00	-3.57	19788.248	4.0	54301.360	4.0
289.6602	25.00	-2.97	33825.490	2.5	68338.590	3.5
289.6613	24.01	-2.39	70852.240	3.5	105365.200	4.5
289.6618	25.01	-2.08	48317.850	4.0	82830.750	4.0
289.6635	27.02	-3.49	73540.200	3.5	108052.900	2.5
289.6640	22.00	-7.40	6742.757	4.0	41255.400	4.0
289.6729	16.02	-.47	170067.310	2.0	204576.890	2.0
289.6730	58.01	-.62	2339.068	0.0	36860.753	0.0
289.6737	23.00	-6.06	2311.370	3.5	36822.860	3.5
289.6747	24.01	-.20	31168.780	3.5	65680.150	4.5
289.6747	18.01	-1.30	174409.830	1.5	208921.200	1.5
289.6748	24.00	-.32	7927.470	2.0	42438.820	2.0
289.6764	23.01	-4.41	12545.150	4.0	47056.320	4.0
289.6795	24.02	-2.37	63172.200	2.0	97683.000	3.0
289.6820	25.01	-3.07	37811.570	1.0	72322.070	0.0
289.6830	28.01	-1.95	103025.580	2.5	137535.960	3.5
289.6872	23.01	-2.11	18293.870	2.0	52803.750	1.0
289.6879	27.00	-3.07	14036.280	1.5	48546.070	1.5
289.6900	70.01	-.67	45974.786	0.0	80494.445	0.0
289.6909	25.00	-.84	27201.540	2.5	61710.980	3.5
289.6946	22.00	-7.23	6661.003	3.0	41170.003	3.0
289.7000	25.01	-4.53	72010.750	4.0	106519.100	5.0
289.7003	10.01	-1.10	246192.450	2.5	280700.770	3.5
289.7007	25.02	-.40	174243.330	3.5	208751.600	4.5
289.7054	28.01	-4.78	100609.010	2.5	135116.720	2.5
289.7055	28.02	-3.78	79143.300	2.0	113651.000	2.0
289.7065	24.01	-3.23	32836.840	3.5	67344.420	2.5
289.7067	25.01	-.66	32787.600	4.0	67295.160	4.0
289.7104	28.01	-3.54	105499.050	3.5	140006.170	4.5
289.7110	9.01	-2.45	254716.680	2.0	289223.730	1.0
289.7135	23.01	-7.19	12545.150	4.0	47051.890	3.0
289.7150	77.00	-.36	5726.684	0.0	40243.364	0.0
289.7160	25.01	-1.61	49427.320	4.0	83933.770	3.0
289.7200	10.01	-2.02	283322.350	1.5	317828.320	.5
289.7240	29.01	-3.35	88362.030	2.0	122867.530	1.0
289.7243	24.01	-.59	40415.340	.5	74920.800	.5
289.7258	24.01	-1.16	40202.140	6.5	74707.420	5.5
289.7259	26.01	-.97	27620.390	2.5	62125.660	1.5
289.7264	25.01	-5.25	29951.120	1.0	64456.330	2.0
289.7340	28.01	-4.08	99418.610	3.5	133922.910	4.5
289.7427	25.00	-1.78	25281.040	2.5	59784.310	3.5
289.7503	7.01	-.35	186570.980	3.0	221073.350	4.0
289.7516	8.01	-1.12	231427.990	3.5	265930.200	4.5
289.7567	28.02	-3.25	82172.900	3.0	116674.500	4.0
289.7588	25.01	-4.99	72010.750	4.0	106512.100	4.0
289.7596	26.00	-1.30	19912.486	2.0	54413.740	3.0
289.7605	28.01	-1.87	103025.580	2.5	137526.730	2.5
289.7618	23.00	-8.10	2424.890	4.5	36925.880	3.5
289.7630	42.01	.33	15566.901	0.0	50077.863	0.0
289.7641	25.00	-1.68	30419.610	2.5	64920.330	3.5
289.7642	10.01	-2.54	279218.660	2.5	313719.370	2.5
289.7664	9.01	-2.76	254723.280	1.0	289223.730	1.0
289.7674	10.01	-1.09	279218.660	2.5	313718.990	3.5
289.7682	24.01	-.03	35607.600	3.5	70107.830	4.5
289.7688	28.01	-4.58	53037.930	2.5	87536.090	3.5
289.7690	39.01	-.17	24519.886	0.0	59030.134	0.0
289.7704	28.01	-2.48	101246.160	.5	135746.130	1.5
289.7706	26.01	-1.46	64832.000	4.5	99331.950	4.5
289.7706	22.01	.35	30958.700	2.5	65458.650	3.5
289.7721	25.02	-4.40	174243.330	3.5	208743.100	2.5
289.7743	24.01	-.95	32844.920	1.5	67344.420	2.5
289.7743	26.01	-1.88	33501.320	3.5	68000.820	4.5
289.7743	24.00	-1.59	27176.220	1.0	61675.720	2.0
289.7774	24.01	-.83	32854.460	4.5	67353.600	4.5
289.7796	25.00	-.60	25285.430	4.5	59784.310	3.5
289.7810	41.01	.12	2984.328	0.0	37493.147	0.0
289.7820	22.00	-8.70	6842.964	5.0	41341.553	5.0
289.7850	7.01	-3.11	186570.980	3.0	221069.220	3.0
289.7870	78.00	-1.20	806.575	0.0	35314.679	0.0
289.7874	26.02	-4.21	84369.920	2.0	118867.870	1.0
289.7875	28.01	-2.86	103025.580	2.5	137523.510	3.5
289.7892	23.01	-.11	30306.400	3.0	64804.130	2.0
289.7896	25.01	-1.98	48333.060	5.0	82830.750	4.0
289.7923	24.01	-.70	32836.840	3.5	67334.200	3.5
289.7926	24.01	-1.68	35610.500	4.5	70107.830	4.5
289.7980	83.00	.60	11292.053	0.0	45798.847	0.0
289.7990	25.00	-1.61	25287.740	3.5	59784.310	3.5
289.8004	26.01	-.95	63948.840	4.5	98445.240	4.5
289.8046	28.01	-1.80	101144.630	3.5	135640.530	4.5
289.8101	25.01	-2.61	37811.570	1.0	72306.810	2.0
289.8207	25.00	-3.94	17052.290	4.5	51546.270	4.5
289.8235	28.01	-2.83	103025.580	2.5	137519.230	2.5
289.8260	72.00	.03	2339.068	0.0	36842.529	0.0
289.8263	25.01	-3.87	38901.800	4.0	73395.120	3.0
289.8265	23.00	-4.01	8476.200	1.5	42969.490	1.5
289.8342	25.01	-1.13	67008.930	3.0	101501.300	3.0
289.8374	27.02	-4.56	76791.100	1.5	111283.100	.5
289.8420	73.00	-.39	15324.929	0.0	49826.485	0.0
289.8430	9.02	-2.20	455648.670	1.5	490140.000	1.5
289.8430	9.02	-1.17	455648.670	1.5	490140.000	2.5
289.8465	25.01	-2.36	67008.930	3.0	101499.840	2.0
289.8533	25.01	-.55	67008.930	3.0	101499.030	4.0
289.8538	24.01	.41	31219.490	4.5	65709.530	5.5
289.8540	44.00	-.64	7985.094	0.0	42485.222	0.0
289.8598	24.01	-2.26	32855.090	2.5	67344.420	2.5
289.8650	42.00	.23	20245.038	0.0	54743.856	0.0
289.8700	28.01	-3.86	101258.010	1.5	135746.130	1.5
289.8700	25.01	.01	33278.390	3.0	67766.510	2.0
289.8710	33.00	-.02	18551.230	0.0	53049.334	0.0
289.8710	40.01	-.75	3226.301	0.0	37724.405	0.0
289.8710	72.01	.08	13389.148	0.0	47887.252	0.0
289.8710	92.01	-1.09	2258.411	0.0	36756.515	0.0
289.8737	26.01	-2.08	38164.240	2.5	72661.910	3.5
289.8744	15.01	-1.15	103340.010	2.0	137827.600	1.0
289.8753	25.02	-4.62	86486.770	1.5	120974.250	.5
289.8770	26.02	-2.86	82410.940	2.0	116898.220	2.0
289.8790	75.00	-.61	20325.695	0.0	54822.847	0.0
289.8811	23.00	-2.19	0.000	1.5	34486.800	2.5
289.8820	39.01	-.29	23632.653	0.0	58129.448	0.0
289.8844	12.02	-1.03	530178.200	2.0	564064.600	2.0
289.8859	26.00	-2.12	17726.985	2.0	52213.207	3.0
289.8869	19.02	-1.19	209461.300	.5	243947.400	1.5
289.8870	23.01	-4.77	106.630	2.0	34592.720	2.0
289.8875	7.01	-2.38	186570.980	3.0	221057.010	2.0
289.8878	28.01	-3.14	101144.630	3.5	135630.630	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
289.8941	24.01	-2.40	70879.950	5.5	105365.200	4.5
289.8957	25.01	-.10	49427.320	4.0	83912.380	5.0
289.8981	28.01	-2.36	101144.630	3.5	135629.400	3.5
289.9040	73.00	-.83	3871.561	0.0	38365.738	0.0
289.9065	28.01	-2.72	101144.630	3.5	135628.410	4.5
289.9086	7.01	-1.40	186570.980	3.0	221054.500	3.0
289.9107	28.01	-4.37	101366.140	2.5	135849.410	2.5
289.9127	24.00	-4.66	23512.000	1.0	57995.040	1.0
289.9145	24.01	-.22	36101.820	3.5	70564.640	2.5
289.9202	23.00	-.85	137.380	2.5	34619.520	2.5
289.9202	24.00	-.89	7810.820	1.0	42292.960	1.0
289.9205	24.01	-.67	48399.190	1.5	82881.300	2.5
289.9240	41.01	.12	3468.273	0.0	37960.071	0.0
289.9277	26.01	-.68	64087.500	2.5	98568.750	3.5
289.9302	23.01	-3.91	17910.980	4.0	52391.940	3.0
289.9328	23.00	-7.02	2220.130	2.5	36700.780	2.5
289.9332	23.03	-4.74	220343.500	1.0	254824.100	1.0
289.9362	26.02	-2.17	90423.680	2.0	124903.920	2.0
289.9366	28.02	-2.31	82194.300	5.0	116674.500	4.0
289.9383	28.01	-3.70	74283.330	.5	108763.320	.5
289.9404	24.01	-1.54	32854.460	4.5	67334.200	3.5
289.9407	25.02	-4.12	144672.380	2.5	179152.090	3.5
289.9412	26.00	-.62	18378.187	2.0	52857.840	1.0
289.9428	25.00	-1.04	27248.000	1.5	61727.460	2.5
289.9449	26.01	-3.56	66012.830	4.5	100492.040	3.5
289.9457	24.01	-.82	32855.090	2.5	67334.200	3.5
289.9468	24.01	-.80	40228.440	5.5	74707.420	5.5
289.9534	6.00	-2.46	85399.810	2.0	119878.000	1.0
289.9553	28.01	-2.71	101144.630	3.5	135622.600	3.5
289.9559	23.03	-.12	258288.800	1.0	292766.700	2.0
289.9572	25.02	-2.37	143209.800	2.5	177687.540	3.5
289.9591	25.01	-4.83	79550.280	3.0	114027.800	4.0
289.9601	23.00	-.60	0.000	1.5	34477.400	.5
289.9630	77.00	-.11	15970.189	0.0	50457.348	0.0
289.9685	24.00	-.66	24940.610	2.0	59417.010	3.0
289.9693	28.01	-2.48	98969.440	5.5	133445.750	4.5
289.9703	22.01	.23	30836.520	1.5	65312.710	2.5
289.9710	70.01	-.30	28633.420	0.0	63119.627	0.0
289.9719	27.00	-2.47	7442.410	3.5	41918.410	3.5
289.9720	90.01	-.43	6129.972	0.0	40616.060	0.0
289.9758	24.00	-3.14	20517.400	2.0	54992.930	2.0
289.9785	20.02	.38	242547.190	2.0	277022.400	3.0
289.9814	27.00	-.90	16470.600	1.5	50945.470	.5
289.9930	23.01	-.69	18293.870	2.0	52767.360	3.0
289.9933	28.01	-3.96	101144.630	3.5	135618.080	2.5
289.9960	45.00	-.58	10243.505	0.0	44726.739	0.0
289.9972	23.00	-5.53	2424.890	4.5	36897.880	4.5
289.9995	25.01	-3.11	37847.900	2.0	72320.620	1.0
290.0019	19.00	-3.07	0.000	.5	34472.430	1.5
290.0021	22.03	-1.45	278501.100	4.5	312973.500	4.5
290.0021	22.03	.28	278501.100	4.5	312973.500	5.5
290.0021	22.03	.19	278501.100	3.5	312973.500	4.5
290.0035	24.00	-3.68	24282.340	4.0	58754.580	5.0
290.0040	19.00	-3.37	0.000	.5	34472.180	.5
290.0054	24.00	-4.60	20520.920	3.0	54992.930	2.0
290.0071	25.02	-2.99	174464.070	4.5	208935.880	4.5
290.0157	25.01	.22	36274.290	2.0	70745.080	3.0
290.0254	24.00	-3.19	8095.210	3.0	42564.850	4.0
290.0287	26.02	-2.54	117068.560	3.0	151537.800	4.0
290.0300	71.01	.38	12340.601	0.0	46819.793	0.0
290.0308	17.02	-3.13	205037.300	1.5	239506.300	1.5
290.0308	25.00	-2.49	30354.210	3.5	64823.210	2.5
290.0329	8.01	-2.44	231530.260	4.5	265999.000	3.5
290.0329	8.01	-1.19	231530.260	4.5	265999.000	4.5
290.0338	25.01	-1.46	49465.130	3.0	83933.770	3.0
290.0348	26.02	-4.52	166187.500	6.0	200656.020	6.0
290.0356	25.01	-4.68	79558.380	4.0	114026.800	5.0
290.0360	73.00	-.30	9598.245	0.0	44076.724	0.0
290.0380	23.00	-8.37	2112.320	.5	36580.460	1.5
290.0390	77.00	-.28	19438.462	0.0	53916.584	0.0
290.0497	24.01	-2.26	32603.730	2.5	67070.480	1.5
290.0520	74.00	-.51	13711.778	0.0	48188.355	0.0
290.0532	26.02	-3.20	117068.560	3.0	151534.900	2.0
290.0543	25.00	-.28	25265.740	5.5	59731.940	4.5
290.0564	8.01	-2.56	231296.050	1.5	265762.000	1.5
290.0596	26.02	-3.41	117068.560	3.0	151534.130	3.0
290.0750	73.01	.53	12582.573	0.0	47056.416	0.0
290.0779	26.01	-3.29	65109.710	3.5	99573.110	4.5
290.0800	42.01	.57	28875.392	0.0	63348.641	0.0
290.0831	9.02	-2.67	356371.820	2.5	390834.600	2.5
290.0864	28.01	-1.05	74300.930	1.5	108763.320	.5
290.0941	21.01	-5.69	4883.420	3.0	39344.900	2.0
290.0969	18.01	-4.19	172816.210	.5	207277.350	1.5
290.1010	24.01	-1.26	31219.490	4.5	65680.150	4.5
290.1050	73.00	-.91	9598.245	0.0	44068.523	0.0
290.1112	10.01	-1.81	283322.350	1.5	317781.790	1.5
290.1130	11.01	-.12	297252.520	3.0	331711.750	3.0
290.1130	11.01	-.12	297252.520	3.0	331711.750	3.0
290.1144	10.01	-3.01	283322.350	1.5	317781.420	2.5
290.1157	25.01	-2.56	37847.900	2.0	72306.810	2.0
290.1182	23.00	-7.87	2153.200	1.5	36611.810	2.5
290.1225	27.01	-5.19	17771.500	3.0	52229.600	2.0
290.1270	24.01	-3.31	33418.110	2.5	67875.680	3.5
290.1320	76.00	-.42	12905.203	0.0	47372.273	0.0
290.1382	26.00	-1.59	12560.933	3.0	47017.170	3.0
290.1431	25.01	-2.76	37851.150	3.0	72306.810	2.0
290.1455	26.01	-4.13	38164.240	2.5	72619.610	2.5
290.1463	26.01	-4.43	26170.190	5.5	60625.470	5.5
290.1508	8.01	-2.02	231530.260	4.5	265985.000	3.5
290.1527	27.00	-2.63	16470.600	1.5	50925.110	1.5
290.1530	26.01	-5.26	26352.800	4.5	60807.280	4.5
290.1584	26.00	-2.89	17726.985	2.0	52180.820	1.0
290.1620	40.01	.32	13308.491	0.0	47771.998	0.0
290.1682	24.00	-1.42	27223.050	2.0	61675.720	2.0
290.1706	24.01	-3.85	33418.110	2.5	67870.500	1.5
290.1735	23.00	-8.20	2311.370	3.5	36763.410	2.5
290.1780	74.00	-.21	17583.339	0.0	52044.945	0.0
290.1785	26.00	-2.81	12968.552	2.0	47420.000	2.0
290.1820	40.01	-1.03	2823.013	0.0	37284.144	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
290.1906	26.00	-.86	19350.882	5.0	53800.900	5.0
290.1912	24.01	-2.12	33418.110	2.5	67868.050	2.5
290.1940	44.00	-.34	7985.094	0.0	42444.800	0.0
290.1950	77.00	.12	12985.861	0.0	47445.449	0.0
290.1956	22.01	-3.16	93.940	4.5	34543.360	3.5
290.1974	26.00	-2.16	19788.248	4.0	54237.460	4.0
290.1983	24.00	-.73	25038.610	5.0	59487.710	4.0
290.2026	17.02	-3.31	182076.000	1.5	216524.600	2.5
290.2050	73.00	.64	13227.833	0.0	47686.233	0.0
290.2054	26.01	-2.43	31483.200	3.5	65931.460	3.5
290.2057	24.00	-1.45	24277.060	0.0	58725.280	1.0
290.2064	25.01	-2.05	49427.320	4.0	83875.460	4.0
290.2084	25.01	-1.84	49820.160	2.0	84268.060	1.0
290.2093	13.01	-2.07	91271.200	1.0	125719.000	2.0
290.2100	44.00	-.33	10566.135	0.0	45023.941	0.0
290.2140	24.01	-2.12	38269.670	3.5	72716.910	4.5
290.2201	25.00	-1.39	17568.480	1.5	52015.000	1.5
290.2201	25.00	-1.41	25285.430	4.5	59731.940	4.5
290.2209	24.00	-4.08	23512.000	1.0	57958.420	0.0
290.2249	24.00	-4.50	24282.340	4.0	58728.290	4.0
290.2270	17.01	-5.00	112608.000	1.0	147053.700	2.0
290.2313	26.01	-2.76	27620.390	2.5	62065.570	3.5
290.2337	28.01	-4.05	98467.250	3.5	132914.150	2.5
290.2396	25.00	-1.50	25287.740	3.5	59731.940	4.5
290.2400	70.01	-.92	33311.556	0.0	67765.801	0.0
290.2421	27.01	-4.52	13404.600	1.0	47848.500	1.0
290.2447	24.00	-2.76	8095.210	3.0	42538.810	3.0
290.2459	26.01	-1.30	30388.550	4.5	64832.000	4.5
290.2474	26.00	-1.52	26105.908	6.0	60549.180	5.0
290.2476	25.02	-4.94	138312.700	4.5	172755.950	3.5
290.2480	75.00	.71	18793.202	0.0	53246.497	0.0
290.2523	26.02	-2.37	82494.880	1.0	116937.570	1.0
290.2617	24.01	-2.66	39877.280	3.5	74318.860	2.5
290.2677	28.00	-1.87	16017.317	0.0	50458.187	1.0
290.2732	25.00	-3.09	23719.520	1.5	58159.730	2.5
290.2810	92.01	-1.55	0.000	0.0	34449.378	0.0
290.2818	24.00	-3.10	20517.400	2.0	54956.590	1.0
290.2856	24.01	-3.00	40415.340	.5	74854.080	.5
290.2856	24.00	-1.98	24286.540	1.0	58725.280	1.0
290.2881	27.00	-3.51	14399.280	.5	48837.720	.5
290.2901	25.01	-.44	32856.950	3.0	67295.160	4.0
290.2920	70.01	-.81	38151.007	0.0	72599.080	0.0
290.2925	12.00	-1.42	21870.464	1.0	56308.381	2.0
290.3050	71.00	-1.54	0.000	0.0	34446.530	0.0
290.3063	23.01	-.64	2604.820	1.0	37041.110	2.0
290.3070	42.01	1.13	26375.009	0.0	60821.302	0.0
290.3070	76.00	.03	18793.202	0.0	53239.495	0.0
290.3080	44.00	-1.00	9033.642	0.0	43479.816	0.0
290.3119	28.01	-3.01	101144.630	3.5	135580.250	4.5
290.3160	90.01	-1.42	4113.534	0.0	38558.759	0.0
290.3171	13.01	-2.30	91271.200	1.0	125706.200	1.0
290.3193	23.01	-2.26	12621.570	5.0	47056.320	4.0
290.3196	27.00	-1.52	16467.900	4.5	50902.610	4.5
290.3210	76.00	-.01	13953.751	0.0	48398.383	0.0
290.3214	23.01	-3.74	16340.970	3.0	50775.470	2.0
290.3298	10.01	-3.33	312810.670	4.5	347244.170	4.5
290.3301	10.01	-4.80	312810.710	5.5	347244.170	4.5
290.3301	10.01	-4.27	312810.670	4.5	347244.130	5.5
290.3304	10.01	-2.97	312810.710	5.5	347244.130	5.5
290.3357	19.02	-.70	208687.800	1.5	243120.600	2.5
290.3380	10.01	-4.47	312811.650	3.5	347244.170	4.5
290.3380	10.01	-3.39	312811.650	4.5	347244.170	4.5
290.3387	24.00	-6.57	7593.160	2.0	42025.600	3.0
290.3548	23.01	-1.06	18269.490	1.0	52700.030	2.0
290.3553	24.01	-2.04	39684.000	3.5	74114.480	3.5
290.3563	26.02	-3.74	90423.680	2.0	124854.040	3.0
290.3650	41.00	-.68	1532.493	0.0	35971.905	0.0
290.3651	28.00	-2.36	15609.861	2.0	50039.180	2.0
290.3652	13.01	-2.77	91271.200	1.0	125700.500	0.0
290.3674	25.01	-3.80	55371.300	3.0	89800.340	4.0
290.3696	26.01	-9.68	27620.390	2.5	62049.170	2.5
290.3698	23.00	-1.55	0.000	1.5	34428.760	1.5
290.3750	64.00	-.59	1693.808	0.0	36132.034	0.0
290.3771	28.01	-2.46	92792.080	3.5	127219.970	3.5
290.3824	23.00	-7.40	2153.200	1.5	36580.460	1.5
290.3828	24.00	-8.60	7810.820	1.0	42238.040	2.0
290.3975	24.01	-1.01	31117.590	2.5	65543.060	3.5
290.3982	24.00	-1.19	24299.890	2.0	58725.280	1.0
290.4011	25.01	-1.22	49882.150	4.0	84307.200	4.0
290.4070	73.00	-.23	10566.135	0.0	45000.567	0.0
290.4087	26.00	-2.94	21999.132	4.0	56423.276	4.0
290.4091	28.02	-3.01	82826.900	4.0	117251.000	3.0
290.4130	23.00	-.90	323.420	3.5	34747.060	3.5
290.4141	24.01	-1.01	54499.700	1.5	88923.200	2.5
290.4260	90.01	-.65	12824.546	0.0	47256.725	0.0
290.4283	14.01	-.21	79338.760	1.5	113760.580	2.5
290.4284	16.02	-.53	170648.940	3.0	205070.750	3.0
290.4285	27.00	-2.64	13795.520	2.5	48217.320	3.5
290.4328	28.01	-4.74	98561.220	2.5	132982.510	1.5
290.4353	25.01	-4.08	68284.380	3.0	102705.370	3.0
290.4364	7.01	-1.65	186652.490	4.0	221073.350	4.0
290.4375	26.01	-3.17	25981.650	3.5	60402.380	2.5
290.4409	26.02	-1.16	90483.590	3.0	124903.920	2.0
290.4410	72.00	.14	4516.821	0.0	38947.222	0.0
290.4420	27.02	-2.22	138774.700	2.5	173194.900	2.5
290.4420	27.02	-2.22	138774.700	2.5	173194.900	2.5
290.4420	27.02	-3.02	138774.700	2.5	173194.900	2.5
290.4425	24.00	-4.15	8095.210	3.0	42515.350	2.0
290.4504	14.03	-1.43	293837.920	4.5	328257.120	4.5
290.4504	14.03	.30	293837.920	4.5	328257.120	5.5
290.4504	14.03	.21	293837.920	3.5	328257.120	4.5
290.4509	25.01	.06	73683.110	4.0	108102.250	3.0
290.4510	92.01	-1.12	241.973	0.0	34671.188	0.0
290.4515	25.01	-2.59	46903.260	2.0	81322.330	1.0
290.4524	26.00	-2.85	17550.180	3.0	51969.140	3.0
290.4524	25.01	-2.91	68284.380	3.0	102703.340	4.0
290.4587	26.01	-1.08	63876.380	5.5	98294.600	5.5
290.4612	26.02	-4.87	149013.360	4.0	183431.280	5.0
290.4661	25.01	.22	49889.860	3.0	84307.200	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
290.4665	24.00	.04	24940.610	2.0	59357.900	2.0
290.4700	11.01	-1.42	297252.520	3.0	331669.400	2.0
290.4700	11.01	-1.42	297252.520	3.0	331669.400	2.0
290.4713	7.01	-3.12	186652.490	4.0	221069.220	3.0
290.4750	72.00	-.28	2339.068	0.0	36765.439	0.0
290.4800	77.00	-.61	7017.204	0.0	41442.982	0.0
290.4810	45.00	-.53	14276.381	0.0	48702.041	0.0
290.4908	11.01	-.32	265693.290	1.0	300107.710	2.0
290.4929	28.01	-3.24	101144.630	3.5	135558.800	4.5
290.4943	28.01	-3.46	99559.330	2.5	133973.330	2.5
290.4968	26.01	-2.54	66078.340	2.5	100492.040	3.5
290.4988	23.01	-.67	18353.890	3.0	52767.360	3.0
290.5034	8.01	-.80	231350.080	2.5	265763.000	3.5
290.5071	28.01	-4.74	101258.010	1.5	135670.490	.5
290.5075	22.00	-9.67	6842.964	5.0	41255.400	4.0
290.5119	8.01	-3.86	231350.080	2.5	265762.000	1.5
290.5183	26.01	-4.88	27314.930	3.5	61726.090	3.5
290.5220	10.01	-1.97	312833.450	5.5	347244.170	4.5
290.5224	10.01	-3.79	312833.450	5.5	347244.130	5.5
290.5225	10.01	-1.90	312833.470	6.5	347244.130	5.5
290.5230	40.01	-.12	6371.944	0.0	40792.627	0.0
290.5240	73.01	-.07	4032.876	0.0	38453.440	0.0
290.5253	25.01	-.11	49465.130	3.0	83875.460	4.0
290.5265	25.02	-2.35	174332.910	1.5	208743.100	2.5
290.5270	42.00	-.07	12259.943	0.0	46680.152	0.0
290.5310	64.01	.06	4758.794	0.0	39178.529	0.0
290.5370	8.01	-1.15	231296.050	1.5	265705.000	2.5
290.5379	24.01	-.65	48632.360	3.5	83041.200	3.5
290.5403	24.01	-2.02	32603.730	2.5	67012.280	2.5
290.5408	12.02	-3.58	496012.100	0.0	530420.600	1.0
290.5410	69.01	-.71	8872.327	0.0	43290.877	0.0
290.5452	28.01	-3.85	99442.860	4.5	133850.830	3.5
290.5488	24.00	-.86	7810.820	1.0	42218.370	0.0
290.5494	27.00	-3.20	14036.280	1.5	48443.760	2.5
290.5516	25.02	-.88	174243.330	3.5	208650.540	3.5
290.5523	29.01	-3.44	116375.470	3.0	150782.600	2.0
290.5532	22.01	-2.61	34543.360	3.5	68950.390	3.5
290.5554	28.01	-2.86	101246.160	.5	135652.930	1.5
290.5565	26.00	-1.42	26351.049	5.0	60757.680	4.0
290.5571	24.01	-2.54	36272.660	4.5	70679.220	4.5
290.5571	27.00	-1.74	18389.570	1.5	52796.130	2.5
290.5576	23.01	-5.50	339.210	4.0	34745.720	3.0
290.5579	27.00	-4.22	16778.160	2.5	51184.630	3.5
290.5580	75.00	-.18	14518.354	0.0	48934.890	0.0
290.5605	23.01	-2.11	18793.870	2.0	52700.030	2.0
290.5627	27.02	-3.73	72083.300	4.5	106489.200	3.5
290.5640	77.00	-1.78	4032.876	0.0	38448.702	0.0
290.5650	44.00	-.90	2661.698	0.0	37077.405	0.0
290.5656	28.01	-4.77	101247.370	2.5	135652.930	1.5
290.5678	14.01	-1.35	79355.280	2.5	113760.580	2.5
290.5692	14.01	-.05	79355.280	2.5	113760.410	3.5
290.5694	26.01	-4.36	38214.500	1.5	72619.610	2.5
290.5730	76.00	-.79	6049.314	0.0	40464.074	0.0
290.5744	28.00	-1.49	15734.018	1.0	50138.530	0.0
290.5764	26.01	-.58	64040.960	3.5	98445.240	4.5
290.5816	26.00	-1.39	26351.049	5.0	60754.710	4.0
290.5817	26.02	-2.43	97041.380	3.0	131445.030	2.0
290.5821	25.00	-2.55	30419.610	2.5	64823.210	2.5
290.5830	44.00	-.76	6452.602	0.0	40866.177	0.0
290.5834	28.01	-3.37	71457.740	3.5	105861.190	2.5
290.5834	25.01	-4.34	55115.800	2.0	89519.250	2.0
290.5843	26.02	-3.16	82494.880	1.0	116898.220	2.0
290.5900	78.00	-1.20	6533.259	0.0	40946.005	0.0
290.5956	7.01	-2.96	186652.490	4.0	221054.500	3.0
290.5964	28.01	-3.14	98467.250	3.5	132869.160	3.5
290.6020	75.00	-.26	14518.354	0.0	48929.679	0.0
290.6060	42.00	.12	20003.065	0.0	54413.917	0.0
290.6111	24.01	-2.58	35707.660	5.5	70107.830	4.5
290.6119	26.01	-1.43	26932.740	.5	61332.820	1.5
290.6120	90.01	-1.15	7904.437	0.0	42314.578	0.0
290.6131	8.01	-1.87	231530.260	4.5	265930.200	4.5
290.6140	23.00	-.36	137.380	2.5	34537.210	1.5
290.6142	18.03	-2.71	257348.890	1.5	291748.700	1.5
290.6169	25.01	-2.53	37847.900	2.0	72247.380	3.0
290.6248	18.01	-4.74	173347.830	1.5	207746.380	2.5
290.6253	17.01	-.60	145468.500	1.0	179867.000	1.0
290.6260	64.01	-1.06	4758.794	0.0	39167.278	0.0
290.6297	23.00	-7.12	2424.890	4.5	36822.860	3.5
290.6320	26.02	-4.15	84159.550	4.0	118557.250	5.0
290.6320	44.00	-.59	7420.492	0.0	41828.265	0.0
290.6337	25.00	-1.62	30425.710	1.5	64823.210	2.5
290.6362	12.00	-1.90	21911.178	2.0	56308.381	2.0
290.6442	23.01	-.09	2808.760	3.0	37205.010	3.0
290.6444	25.01	-1.83	37851.150	3.0	72247.380	3.0
290.6537	26.00	-3.11	17550.180	3.0	51945.310	2.0
290.6565	25.01	-1.95	49517.580	5.0	83912.380	5.0
290.6570	8.01	.12	231530.260	4.5	265925.000	5.5
290.6573	25.01	-3.70	48317.850	4.0	82712.550	3.0
290.6583	26.02	-4.32	179579.830	5.0	213974.420	6.0
290.6592	10.01	-1.38	279324.890	1.5	313719.370	2.5
290.6607	29.02	-3.96	89045.900	3.5	123440.200	2.5
290.6666	24.02	-2.37	66027.800	4.0	100421.400	5.0
290.6680	63.01	-.35	0.000	0.0	34403.512	0.0
290.6736	26.00	-4.08	19621.004	5.0	54013.780	5.0
290.6766	24.01	-3.58	30864.610	2.5	65257.030	3.5
290.6816	10.01	-1.06	246597.710	.5	280989.530	1.5
290.6828	23.00	-7.22	2220.130	2.5	36611.810	2.5
290.6873	28.01	-4.33	99418.610	3.5	133809.760	3.5
290.6880	70.01	-.81	36860.487	0.0	71261.632	0.0
290.6888	23.00	-4.97	8578.520	2.5	42969.490	1.5
290.6900	13.02	.04	167612.750	2.5	202003.580	3.5
290.6952	13.02	.15	167613.370	3.5	202003.580	4.5
290.6952	13.02	-1.39	167613.370	3.5	202003.580	3.5
290.6978	24.01	-.53	48491.390	2.5	82881.300	2.5
290.7001	25.01	-.08	73780.810	3.0	108170.450	2.0
290.7020	23.00	-7.32	2311.370	3.5	36700.780	2.5
290.7044	18.01	-2.86	158167.710	1.5	192556.840	2.5
290.7067	28.01	-3.24	101357.200	4.5	135746.060	3.5
290.7100	19.00	-3.13	0.000	.5	34388.460	1.5
290.7120	42.01	.21	17260.709	0.0	51659.014	0.0
290.7126	19.00	-3.43	0.000	.5	34388.160	.5
290.7200	25.01	-.26	73785.250	2.0	108172.540	1.0
290.7210	45.00	-1.12	2581.041	0.0	36978.281	0.0
290.7211	25.00	-.54	25265.740	5.5	59652.900	5.5
290.7240	77.00	-.81	6291.287	0.0	40688.172	0.0
290.7260	74.00	-.18	17986.627	0.0	52383.275	0.0
290.7291	23.03	-2.15	223304.600	4.0	257690.800	3.0
290.7376	25.01	-1.08	73785.250	2.0	108170.450	2.0
290.7378	24.01	-1.24	35569.020	2.5	69954.200	2.5
290.7380	40.01	-.47	6371.944	0.0	40767.173	0.0
290.7454	28.00	-3.04	2216.519	2.0	36600.805	2.0
290.7463	23.01	-.40	2968.220	4.0	37352.390	5.0
290.7492	23.01	-5.61	208.890	3.0	34592.720	2.0
290.7500	29.01	-3.71	88362.030	2.0	122745.770	2.0
290.7505	26.02	-1.53	83138.230	5.0	117521.910	4.0
290.7517	26.00	-.25	21999.132	4.0	56382.664	5.0
290.7536	26.00	-3.07	17726.985	2.0	52110.300	1.0
290.7540	28.01	-1.94	101247.370	2.5	135630.630	2.5
290.7558	25.02	-1.91	174436.590	2.5	208819.640	3.5
290.7612	23.01	-3.60	44657.990	2.0	79040.400	3.0
290.7628	10.01	-1.11	246415.040	1.5	280797.260	2.5
290.7644	28.01	-1.78	101247.370	2.5	135629.400	3.5
290.7658	27.00	-2.02	16778.160	2.5	51160.030	2.5
290.7700	24.00	-.78	25106.340	3.0	59487.710	4.0
290.7780	42.00	-.94	11372.710	0.0	45763.207	0.0
290.7789	28.01	-3.01	71457.740	3.5	105838.060	3.5
290.7797	25.02	-4.79	143097.000	3.5	177477.230	2.5
290.7817	28.01	-4.54	101366.140	2.5	135746.130	1.5
290.7848	26.01	-3.03	7955.240	3.5	42334.860	2.5
290.7854	26.02	-4.69	179630.770	4.0	214010.320	5.0
290.7877	28.01	-3.37	98467.250	3.5	132846.530	3.5
290.7877	24.00	-1.08	27597.220	3.0	61976.500	4.0
290.7891	24.01	-4.55	38269.670	3.5	72648.790	3.5
290.7921	20.02	-1.22	247696.390	1.0	282075.150	0.0
290.7940	29.01	-3.47	88926.090	0.0	123304.630	1.0
290.7964	26.01	-4.38	31999.120	3.5	66377.370	3.5
290.7998	25.00	-1.11	17637.150	.5	52015.000	1.5
290.8030	76.00	-.44	16131.504	0.0	50519.045	0.0
290.8033	28.01	-2.67	101246.160	.5	135623.590	1.5
290.8061	28.00	-2.19	27580.411	5.0	61957.517	6.0
290.8094	26.01	-2.01	69606.640	3.5	103983.350	3.5
290.8136	28.01	-2.65	101247.370	2.5	135623.590	1.5
290.8160	42.00	-.26	21051.613	0.0	55437.617	0.0
290.8220	28.01	-1.92	101247.370	2.5	135622.600	3.5
290.8240	41.01	.03	2339.068	0.0	36724.126	0.0
290.8252	23.01	-2.38	20343.000	2.0	54717.850	1.0
290.8260	74.00	-.03	16292.819	0.0	50677.640	0.0
290.8300	24.01	-1.36	31168.780	3.5	65543.060	3.5
290.8320	70.01	-.76	30085.255	0.0	64469.367	0.0
290.8336	15.01	-1.02	105550.450	2.0	139924.300	2.0
290.8345	28.01	-3.72	101246.160	.5	135619.910	1.5
290.8348	16.01	-3.00	129858.070	1.5	164231.780	2.5
290.8360	90.01	-1.14	4436.164	0.0	38819.803	0.0
290.8420	58.01	-.27	4436.164	0.0	38819.094	0.0
290.8440	23.01	-.30	20343.000	2.0	54715.630	2.0
290.8440	28.01	-2.13	101258.010	1.5	135630.630	2.5
290.8447	28.01	-1.93	101247.370	2.5	135619.910	1.5
290.8461	26.01	-2.91	66377.370	3.5	100749.750	2.5
290.8483	24.01	-1.92	39742.360	2.5	74114.480	3.5
290.8554	9.02	-1.41	455768.720	.5	490140.000	1.5
290.8559	24.01	-2.38	32355.940	3.5	66727.160	2.5
290.8602	28.01	-1.68	101247.370	2.5	135618.080	2.5
290.8624	26.02	-2.23	90483.590	3.0	124854.040	3.0
290.8698	26.00	-4.25	17927.378	1.0	52296.960	2.0
290.8751	8.01	-.37	231296.050	1.5	265665.000	2.5
290.8771	23.01	-2.04	20980.920	2.0	55349.630	3.0
290.8807	23.01	.33	3162.800	5.0	37531.090	4.0
290.8865	26.00	-1.26	19757.020	3.0	54124.620	4.0
290.8876	25.00	-1.31	25285.430	4.5	59652.900	5.5
290.8880	29.01	-2.87	116375.470	3.0	150742.900	3.0
290.8880	44.00	-.43	3064.986	0.0	37442.478	0.0
290.8880	41.01	.74	14679.669	0.0	49057.161	0.0
290.8897	24.00	-3.47	20519.600	6.0	54886.820	6.0
290.8910	73.00	-.19	10566.135	0.0	44943.273	0.0
290.8937	28.01	-4.46	98561.220	2.5	132927.970	1.5
290.8990	63.00	-.40	0.000	0.0	34376.192	0.0
290.9036	28.01	-2.16	101258.010	1.5	135623.590	1.5
290.9044	24.00	-.98	7927.470	2.0	42292.960	1.0
290.9049	23.00	-8.96	2112.320	.5	36477.750	.5
290.9060	76.00	.16	0.000	0.0	34375.365	0.0
290.9104	28.01	-4.74	96535.870	3.5	130900.650	2.5
290.9120	42.01	.59	11695.340	0.0	46069.996	0.0
290.9120	74.00	-.75	9436.930	0.0	43811.586	0.0
290.9148	24.01	-.62	48399.190	1.5	82763.450	1.5
290.9158	24.00	-1.55	27163.200	0.0	61527.340	1.0
290.9190	70.01	-.62	32908.268	0.0	67282.097	0.0
290.9220	44.00	-.82	8469.040	0.0	42842.515	0.0
290.9265	24.00	-4.81	20523.940	5.0	54886.820	6.0
290.9313	28.01	-2.16	71770.830	2.5	106133.140	1.5
290.9314	26.00	-2.06	19621.004	5.0	53963.300	5.0
290.9329	14.03	-3.44	293837.920	3.5	328200.040	3.5
290.9329	14.03	-1.90	293837.920	4.5	328200.040	3.5
290.9329	14.03	-2.01	293837.920	3.5	328200.040	2.5
290.9348	28.01	-3.96	101258.010	1.5	135619.910	1.5
290.9368	26.01	-2.28	49506.990	1.5	83868.650	2.5
290.9382	28.01	-4.76	103653.030	3.5	138014.530	2.5
290.9389	24.01	-1.74	34631.140	4.5	68992.550	4.5
290.9470	70.01	-.45	30407.885	0.0	64778.406	0.0
290.9471	22.01	-.88	24961.340	1.5	59321.790	2.5
290.9472	26.02	-2.79	83161.480	4.0	117521.910	4.0
290.9477	26.01	-3.85	38164.240	2.5	72524.620	1.5
290.9481	23.00	-6.41	2220.130	2.5	36580.460	1.5
290.9503	28.01	-2.97	101258.010	1.5	135618.080	2.5
290.9508	25.02	-1.64	174575.870	3.5	208935.880	4.5
290.9560	26.01	-4.54	45079.910	2.5	79439.300	3.5
290.9560	77.00	-.38	13873.093	0.0	48242.551	0.0
290.9610	27.02	-4.66	138774.700	2.5	173133.500	1.5
290.9616	25.00	-1.79	30354.210	3.5	64712.940	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
290.9670	76.00	-.44	10969.423	0.0	45337.582	0.0
290.9688	25.01	-3.46	49517.580	5.0	83875.460	4.0
290.9717	24.01	-1.95	34813.060	5.5	69170.600	5.5
290.9770	90.01	-1.33	7259.177	0.0	41626.154	0.0
290.9820	75.00	.37	16212.162	0.0	50578.549	0.0
290.9884	25.02	-4.30	174464.070	4.5	208819.640	3.5
290.9908	22.01	-2.10	393.220	4.5	34748.500	4.5
290.9910	72.01	-1.55	0.000	0.0	34365.324	0.0
290.9939	8.01	-1.52	231350.080	2.5	265705.000	2.5
290.9956	26.01	-9.49	27620.390	2.5	61975.110	1.5
290.9979	24.01	-2.06	33521.230	3.5	67875.680	3.5
290.9980	27.00	-2.33	14399.280	.5	48753.720	1.5
291.0008	23.01	-.18	2687.010	2.0	37041.110	2.0
291.0016	22.01	-.68	30958.700	2.5	65312.710	2.5
291.0061	10.01	-.43	246415.040	1.5	280768.520	.5
291.0080	75.00	-1.09	11534.025	0.0	45897.341	0.0
291.0115	28.01	-2.52	101246.160	.5	135599.000	.5
291.0170	45.01	.94	25245.804	0.0	59608.058	0.0
291.0239	25.00	-1.56	25265.740	5.5	59617.120	6.5
291.0250	40.01	-.17	8065.752	0.0	42427.061	0.0
291.0261	24.00	-1.98	27176.220	1.0	61527.340	1.0
291.0277	28.01	-3.77	98561.220	2.5	132912.150	2.5
291.0279	28.01	-2.38	98467.250	3.5	132816.160	4.5
291.0302	27.00	-4.62	8460.810	2.5	42811.440	3.5
291.0376	23.01	-.30	2604.820	1.0	36954.580	1.0
291.0405	23.00	-1.34	137.380	2.5	34486.800	2.5
291.0408	10.01	-.38	246597.710	.5	280947.100	1.5
291.0480	74.00	-1.11	3306.958	0.0	37665.552	0.0
291.0530	64.01	-.48	3952.218	0.0	38310.222	0.0
291.0578	25.02	.93	174975.650	5.5	209323.030	6.5
291.0590	41.01	.27	2984.328	0.0	37341.623	0.0
291.0590	90.01	-.77	4113.534	0.0	38470.829	0.0
291.0612	26.01	-3.70	26055.400	2.5	60402.380	2.5
291.0625	24.01	-2.76	33521.230	3.5	67868.050	2.5
291.0644	24.01	-1.12	35607.600	3.5	69954.200	2.5
291.0683	23.01	-2.90	18353.890	3.0	52700.030	2.0
291.0695	27.01	-4.61	18338.500	1.0	52684.500	1.0
291.0715	26.01	-.48	63948.840	4.5	98294.600	5.5
291.0758	26.01	-1.72	30764.460	3.5	65109.710	3.5
291.0776	22.01	-.63	31113.610	3.5	65458.650	3.5
291.0803	10.01	-4.00	219947.460	.5	254292.190	.5
291.0897	24.00	-3.53	8095.210	3.0	42438.820	2.0
291.0921	26.00	-.57	22249.430	3.0	56592.760	4.0
291.0994	25.02	-2.76	143345.070	3.5	177687.540	3.5
291.1000	74.00	-1.43	0.000	0.0	34352.456	0.0
291.1050	23.01	-.30	2808.760	3.0	37150.570	4.0
291.1119	28.01	-2.82	101258.010	1.5	135599.000	.5
291.1125	8.01	-.28	231350.080	2.5	265691.000	3.5
291.1137	10.01	-1.47	283322.350	1.5	317663.130	1.5
291.1145	24.00	-.61	8307.570	4.0	42648.260	3.0
291.1205	28.01	-3.56	105668.780	2.5	140008.760	3.5
291.1320	90.01	-.58	8549.697	0.0	42898.377	0.0
291.1340	76.00	-.20	18954.517	0.0	53302.961	0.0
291.1342	9.01	-3.24	236169.930	1.0	270508.290	2.0
291.1390	71.01	.85	14115.066	0.0	48462.920	0.0
291.1490	22.00	-6.24	14028.470	2.0	48365.090	3.0
291.1520	70.01	-.23	34844.049	0.0	69190.370	0.0
291.1537	23.01	-1.92	30267.460	2.0	64603.530	3.0
291.1554	27.00	-2.67	8460.810	2.5	42796.670	1.5
291.1569	9.01	-2.60	236172.610	2.0	270508.290	2.0
291.1611	22.01	-.25	32602.510	1.5	66937.700	2.5
291.1626	8.01	-1.68	231427.990	3.5	265763.000	3.5
291.1660	23.01	-.78	18269.490	1.0	52604.110	1.0
291.1675	24.01	-.06	35569.020	2.5	69903.460	3.5
291.1677	25.02	-3.50	144817.680	3.5	179152.090	3.5
291.1730	24.01	-2.59	38315.000	2.5	72648.790	3.5
291.1732	24.00	-.21	27703.840	4.0	62037.600	5.0
291.1740	41.01	.06	2581.041	0.0	36924.767	0.0
291.1743	25.01	-3.87	46903.260	2.0	81236.890	1.0
291.1796	8.01	-.06	231427.990	3.5	265761.000	4.5
291.1810	22.01	-1.82	34748.500	4.5	69081.350	4.5
291.1811	24.00	-.82	27597.220	3.0	61930.050	3.0
291.1813	26.01	-.35	69650.540	2.5	103983.350	3.5
291.1814	10.01	-3.15	279137.620	3.5	313470.420	2.5
291.1858	26.00	-3.47	19390.165	6.0	53722.440	5.0
291.1859	10.01	-1.72	279137.620	3.5	313469.890	3.5
291.1920	42.01	.98	12824.546	0.0	47166.149	0.0
291.1966	27.00	-1.92	15774.040	1.5	50105.050	1.5
291.2010	90.01	-1.63	0.000	0.0	34340.541	0.0
291.2062	22.00	.32	7255.369	2.0	41585.240	3.0
291.2151	25.02	-2.76	143148.400	1.5	177477.230	2.5
291.2159	26.00	-1.50	0.000	4.0	34328.733	3.0
291.2196	27.01	-3.31	28111.900	2.0	62440.200	1.0
291.2205	26.00	-3.10	12560.933	3.0	46889.126	4.0
291.2258	26.00	-1.65	12560.933	3.0	46888.494	2.0
291.2260	78.00	-.47	10001.532	0.0	44339.125	0.0
291.2330	76.00	.01	4113.534	0.0	38450.302	0.0
291.2336	24.00	-8.38	7927.470	2.0	42254.110	3.0
291.2365	27.02	-2.78	73726.600	2.5	108052.900	2.5
291.2375	26.00	-.92	26351.049	5.0	60677.230	5.0
291.2442	24.01	-2.64	36101.820	3.5	70427.220	3.5
291.2514	23.00	-6.41	2153.200	1.5	36477.750	.5
291.2597	24.01	-2.52	31219.490	4.5	65543.060	3.5
291.2620	45.00	-1.09	5565.369	0.0	39898.718	0.0
291.2660	90.01	-1.13	4032.876	0.0	38365.754	0.0
291.2778	25.01	-1.36	73780.810	3.0	108102.250	3.0
291.2833	27.01	-4.52	11651.310	2.0	45972.100	3.0
291.2860	70.01	-.94	31475.775	0.0	65706.296	0.0
291.2880	28.01	-3.39	101144.630	3.5	135464.860	3.5
291.2910	58.01	-.12	10162.848	0.0	44492.779	0.0
291.2958	25.00	-3.06	25281.040	2.5	59600.350	2.5
291.2998	18.03	.29	257348.890	1.5	291667.730	2.5
291.3004	23.01	-1.25	30267.460	2.0	64586.230	2.0
291.3010	21.01	-.38	26081.320	2.0	60400.020	1.0
291.3079	22.01	-2.68	225.470	3.5	34543.360	3.5
291.3080	64.01	-.85	4758.794	0.0	39086.722	0.0
291.3127	25.01	-.36	46903.260	2.0	81220.580	3.0
291.3150	75.00	-.48	17180.052	0.0	51507.155	0.0
291.3155	25.01	-2.84	73785.250	2.0	108102.250	3.0
291.3155	27.01	-2.79	49697.500	4.0	84014.500	5.0
291.3161	28.01	-4.39	101144.630	3.5	135461.550	2.5
291.3170	44.00	-.36	11695.340	0.0	46022.207	0.0
291.3208	28.01	-4.64	99418.610	3.5	133734.980	3.5
291.3320	73.00	-1.52	5565.369	0.0	39890.469	0.0
291.3331	8.01	-1.35	231350.080	2.5	265665.000	2.5
291.3397	26.01	-1.76	44929.590	2.5	79243.730	1.5
291.3400	25.02	-1.46	174975.650	5.5	209289.760	6.5
291.3437	10.00	-4.32	134041.840	2.0	168355.510	1.0
291.3450	73.01	-.45	6775.232	0.0	41098.800	0.0
291.3465	22.00	-4.59	386.874	4.0	34700.212	5.0
291.3482	9.01	-2.96	236195.140	3.0	270508.290	2.0
291.3494	25.01	-1.82	55115.800	2.0	89428.800	3.0
291.3497	28.01	-2.70	99132.780	5.5	133445.750	4.5
291.3520	42.00	-.62	10646.793	0.0	44969.537	0.0
291.3527	25.00	-1.29	25287.740	3.5	59600.350	2.5
291.3540	50.00	.08	17018.737	0.0	51341.245	0.0
291.3540	78.00	-.47	10082.190	0.0	44404.698	0.0
291.3589	28.01	-1.64	23108.280	2.5	57420.160	2.5
291.3606	21.01	-6.06	4802.750	2.0	39114.440	1.0
291.3664	12.02	-2.00	530420.600	1.0	564731.600	1.0
291.3692	24.00	-.06	25106.340	3.0	59417.010	3.0
291.3701	24.00	-8.14	7927.470	2.0	42238.040	2.0
291.3719	25.01	-.11	70745.080	3.0	105055.430	2.0
291.3722	24.00	.13	25177.390	4.0	59487.710	4.0
291.3729	23.01	-1.50	18293.870	2.0	52604.110	1.0
291.3739	26.01	-4.02	38214.500	1.5	72524.620	1.5
291.3804	9.02	-3.55	430012.480	1.5	464321.840	2.5
291.3810	42.01	.47	28794.735	0.0	63114.063	0.0
291.3840	76.00	-.44	10082.190	0.0	44401.164	0.0
291.3914	23.00	-7.50	2153.200	1.5	36461.260	2.5
291.3924	28.01	-3.64	98561.220	2.5	132869.160	3.5
291.3960	69.01	-1.70	0.000	0.0	34317.561	0.0
291.4004	28.00	-2.55	1332.153	3.0	35639.148	3.0
291.4045	25.02	-2.69	174436.590	2.5	208743.100	2.5
291.4120	73.00	-.09	10888.765	0.0	45204.442	0.0
291.4160	28.00	-4.08	15734.018	1.0	50039.180	2.0
291.4195	26.00	-2.24	18378.187	2.0	52682.930	2.0
291.4210	70.01	.08	35650.624	0.0	69965.241	0.0
291.4234	24.00	-1.50	27223.050	2.0	61527.340	1.0
291.4244	23.00	-7.05	2112.320	.5	36416.490	1.5
291.4250	92.01	-1.02	241.973	0.0	34556.119	0.0
291.4291	23.01	-.46	18353.890	3.0	52657.510	4.0
291.4300	44.00	-.37	11695.340	0.0	46008.897	0.0
291.4301	25.03	-4.35	152700.500	4.0	187004.000	3.0
291.4304	23.00	-.15	16572.540	3.5	50876.000	4.5
291.4306	26.00	-1.78	12968.552	2.0	47271.999	1.0
291.4368	24.01	-2.84	40415.340	.5	74718.050	1.5
291.4430	23.00	-.21	16449.850	2.5	50751.830	3.5
291.4447	22.01	-3.84	34543.360	3.5	68845.140	2.5
291.4561	23.00	-7.11	2311.370	3.5	36611.810	2.5
291.4598	27.00	-1.24	15184.040	2.5	49484.050	3.5
291.4606	27.00	-1.62	18775.010	.5	53074.920	1.5
291.4612	28.01	-4.83	101144.630	3.5	135444.470	3.5
291.4624	28.01	-4.37	101754.800	2.5	136054.500	1.5
291.4666	26.02	-4.97	179748.170	5.0	214047.380	4.0
291.4694	28.01	-3.57	58493.210	2.5	92792.080	3.5
291.4706	22.01	-.35	32697.940	2.5	66996.670	3.5
291.4710	76.00	.07	18309.257	0.0	52617.988	0.0
291.4755	26.02	-4.92	179207.570	5.0	213505.730	6.0
291.4761	27.00	-3.05	14036.280	1.5	48334.370	1.5
291.4807	23.00	-.19	16728.750	4.5	51026.300	5.5
291.4816	24.01	-.49	54625.760	2.5	88923.200	2.5
291.4830	69.00	-.76	0.000	0.0	34307.318	0.0
291.4842	23.01	-.81	30306.400	3.0	64603.530	3.0
291.4843	22.00	-8.38	6742.757	4.0	41039.874	5.0
291.4858	23.01	-.96	14556.090	4.0	48853.040	5.0
291.4925	18.01	-3.39	172335.520	2.5	206631.670	2.5
291.4930	23.00	-.13	323.420	3.5	34619.520	2.5
291.4940	73.00	-.99	10888.765	0.0	45194.788	0.0
291.4946	23.00	-6.66	2112.320	.5	36408.230	1.5
291.4950	24.01	-3.04	35607.600	3.5	69903.460	3.5
291.4956	25.01	-1.93	79544.510	2.0	113840.300	3.0
291.5015	27.02	-3.80	139314.200	.5	173609.300	1.5
291.5015	27.02	-3.80	139314.200	.5	173609.300	1.5
291.5015	27.02	-3.11	139314.200	.5	173609.300	1.5
291.5024	25.00	-1.87	30354.210	3.5	64649.200	3.5
291.5052	10.01	-2.42	279137.620	3.5	313432.280	3.5
291.5110	74.00	-.15	14840.984	0.0	49145.007	0.0
291.5119	10.01	-.87	279137.620	3.5	313431.490	4.5
291.5165	25.00	-1.98	30419.610	2.5	64712.940	2.5
291.5170	23.00	-.41	16361.450	1.5	50654.720	2.5
291.5185	27.02	-2.39	73214.500	.5	107507.600	.5
291.5187	24.01	-.84	48399.190	1.5	82692.260	.5
291.5197	24.01	-2.88	35610.500	4.5	69903.460	3.5
291.5224	24.01	-.19	36101.820	3.5	70394.460	4.5
291.5260	42.00	.18	25407.119	0.0	59709.377	0.0
291.5270	70.01	-.12	26616.982	0.0	60919.122	0.0
291.5287	24.01	-3.92	30156.940	3.5	64448.840	2.5
291.5331	23.00	-4.13	137.380	2.5	34428.760	1.5
291.5337	23.01	-.49	20522.140	1.0	54813.450	0.0
291.5369	28.01	-4.29	99154.810	4.5	133445.750	4.5
291.5380	42.00	.07	20164.380	0.0	54465.226	0.0
291.5420	45.00	-1.02	5646.026	0.0	39946.401	0.0
291.5447	25.01	-1.86	79550.280	3.0	113840.300	3.0
291.5452	24.01	.12	39824.520	4.5	74114.480	3.5
291.5455	25.01	-1.67	79550.280	3.0	113840.200	4.0
291.5482	28.01	-2.48	68735.980	2.5	103025.580	2.5
291.5490	73.00	-.77	3871.561	0.0	38171.113	0.0
291.5500	26.02	-4.54	179757.980	4.0	214047.380	4.0
291.5540	8.01	-1.37	231350.080	2.5	265639.000	3.5
291.5560	58.01	-.97	3306.958	0.0	37605.686	0.0
291.5594	24.00	-1.33	24833.860	3.0	59122.150	3.0
291.5594	18.01	-2.50	172335.520	2.5	206623.800	3.5
291.5616	25.01	-3.63	68417.340	2.0	102705.370	3.0
291.5619	24.03	-2.31	127218.000	3.5	161506.000	2.5
291.5627	28.01	-2.25	101357.200	4.5	135645.100	5.5
291.5654	28.01	-2.61	70358.940	4.5	104646.520	3.5
291.5659	25.02	-.99	174464.070	4.5	208751.600	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
291.5666	25.01	-2.74	48317.850	4.0	82605.290	4.0
291.5673	22.00	-6.29	6556.828	1.0	40844.190	1.0
291.5684	25.00	-1.40	30425.710	1.5	64712.940	2.5
291.5847	28.01	-3.28	98561.220	2.5	132846.530	3.5
291.5847	9.02	-1.53	431967.930	.5	466253.240	1.5
291.5882	23.01	.17	30318.630	4.0	64603.530	3.0
291.5949	22.01	-.39	32532.380	.5	66816.490	1.5
291.5954	26.02	-3.22	83237.860	3.0	117521.910	4.0
291.5961	23.00	-.38	16917.150	5.5	51201.120	6.5
291.5961	18.01	-2.55	158428.030	.5	192712.000	1.5
291.5976	26.01	-3.38	50076.100	1.5	84359.900	1.5
291.5990	40.01	-.18	3710.246	0.0	38003.916	0.0
291.6012	26.02	-3.80	84159.550	4.0	118442.920	3.0
291.6016	28.01	-2.51	101357.200	4.5	135640.530	4.5
291.6031	19.00	-3.17	0.000	.5	34283.150	1.5
291.6034	27.00	-3.79	1809.330	1.5	36092.440	2.5
291.6063	19.00	-3.47	0.000	.5	34282.770	.5
291.6068	24.01	-2.58	35356.060	1.5	69638.770	1.5
291.6089	10.01	-2.95	279137.620	3.5	313420.090	2.5
291.6100	42.00	-.76	11050.080	0.0	45342.457	0.0
291.6102	26.01	-1.85	64286.440	3.5	98568.750	3.5
291.6136	25.01	-2.71	79558.380	4.0	113840.300	3.0
291.6144	25.01	-1.89	79558.380	4.0	113840.200	4.0
291.6145	26.01	-3.50	7955.240	3.5	42237.050	3.5
291.6153	25.01	-1.46	79558.380	4.0	113840.100	5.0
291.6156	24.00	-2.87	8307.570	4.0	42589.250	5.0
291.6203	10.01	-.96	246192.450	2.5	280473.580	1.5
291.6250	40.00	-1.52	564.603	0.0	34855.216	0.0
291.6260	44.00	-.20	1129.205	0.0	35419.700	0.0
291.6275	26.02	-4.12	88663.870	4.0	122944.150	4.0
291.6313	23.01	-.61	30306.400	3.0	64586.230	2.0
291.6335	24.00	-4.97	20519.600	6.0	54799.180	5.0
291.6360	77.00	-.77	4032.876	0.0	38322.196	0.0
291.6379	25.00	-1.48	27201.540	2.5	61480.600	3.5
291.6430	70.01	-.88	39199.555	0.0	73488.052	0.0
291.6480	72.00	.32	4516.821	0.0	38804.730	0.0
291.6519	26.00	-4.24	17550.180	3.0	51827.590	2.0
291.6553	8.01	-4.27	231427.990	3.5	265705.000	2.5
291.6586	28.01	-4.34	101754.800	2.5	136031.430	2.5
291.6633	24.01	-4.88	40228.440	5.5	74504.510	4.5
291.6639	27.01	-4.23	13261.100	2.0	47537.100	2.0
291.6640	40.01	-.74	2823.013	0.0	37109.041	0.0
291.6675	26.00	-4.42	17550.180	3.0	51825.758	3.0
291.6680	58.01	-.71	4194.191	0.0	38479.749	0.0
291.6704	24.00	-4.50	20523.940	5.0	54799.180	5.0
291.6730	75.01	.77	25165.146	0.0	59450.116	0.0
291.6744	22.01	-.79	25193.040	2.5	59467.810	3.5
291.6875	28.00	-.67	28542.113	5.0	62815.340	5.0
291.6923	26.01	-3.09	26352.800	4.5	60625.470	5.5
291.6924	24.00	-.52	27703.840	4.0	61976.500	4.0
291.6960	25.01	-3.00	48333.060	5.0	82605.290	4.0
291.6962	25.00	-3.33	30411.740	.5	64683.950	1.5
291.6963	28.01	-3.21	101357.200	4.5	135629.400	3.5
291.6975	24.01	-1.10	48491.390	2.5	82763.450	1.5
291.6976	24.01	-5.07	20512.620	2.5	54784.670	3.5
291.7028	24.01	-4.84	54784.670	3.5	89056.100	2.5
291.7047	28.01	-2.58	101357.200	4.5	135628.410	4.5
291.7050	41.01	.19	10566.135	0.0	44847.344	0.0
291.7056	25.01	-3.11	79569.100	5.0	113840.200	4.0
291.7065	25.01	-2.06	79569.100	5.0	113840.100	5.0
291.7073	25.01	-1.29	79569.100	5.0	113840.000	6.0
291.7084	26.01	-1.17	36252.960	2.5	70523.730	3.5
291.7120	73.00	-1.47	5968.656	0.0	40249.042	0.0
291.7176	25.00	-2.56	27201.540	2.5	61471.230	2.5
291.7233	23.01	-1.12	14461.730	3.0	48730.760	4.0
291.7256	24.00	-2.38	23933.900	4.0	58202.650	3.0
291.7260	76.00	-.03	8630.355	0.0	42909.096	0.0
291.7357	23.01	-.99	2687.010	2.0	36954.580	1.0
291.7363	24.02	-2.74	63038.600	1.0	97306.100	2.0
291.7410	90.01	-.84	4436.164	0.0	38713.143	0.0
291.7440	63.01	-2.19	1613.150	0.0	35889.776	0.0
291.7451	26.01	-2.70	31811.870	2.5	66078.340	2.5
291.7462	24.01	-3.27	20518.330	3.5	54784.670	3.5
291.7464	26.01	-2.15	8391.920	2.5	42658.230	3.5
291.7490	72.01	-.22	17744.654	0.0	52020.693	0.0
291.7498	28.00	-.93	28542.113	5.0	62808.030	6.0
291.7512	11.01	-.57	264928.000	2.0	299193.750	2.0
291.7516	28.01	-3.35	66579.710	1.5	100845.410	.5
291.7529	28.01	-3.85	101247.370	2.5	135512.920	2.5
291.7542	28.01	-3.55	101357.200	4.5	135622.600	3.5
291.7552	28.01	-2.12	74283.330	.5	108548.610	1.5
291.7560	73.01	.36	13469.806	0.0	47745.022	0.0
291.7591	24.01	-3.78	20519.850	4.5	54784.670	3.5
291.7619	28.01	-4.39	101366.140	2.5	135630.630	2.5
291.7632	25.00	-1.95	30419.610	2.5	64683.950	1.5
291.7638	25.00	-4.19	17282.000	3.5	51546.270	4.5
291.7670	74.00	-.14	18873.860	0.0	53147.784	0.0
291.7721	23.00	-6.75	2153.200	1.5	36416.490	1.5
291.7724	28.01	-4.52	101366.140	2.5	135629.400	3.5
291.7736	23.01	-3.02	32040.760	2.0	66303.880	3.0
291.7738	7.01	-1.42	187091.370	2.0	221354.470	2.0
291.7745	8.01	-1.40	231427.990	3.5	265691.000	3.5
291.7745	9.02	-3.96	406904.380	.5	441167.400	.5
291.7757	28.00	-2.73	27580.411	5.0	61843.280	5.0
291.7770	44.00	-.96	7985.094	0.0	42257.843	0.0
291.7772	24.02	-2.72	63420.300	3.0	97683.000	3.0
291.7800	29.01	-3.71	88605.160	1.0	122867.530	1.0
291.7812	28.01	-4.41	98467.250	3.5	132729.480	2.5
291.7818	26.02	-4.82	179748.170	5.0	214010.320	5.0
291.7830	76.00	-1.09	5081.424	0.0	39353.469	0.0
291.7884	25.01	-4.51	53597.130	2.0	87858.510	2.0
291.7892	26.01	-1.99	64832.000	4.5	99093.290	5.5
291.7897	25.01	-2.96	73911.310	1.0	108172.540	1.0
291.7980	7.01	-4.38	187091.370	2.0	221351.630	1.0
291.8019	26.00	.56	26105.908	6.0	60365.700	6.0
291.8052	22.00	-9.40	14105.680	3.0	48365.090	3.0
291.8075	25.01	-3.14	73911.310	1.0	108170.450	2.0
291.8134	9.02	-4.31	406908.950	1.5	441167.400	.5
291.8151	25.00	-3.13	30425.710	1.5	64683.950	1.5
291.8204	23.01	-1.40	30673.140	2.0	64930.760	1.0
291.8233	24.00	-3.19	8307.570	4.0	42564.850	4.0
291.8240	40.01	.30	8065.752	0.0	42332.982	0.0
291.8250	74.00	-.57	6129.972	0.0	40397.084	0.0
291.8274	18.03	-1.20	251972.000	2.5	286226.800	1.5
291.8295	24.01	-2.38	33619.130	4.5	67875.680	3.5
291.8303	28.01	-3.03	101366.140	2.5	135622.600	3.5
291.8320	81.00	.27	7743.122	0.0	42009.412	0.0
291.8339	28.01	-3.96	101144.630	3.5	135400.670	3.5
291.8346	27.01	-.43	52684.500	1.0	86940.460	2.0
291.8351	26.00	-1.08	19552.474	1.0	53808.370	1.0
291.8425	23.00	-6.11	2153.200	1.5	36408.230	1.5
291.8427	27.01	-4.19	13593.500	0.0	47846.500	1.0
291.8435	28.01	-4.23	101258.010	1.5	135512.920	2.5
291.8458	15.01	-.37	105550.450	2.0	139805.100	3.0
291.8494	9.02	-4.25	406904.380	.5	441158.600	1.5
291.8532	28.01	-3.37	101366.140	2.5	135619.910	1.5
291.8547	26.01	-.37	63876.380	5.5	98129.980	6.5
291.8548	27.01	-2.33	50913.800	2.0	85167.380	3.0
291.8560	26.00	-3.33	17927.378	1.0	52180.820	1.0
291.8570	77.00	-.03	12098.628	0.0	46361.983	0.0
291.8580	72.00	-.48	2339.068	0.0	36602.306	0.0
291.8614	6.00	-1.28	85625.180	0.0	119878.000	1.0
291.8630	74.01	.20	11211.395	0.0	45474.046	0.0
291.8654	26.02	-4.89	179757.980	4.0	214010.320	5.0
291.8670	58.01	-.56	2581.041	0.0	36843.222	0.0
291.8678	28.00	-3.76	27580.411	5.0	61832.470	4.0
291.8688	28.01	-3.01	101366.140	2.5	135618.080	2.5
291.8704	10.01	-3.59	279218.660	2.5	313470.420	2.5
291.8721	24.00	-1.93	25106.340	3.0	59357.900	2.0
291.8749	10.01	-1.42	279218.660	2.5	313469.890	3.5
291.8750	22.01	-2.64	31207.440	2.5	65458.650	3.5
291.8780	58.01	-.97	4113.534	0.0	38374.424	0.0
291.8830	42.01	.26	15566.901	0.0	49827.204	0.0
291.8854	27.02	-3.42	72341.900	1.5	106591.900	1.5
291.8880	75.00	-.53	16534.792	0.0	50794.508	0.0
291.8884	9.02	-3.62	406908.950	1.5	441158.600	1.5
291.8898	26.02	-3.47	88694.670	5.0	122944.150	4.0
291.8929	26.02	-4.38	179725.310	6.0	213974.420	6.0
291.8939	28.01	-1.92	101357.200	4.5	135606.200	5.5
291.8944	24.01	-1.51	48632.360	3.5	82881.300	2.5
291.8960	73.01	1.10	17099.394	0.0	51358.171	0.0
291.8970	92.01	-.68	5162.081	0.0	39420.741	0.0
291.8972	25.00	-4.72	17282.000	3.5	51530.610	3.5
291.9043	11.01	-.02	297252.520	3.0	331500.290	2.0
291.9050	39.00	-.93	0.000	0.0	34257.721	0.0
291.9051	28.01	-.84	74300.930	1.5	108548.610	1.5
291.9122	25.00	-1.93	25281.040	2.5	59527.890	1.5
291.9200	42.00	-1.06	11050.080	0.0	45306.041	0.0
291.9204	28.01	-4.43	101247.370	2.5	135493.260	1.5
291.9242	22.00	-5.98	6598.749	2.0	40844.190	1.0
291.9242	22.00	-8.60	6598.749	2.0	40844.190	3.0
291.9332	25.01	-1.33	46903.260	2.0	81147.650	2.0
291.9340	70.01	.27	31456.433	0.0	65710.751	0.0
291.9340	78.00	-.31	13389.148	0.0	47643.466	0.0
291.9356	27.02	-3.17	73286.000	4.5	107530.100	3.5
291.9365	12.02	-1.88	530420.600	1.0	564664.600	2.0
291.9380	42.00	-.54	12259.943	0.0	46513.791	0.0
291.9385	25.02	-2.34	174575.870	3.5	208819.640	3.5
291.9410	75.00	-.38	16212.162	0.0	50465.658	0.0
291.9414	25.01	-3.18	36274.290	2.0	70517.720	3.0
291.9487	23.01	-2.62	17910.980	4.0	52153.550	5.0
291.9522	26.00	-2.66	17726.985	2.0	51969.140	3.0
291.9548	27.00	-1.37	16470.600	1.5	50712.450	2.5
291.9590	72.01	-.76	3629.588	0.0	37880.973	0.0
291.9591	26.02	-4.71	179216.470	6.0	213457.820	7.0
291.9610	23.00	-8.25	2220.130	2.5	46461.260	2.5
291.9610	23.00	-7.44	2220.130	2.5	46461.260	3.5
291.9610	44.00	-.84	3064.986	0.0	37316.136	0.0
291.9727	22.01	.08	32697.940	2.5	66937.700	2.5
291.9738	24.00	-2.29	25177.390	4.0	59417.010	3.0
291.9785	26.02	-4.95	144968.500	4.0	179207.570	5.0
291.9790	76.00	1.30	15082.956	0.0	49331.994	0.0
291.9830	90.01	-.91	4436.164	0.0	38684.733	0.0
291.9837	26.00	-1.38	19562.435	4.0	53800.900	5.0
291.9848	11.01	-.29	297639.340	2.0	331877.670	1.0
291.9925	23.00	-1.96	137.380	2.5	34374.810	3.5
291.9945	24.01	-3.04	39877.280	3.5	74114.480	3.5
291.9957	28.01	-1.88	71770.830	2.5	106007.890	2.5
291.9961	8.01	-3.07	231427.990	3.5	265665.000	2.5
291.9980	23.01	-1.33	2968.220	4.0	37205.010	3.0
292.0117	27.00	-3.25	16467.900	4.5	50703.080	5.5
292.0128	22.01	-.40	32532.380	.5	66767.430	.5
292.0219	24.00	-3.50	23933.900	4.0	58167.890	4.0
292.0278	26.00	-1.98	20037.815	0.0	54271.110	1.0
292.0325	8.01	-3.53	231530.260	4.5	265763.000	3.5
292.0359	23.01	-1.31	2808.760	3.0	37041.110	2.0
292.0360	90.01	-1.12	6613.917	0.0	40856.271	0.0
292.0370	23.01	-.54	2687.010	2.0	36919.230	3.0
292.0397	25.02	-3.07	100054.100	.5	134286.000	.5
292.0434	10.01	-4.05	294086.490	1.5	328317.950	2.5
292.0452	28.01	-4.33	101754.800	2.5	135986.060	3.5
292.0453	24.00	-2.30	8307.570	4.0	42538.810	3.0
292.0454	25.00	-.44	30354.210	3.5	64585.440	4.5
292.0496	8.01	-1.55	231530.260	4.5	265761.000	4.5
292.0589	22.01	.38	32767.020	3.5	66996.670	3.5
292.0594	25.00	-.69	30419.610	2.5	64649.200	3.5
292.0602	7.02	-1.65	320287.500	3.5	354517.000	2.5
292.0653	25.03	-4.53	137853.000	4.0	172081.900	3.0
292.0691	26.00	-1.46	12968.552	2.0	47197.000	2.0
292.0776	24.01	-2.11	40228.440	5.5	74455.900	4.5
292.0778	26.01	-3.10	66522.320	2.5	100749.750	2.5
292.0789	23.03	-.91	257690.800	3.0	291918.100	2.0
292.0797	23.00	-5.75	2311.370	3.5	36538.580	4.5
292.0816	28.01	-3.32	67031.020	.5	101258.010	1.5
292.0820	25.00	-3.79	30411.740	.5	64638.680	.5
292.0855	18.01	-4.45	155708.020	.5	189934.550	.5
292.0879	26.02	-4.94	179748.170	5.0	213974.420	6.0
292.0882	24.00	-1.58	27703.840	4.0	61930.050	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
292.0899	22.01	-.71	30958.700	2.5	65184.720	3.5
292.0938	24.01	-1.18	32844.920	1.5	67070.480	1.5
292.0938	11.01	-.62	266285.360	0.0	300510.920	1.0
292.0940	26.00	-4.64	19788.248	4.0	54013.780	5.0
292.0940	90.01	-.63	10566.135	0.0	44801.689	0.0
292.1020	24.00	-2.81	24897.550	4.0	59122.150	3.0
292.1037	27.02	-2.73	138970.500	1.5	173194.900	2.5
292.1037	27.02	-2.73	138970.500	1.5	173194.900	2.5
292.1037	27.02	-2.71	138970.500	1.5	173194.900	2.5
292.1070	76.00	-.29	15324.929	0.0	49558.960	0.0
292.1080	27.02	-3.60	139627.200	1.5	173851.100	.5
292.1080	27.02	-3.60	139627.200	1.5	173851.100	.5
292.1080	27.02	-3.98	139627.200	1.5	173851.100	.5
292.1120	70.01	-.42	32827.611	0.0	67061.056	0.0
292.1137	25.00	-2.24	27248.000	1.5	61471.230	2.5
292.1152	28.01	-3.68	101357.200	4.5	135580.250	4.5
292.1172	23.00	.07	16361.450	1.5	50584.270	1.5
292.1180	22.01	-5.25	9518.050	2.5	43740.770	3.5
292.1221	26.01	-1.94	65109.710	3.5	99331.950	4.5
292.1224	24.01	.42	40202.140	6.5	74424.350	6.5
292.1299	25.01	-1.95	32787.600	4.0	67008.930	3.0
292.1351	24.00	-.30	27816.880	5.0	62037.600	5.0
292.1380	78.00	-1.52	6533.259	0.0	40763.657	0.0
292.1445	24.01	-.98	40202.140	6.5	74421.760	5.5
292.1520	81.00	-.53	7743.122	0.0	41971.880	0.0
292.1530	24.01	-1.02	54418.080	.5	88636.700	1.5
292.1556	26.00	-3.56	17726.985	2.0	51945.310	2.0
292.1582	28.01	-4.62	102742.740	1.5	136960.750	2.5
292.1622	10.01	-4.32	219947.460	.5	254165.010	1.5
292.1652	28.02	-3.07	83033.800	2.0	117251.000	3.0
292.1658	28.01	-4.24	102742.740	1.5	136959.860	2.5
292.1671	26.01	-3.11	50142.930	2.5	84359.900	1.5
292.1676	25.02	-1.48	174874.500	4.5	209091.410	5.5
292.1705	26.00	-4.06	19788.248	4.0	54004.820	3.0
292.1736	28.01	-2.84	100078.780	1.5	134294.990	2.5
292.1806	24.01	-2.08	32855.090	2.5	67070.480	1.5
292.1817	24.01	.11	31168.780	3.5	65384.040	4.5
292.1819	26.01	-3.20	38214.500	1.5	72429.740	.5
292.1821	24.01	-1.45	36101.820	3.5	70317.040	2.5
292.1828	28.01	-4.03	67031.020	.5	101246.160	.5
292.1852	9.02	-1.22	432060.640	1.5	466275.500	2.5
292.1910	28.01	-3.26	101247.370	2.5	135461.550	2.5
292.1927	22.01	-.21	32602.510	1.5	66816.490	1.5
292.1929	25.02	.49	174436.590	2.5	208650.540	3.5
292.1940	28.01	-3.67	101740.270	3.5	135954.090	3.5
292.1958	10.01	-1.65	279218.660	2.5	313432.280	3.5
292.2013	25.00	-2.72	30425.710	1.5	64638.680	.5
292.2018	26.01	-1.17	31483.200	3.5	65696.110	4.5
292.2050	28.01	-4.23	102742.740	1.5	136955.280	.5
292.2064	24.01	-1.67	34631.140	4.5	68843.510	3.5
292.2101	26.00	-4.49	17550.180	3.0	51762.120	2.0
292.2110	73.01	.55	15647.559	0.0	49869.406	0.0
292.2126	24.00	-1.86	27176.220	1.0	61387.860	0.0
292.2178	28.01	-3.38	71457.740	3.5	105668.780	2.5
292.2181	9.03	-.97	556051.000	1.0	590262.000	0.0
292.2181	8.01	-1.55	231427.990	3.5	265639.000	3.5
292.2314	26.01	-2.07	65363.660	5.5	99573.110	4.5
292.2330	24.01	-3.43	52298.120	3.5	86507.380	2.5
292.2381	26.00	-4.44	12968.552	2.0	47177.210	1.0
292.2386	24.02	-2.37	65890.900	3.0	100099.500	4.0
292.2451	24.01	-1.21	38509.070	3.5	72716.910	4.5
292.2452	26.02	-4.73	166187.500	6.0	200395.330	5.0
292.2490	46.00	-1.08	6533.259	0.0	40750.656	0.0
292.2575	23.00	-2.16	323.420	3.5	34529.810	4.5
292.2580	58.01	-.96	4274.849	0.0	38491.192	0.0
292.2588	25.01	-.59	51553.060	5.0	85759.300	4.0
292.2595	25.01	-.10	47073.560	3.0	81279.710	4.0
292.2596	25.01	-4.18	67295.160	4.0	101501.300	3.0
292.2649	27.01	-1.95	50381.600	3.0	84587.120	4.0
292.2705	23.00	.13	16449.850	2.5	50654.720	2.5
292.2705	7.01	-1.45	187091.370	2.0	221296.240	2.0
292.2790	25.01	-1.82	67295.160	4.0	101499.030	4.0
292.2790	90.01	-.44	12098.628	0.0	46312.513	0.0
292.2819	28.01	-3.49	101258.010	1.5	135461.550	2.5
292.2897	16.01	-3.89	130134.080	2.5	164336.710	3.5
292.2929	22.00	-2.33	7255.369	2.0	41457.620	3.0
292.2960	22.01	-3.17	34748.500	4.5	68950.390	3.5
292.2990	90.01	-1.26	7904.437	0.0	42115.981	0.0
292.2998	10.01	-2.75	279218.660	2.5	313420.090	2.5
292.3040	7.01	-1.44	187091.370	2.0	221292.310	3.0
292.3082	24.01	-2.19	31219.490	4.5	65419.950	5.5
292.3088	10.01	-4.98	279218.660	2.5	313419.040	1.5
292.3100	45.00	-1.04	9114.300	0.0	43324.556	0.0
292.3100	74.00	-.74	4758.794	0.0	38969.050	0.0
292.3142	25.00	-3.80	25281.040	2.5	59480.800	2.5
292.3144	25.01	-4.19	55371.300	3.0	89571.030	3.0
292.3170	92.01	-1.57	0.000	0.0	34209.437	0.0
292.3198	22.01	-2.25	31113.610	3.5	65312.710	2.5
292.3216	10.01	-2.77	249695.530	1.5	283894.410	.5
292.3232	24.02	-.90	66222.700	5.0	100421.400	5.0
292.3281	26.00	.37	26351.049	5.0	60549.180	5.0
292.3283	27.01	-5.86	18031.500	2.0	52229.600	2.0
292.3312	25.02	-4.16	144619.190	1.5	178816.960	2.5
292.3314	26.01	-1.94	27314.930	3.5	61512.670	4.5
292.3320	64.01	-.59	5242.739	0.0	39450.421	0.0
292.3342	23.01	-.52	14655.630	5.0	48853.040	5.0
292.3369	28.01	-4.18	101247.370	2.5	135444.470	3.5
292.3385	22.00	-8.30	6842.964	5.0	41039.874	5.0
292.3390	42.01	.98	12340.601	0.0	46547.464	0.0
292.3432	23.00	-9.89	2220.130	2.5	36416.490	1.5
292.3471	24.01	.21	40228.440	5.5	74424.350	6.5
292.3474	11.01	-1.01	265693.290	1.0	299889.160	1.0
292.3488	23.01	-1.11	20522.140	1.0	54717.850	1.0
292.3540	74.00	-1.17	2903.671	0.0	37108.779	0.0
292.3544	26.00	-5.00	19788.248	4.0	53983.300	5.0
292.3621	25.01	-1.30	67295.160	4.0	101489.310	5.0
292.3631	23.00	.08	553.020	4.5	34747.060	3.5
292.3648	22.01	.46	31113.610	3.5	65307.450	4.5
292.3678	23.01	-4.21	20522.140	1.0	54715.630	2.0
292.3692	24.01	.52	40228.440	5.5	74421.760	5.5
292.3696	24.00	-1.16	31987.060	4.0	66180.340	5.0
292.3714	25.00	-2.52	25287.740	3.5	59480.800	2.5
292.3753	9.02	-2.02	432060.640	1.5	466253.240	1.5
292.3775	25.02	-4.77	144959.740	4.5	179152.090	3.5
292.3813	24.01	-.77	31351.150	2.5	65543.060	3.5
292.3849	26.00	-.62	21715.735	5.0	55907.220	5.0
292.3850	40.00	-1.10	564.603	0.0	34766.084	0.0
292.3879	25.01	-1.59	55759.270	3.0	89950.400	3.0
292.3882	27.02	-3.63	73861.800	1.5	108052.900	2.5
292.3917	26.02	-2.41	84159.550	4.0	118350.240	4.0
292.3934	24.00	-7.89	0.000	3.0	34190.490	2.0
292.3941	25.00	-2.35	23296.670	3.5	57487.080	2.5
292.3991	26.00	-2.16	21715.735	5.0	55905.560	4.0
292.4002	25.01	-1.91	53805.800	4.0	87995.500	5.0
292.4010	28.01	-4.96	101754.800	2.5	135944.400	3.5
292.4011	23.01	.47	3162.800	5.0	37352.390	5.0
292.4020	45.00	-1.11	2581.041	0.0	36780.533	0.0
292.4053	25.00	-2.78	25281.040	2.5	59470.140	3.5
292.4139	23.00	-6.05	2220.130	2.5	36408.230	1.5
292.4153	26.01	-3.26	38164.240	2.5	72352.170	3.5
292.4192	28.01	-4.10	99340.550	3.5	133528.020	3.5
292.4230	70.01	-.55	32182.351	0.0	66379.387	0.0
292.4278	25.02	-2.09	174464.070	4.5	208650.540	3.5
292.4320	42.01	.80	25891.064	0.0	60087.048	0.0
292.4331	20.02	-.02	247696.390	1.0	281882.240	2.0
292.4342	26.00	-1.64	23711.443	4.0	57897.170	5.0
292.4350	21.01	-2.34	26081.320	2.0	60266.950	3.0
292.4429	25.00	-.95	25285.430	4.5	59470.140	3.5
292.4429	18.01	-4.56	170400.940	2.5	204585.640	2.5
292.4486	26.00	-2.69	12560.933	3.0	46744.975	3.0
292.4490	76.00	-.42	11292.053	0.0	45486.049	0.0
292.4559	22.00	-6.17	6661.003	3.0	40844.190	3.0
292.4575	26.00	-2.58	26623.726	2.0	60806.720	3.0
292.4582	26.00	-3.77	17927.378	1.0	52110.300	1.0
292.4600	75.00	-.64	11695.340	0.0	45888.050	0.0
292.4620	72.00	-.61	5484.711	0.0	39677.187	0.0
292.4630	23.01	.22	2968.220	4.0	37150.570	4.0
292.4636	18.01	-1.43	174409.830	1.5	208592.110	.5
292.4640	40.01	.23	14034.408	0.0	48226.650	0.0
292.4665	18.01	-.76	174409.830	1.5	208591.780	1.5
292.4700	24.00	-1.69	24940.610	2.0	59122.150	3.0
292.4711	28.01	-3.28	101357.200	4.5	135538.610	5.5
292.4790	77.00	-.27	0.000	0.0	34190.469	0.0
292.4817	25.02	-3.61	97239.860	6.5	131420.030	6.5
292.4832	24.00	-8.95	8095.210	3.0	42275.200	4.0
292.4875	24.01	-1.89	34813.060	5.5	68992.550	4.5
292.4892	23.00	.26	16572.540	3.5	50751.630	3.5
292.4908	26.00	-2.38	26627.612	4.0	60806.720	3.0
292.5040	63.01	-.74	1613.150	0.0	35800.717	0.0
292.5065	28.01	-4.49	100078.780	1.5	134256.050	2.5
292.5120	74.00	.29	15324.929	0.0	49511.561	0.0
292.5182	28.01	-2.53	100078.780	1.5	134254.690	1.5
292.5190	58.01	-.66	2823.013	0.0	37008.827	0.0
292.5190	73.00	-.39	5968.656	0.0	40154.470	0.0
292.5197	25.02	.63	174575.870	3.5	208751.600	4.5
292.5200	75.00	.16	26536.324	0.0	60722.021	0.0
292.5222	24.01	-1.51	32836.840	3.5	67012.280	2.5
292.5280	76.00	-.58	13308.491	0.0	47493.253	0.0
292.5288	23.01	-.67	14556.090	4.0	48730.760	4.0
292.5358	26.00	-.72	22249.430	3.0	56423.276	4.0
292.5420	26.02	-4.16	166222.200	4.0	200395.330	5.0
292.5474	27.00	-4.91	14399.280	.5	48571.770	.5
292.5525	23.01	-1.50	17910.980	4.0	52082.880	4.0
292.5570	76.00	-.85	4113.534	0.0	38294.907	0.0
292.5607	28.01	-4.20	100078.780	1.5	134249.720	1.5
292.5618	10.01	-.83	246597.710	.5	280768.520	.5
292.5628	28.01	-4.17	105838.060	3.5	140006.760	3.5
292.5629	22.01	-.66	32767.020	3.5	66937.700	2.5
292.5630	26.02	-4.47	179876.710	4.0	214047.380	4.0
292.5660	73.00	-1.00	9920.875	0.0	44101.197	0.0
292.5712	26.00	-2.27	20641.110	4.0	54810.820	4.0
292.5727	29.01	-2.67	116080.460	3.0	150250.000	2.0
292.5837	28.01	-3.75	98561.220	2.5	132729.480	2.5
292.5849	28.01	-2.71	105838.060	3.5	140006.170	4.5
292.5873	23.00	-2.65	0.000	1.5	34167.840	2.5
292.5884	25.01	-1.40	44745.460	2.0	78913.170	2.0
292.5901	26.00	-2.47	12968.552	2.0	47136.058	2.0
292.5914	24.01	-1.25	32844.920	1.5	67012.280	2.5
292.5920	69.01	-1.95	161.315	0.0	34336.599	0.0
292.5925	25.02	-3.75	174575.870	3.5	208743.100	2.5
292.6020	26.00	-3.53	12560.933	3.0	46727.055	2.0
292.6058	26.02	-3.36	88663.870	4.0	122829.550	3.0
292.6123	22.01	-.50	32602.510	1.5	66767.430	.5
292.6154	24.01	-.43	31219.490	4.5	65384.040	4.5
292.6255	23.00	-4.96	323.420	3.5	34486.800	2.5
292.6274	18.03	.03	256093.290	.5	290256.450	1.5
292.6287	27.02	-3.93	138970.500	1.5	173133.500	1.5
292.6337	23.01	-1.39	30641.710	3.0	64804.130	2.0
292.6451	23.01	-.59	20980.920	2.0	55142.010	3.0
292.6460	73.00	-1.00	5968.656	0.0	40139.634	0.0
292.6467	26.00	-3.56	11976.239	4.0	46137.140	3.0
292.6481	8.01	-3.30	231530.260	4.5	265691.000	3.5
292.6518	28.02	-2.95	97996.300	3.0	132156.600	4.0
292.6522	25.01	-1.77	44315.170	6.0	78475.430	7.0
292.6536	29.01	-4.52	114482.500	2.0	148642.600	2.0
292.6553	26.00	-2.53	12560.933	3.0	46720.824	4.0
292.6560	25.01	-1.11	53698.700	2.0	87856.510	2.0
292.6571	26.00	-4.37	11976.239	4.0	46135.920	5.0
292.6577	24.00	-1.16	27816.880	5.0	61976.500	4.0
292.6578	25.01	-2.31	37851.150	3.0	72010.750	4.0
292.6583	26.01	-1.41	7955.240	3.5	42114.790	4.5
292.6597	25.01	-2.06	53781.700	3.0	87941.080	4.0
292.6638	24.00	-8.07	8095.210	3.0	42254.110	3.0
292.6647	26.01	-1.12	64286.440	3.5	98445.240	4.5
292.6703	25.01	-4.31	72010.750	4.0	106168.900	5.0
292.6733	25.02	.77	174874.500	4.5	209034.300	5.5
292.6739	22.01	-2.41	31300.920	4.5	65458.650	3.5
292.6785	24.01	-.98	32855.090	2.5	67012.280	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
292.6835	28.01	-4.70	102742.740	1.5	136899.340	2.5
292.6930	75.00	-.49	17180.052	0.0	51345.543	0.0
292.6980	74.00	.05	17583.339	0.0	51748.246	0.0
292.6990	40.01	1.09	14115.066	0.0	48279.856	0.0
292.7010	24.01	-2.38	36272.660	4.5	70427.220	3.5
292.7079	24.01	.49	38563.150	4.5	72716.910	4.5
292.7105	25.01	-4.27	72010.750	4.0	106164.200	4.0
292.7118	28.01	-2.92	101247.370	2.5	135400.670	3.5
292.7120	44.00	-.20	14599.011	0.0	48762.284	0.0
292.7231	25.01	-1.52	32856.950	3.0	67008.930	3.0
292.7308	25.01	-1.63	46903.260	2.0	81054.350	2.0
292.7380	92.01	-1.03	241.973	0.0	34402.212	0.0
292.7389	22.01	-3.83	393.220	4.5	34543.360	3.5
292.7393	25.01	-.85	32858.840	2.0	67008.930	3.0
292.7401	9.03	-1.10	556051.000	1.0	590201.000	1.0
292.7411	23.00	-7.69	2311.370	3.5	36461.260	2.5
292.7411	23.00	-7.90	2311.370	3.5	36461.260	3.5
292.7420	75.00	.09	11695.340	0.0	45855.112	0.0
292.7518	19.00	-4.16	0.000	.5	34148.630	1.5
292.7540	42.01	.55	29843.282	0.0	64001.654	0.0
292.7542	25.01	-1.08	46903.260	2.0	81051.620	3.0
292.7559	19.00	-4.46	0.000	.5	34148.150	.5
292.7577	25.01	-4.18	55371.300	3.0	89519.250	2.0
292.7592	25.01	-2.70	33147.390	5.0	67295.160	4.0
292.7609	28.01	-3.53	105861.190	2.5	140008.760	3.5
292.7637	23.00	.41	16728.750	4.5	50876.000	4.5
292.7645	28.01	-4.23	101754.800	2.5	135901.960	2.5
292.7657	25.01	-1.04	47073.560	3.0	81220.580	3.0
292.7661	26.01	-4.63	50212.930	2.5	84359.900	1.5
292.7663	27.00	-.70	16778.160	2.5	50925.110	1.5
292.7676	27.00	-2.42	14399.280	.5	48546.070	1.5
292.7677	28.01	-4.97	101366.140	2.5	135512.920	2.5
292.7735	28.01	-3.90	100010.170	.5	134156.280	1.5
292.7784	10.01	-1.68	279324.890	1.5	313470.420	2.5
292.7810	41.01	.62	4113.534	0.0	38268.756	0.0
292.7836	22.01	.57	31300.920	4.5	65445.850	5.5
292.7850	70.01	-.74	36860.487	0.0	71015.242	0.0
292.7866	25.02	-3.77	144672.380	2.5	178816.960	2.5
292.7920	25.01	-3.56	31514.350	4.0	65658.300	5.0
292.7930	74.00	-.14	18873.860	0.0	53027.682	0.0
292.7949	29.01	-2.59	117231.690	1.0	151375.300	2.0
292.7974	27.00	-1.93	16467.900	4.5	50611.220	3.5
292.7976	26.01	-.74	64425.460	2.5	98568.750	3.5
292.8016	24.00	-7.61	8095.210	3.0	42238.040	2.0
292.8058	25.02	-3.26	143127.000	.5	177269.340	1.5
292.8104	26.00	-2.96	17550.180	3.0	51691.980	3.0
292.8152	24.01	.04	30307.600	1.5	64448.840	2.5
292.8190	25.01	-1.53	54938.100	1.0	89078.900	2.0
292.8190	74.00	-1.53	3306.958	0.0	37457.747	0.0
292.8206	29.01	-4.24	88605.160	1.0	122745.770	2.0
292.8250	90.01	-.18	8307.725	0.0	42457.815	0.0
292.8276	26.00	-4.61	26224.961	3.0	60364.760	3.0
292.8283	24.01	.38	38509.070	3.5	72648.790	3.5
292.8299	12.01	-2.14	71490.190	2.5	105629.720	1.5
292.8307	24.01	.01	31117.590	2.5	65257.030	3.5
292.8312	25.00	-4.24	33825.490	2.5	67964.870	2.5
292.8332	28.01	-3.19	101740.270	3.5	135879.410	3.5
292.8340	64.01	-1.33	2823.013	0.0	36972.053	0.0
292.8355	9.02	-2.06	355981.900	1.5	390120.770	.5
292.8373	12.01	-3.09	71491.060	1.5	105629.720	1.5
292.8375	29.01	-4.67	116643.960	3.0	150782.600	2.0
292.8385	24.01	-.50	54784.670	3.5	88923.200	2.5
292.8515	26.01	-1.02	66612.740	1.5	100749.750	2.5
292.8516	24.01	-.54	54499.700	1.5	88636.700	1.5
292.8570	28.01	-3.93	101246.160	.5	135382.530	1.5
292.8633	12.01	-.54	35669.310	.5	69804.950	.5
292.8660	74.00	-.57	13227.833	0.0	47373.142	0.0
292.8663	7.01	-1.15	187091.370	2.0	221226.650	3.0
292.8664	25.01	-2.84	53805.800	4.0	87941.080	4.0
292.8674	28.01	-4.02	101247.370	2.5	135382.530	1.5
292.8678	25.00	-.72	25281.040	2.5	59416.150	1.5
292.8737	23.00	-.41	16449.850	2.5	50584.270	1.5
292.8750	26.00	-1.94	18378.187	2.0	52512.460	1.0
292.8782	24.02	-2.55	63172.200	2.0	97306.100	2.0
292.8809	27.00	-2.83	0.000	4.5	34133.590	3.5
292.8902	27.01	-3.51	13404.600	1.0	47537.100	2.0
292.8931	25.02	-2.54	143345.070	3.5	177477.230	2.5
292.8956	14.02	-1.03	214989.270	2.0	249121.140	3.0
292.8957	26.01	-4.32	65556.340	4.5	99688.200	3.5
292.9007	12.01	-2.39	71491.060	1.5	105622.340	.5
292.9008	26.00	-1.40	415.932	3.0	34547.192	2.0
292.9010	72.00	-.94	6533.259	0.0	40674.488	0.0
292.9018	28.01	-4.41	71457.740	3.5	105588.890	4.5
292.9032	23.01	-2.28	30673.140	2.0	64804.130	2.0
292.9110	45.00	-.88	5565.369	0.0	39703.432	0.0
292.9110	58.01	-.87	4274.849	0.0	38414.912	0.0
292.9111	26.00	.28	26627.612	4.0	60757.680	4.0
292.9158	28.01	-4.49	100078.780	1.5	134208.300	2.5
292.9162	28.01	-2.78	103653.030	3.5	137782.500	4.5
292.9214	24.01	-2.02	34631.140	4.5	68760.000	3.5
292.9224	22.01	-1.87	25193.040	2.5	59321.790	2.5
292.9263	17.02	-2.22	205946.900	2.5	240075.200	3.5
292.9287	23.01	-3.36	19191.500	6.0	53319.520	7.0
292.9325	10.00	-3.99	134459.287	1.0	168586.860	0.0
292.9362	21.01	-.36	30815.650	1.0	64942.790	0.0
292.9364	28.01	-4.22	101366.140	2.5	135493.260	1.5
292.9366	26.00	-.89	26627.612	4.0	60754.710	4.0
292.9427	24.01	-.31	36272.660	4.5	70399.040	5.5
292.9505	27.00	-.92	16467.900	4.5	50593.380	4.5
292.9510	76.00	-1.28	0.000	0.0	34135.401	0.0
292.9520	23.03	-3.33	220343.500	1.0	254468.800	2.0
292.9530	75.00	-.17	15647.559	0.0	49782.727	0.0
292.9541	24.00	-3.38	28637.000	3.0	62762.060	4.0
292.9620	26.00	-2.39	12968.552	2.0	47092.693	3.0
292.9630	72.01	-1.03	0.000	0.0	34134.003	0.0
292.9673	28.01	-2.27	103653.030	3.5	137776.550	3.5
292.9681	24.01	-4.49	32603.730	2.5	66727.160	2.5
292.9720	68.00	-1.11	403.288	0.0	34536.243	0.0
292.9731	25.02	-4.10	97000.800	4.5	131123.640	5.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
292.9790	78.00	-.58	0.000	0.0	34132.139	0.0
292.9803	24.01	.11	35356.060	1.5	69478.060	2.5
292.9821	24.01	-3.34	36272.660	4.5	70394.460	4.5
292.9894	25.02	-4.77	143148.400	1.5	177269.340	1.5
292.9900	72.00	.21	8872.327	0.0	43003.185	0.0
292.9918	25.01	-2.70	51553.060	5.0	85673.720	4.0
292.9967	27.02	-2.94	139731.000	.5	173851.100	.5
292.9967	27.02	-2.94	139731.000	.5	173851.100	.5
292.9967	27.02	-4.69	139731.000	.5	173851.100	.5
293.0030	39.01	-.10	27342.899	0.0	61472.242	0.0
293.0060	42.01	.40	28714.077	0.0	62843.071	0.0
293.0096	22.03	-.76	196794.800	1.5	230913.400	1.5
293.0100	22.01	-.45	32697.940	2.5	66816.490	1.5
293.0127	23.01	-.77	14461.730	3.0	48579.960	3.0
293.0147	26.00	-4.47	17550.180	3.0	51668.175	4.0
293.0150	74.00	-.19	15002.299	0.0	49130.245	0.0
293.0221	9.02	-3.35	430374.750	2.5	464491.890	3.5
293.0222	27.01	-.33	52229.600	2.0	86346.730	3.0
293.0242	25.00	-1.18	17052.290	4.5	51169.180	5.5
293.0253	26.02	-4.48	179893.560	5.0	214010.320	5.0
293.0339	25.02	-2.35	174975.650	5.5	209091.410	5.5
293.0388	25.01	-.80	70940.240	2.0	105055.430	2.0
293.0433	26.01	-2.81	66377.370	3.5	100492.040	3.5
293.0437	14.02	-1.80	214989.270	2.0	249103.900	2.0
293.0500	42.01	.87	11937.313	0.0	46061.183	0.0
293.0510	22.00	-7.58	6556.828	1.0	40670.600	2.0
293.0517	23.00	-6.88	2424.890	4.5	36538.580	4.5
293.0524	25.01	.16	49820.160	2.0	83933.770	3.0
293.0564	24.01	-4.11	20512.620	2.5	54625.760	2.5
293.0570	76.00	.46	22503.448	0.0	56626.503	0.0
293.0610	75.00	-.06	14921.641	0.0	49044.230	0.0
293.0630	77.00	-.46	12421.258	0.0	46543.614	0.0
293.0681	24.00	-1.78	24056.110	5.0	58167.890	4.0
293.0697	12.02	-1.76	530178.200	2.0	564289.800	1.0
293.0763	27.00	-1.24	16467.900	4.5	50578.730	3.5
293.0770	42.01	.49	29843.282	0.0	63964.008	0.0
293.0794	23.01	-.27	2808.760	3.0	36919.230	3.0
293.0817	23.03	-3.59	223033.000	3.0	257143.200	2.0
293.0856	24.01	-.34	29952.080	.5	64061.820	1.5
293.0860	28.01	-4.85	102742.740	1.5	136852.440	1.5
293.0878	24.00	-1.29	24093.160	2.0	58202.650	3.0
293.0884	11.01	-1.41	297639.340	2.0	331748.770	1.0
293.0884	11.01	-1.41	297639.340	2.0	331748.770	1.0
293.0899	14.02	-1.40	214994.650	1.0	249103.900	2.0
293.0907	23.00	.56	16917.150	5.5	51026.300	5.5
293.0908	28.01	-4.87	101740.270	3.5	135849.410	2.5
293.0910	28.00	-.90	25753.578	4.0	59862.690	5.0
293.0943	8.01	-3.03	231530.260	4.5	265639.000	3.5
293.0944	9.02	-1.57	431432.270	1.5	465541.000	.5
293.0944	9.02	-1.34	431432.270	1.5	465541.000	1.5
293.0990	73.00	-.64	12743.888	0.0	46862.053	0.0
293.1055	24.01	-4.89	20518.330	3.5	54625.760	2.5
293.1080	42.00	-.61	12259.943	0.0	46377.060	0.0
293.1091	15.01	-.87	105303.190	1.0	139410.200	2.0
293.1092	24.00	-3.34	31987.060	4.0	66094.060	4.0
293.1105	24.01	-1.91	34631.140	4.5	68737.990	5.5
293.1199	26.02	-4.99	179904.560	6.0	214010.320	5.0
293.1204	26.01	-4.05	27620.390	2.5	61726.090	3.5
293.1241	22.01	-1.20	31207.440	2.5	65312.710	2.5
293.1247	28.01	-3.47	99340.550	3.5	133445.750	4.5
293.1280	76.00	-.63	4113.534	0.0	38228.323	0.0
293.1330	14.02	-2.98	214989.270	2.0	249093.500	1.0
293.1364	25.01	-3.66	55696.500	4.0	89800.340	4.0
293.1401	25.00	-3.46	25281.040	2.5	59384.450	1.5
293.1411	26.00	-2.89	19788.248	4.0	53891.540	3.0
293.1468	26.01	-2.75	26932.740	.5	61035.370	.5
293.1470	41.01	-.60	2581.041	0.0	36693.619	0.0
293.1554	25.01	-2.62	48317.850	4.0	82419.480	3.0
293.1570	26.00	-3.58	19621.004	5.0	53722.440	5.0
293.1570	22.00	-5.04	6742.757	4.0	40844.190	3.0
293.1621	28.01	-1.48	103653.030	3.5	137753.870	4.5
293.1625	23.01	-.80	20617.050	2.0	54717.850	1.0
293.1670	18.01	-.65	174820.930	.5	208921.200	1.5
293.1699	29.00	-2.16	40974.020	0.0	75083.934	0.0
293.1785	29.01	-3.08	116643.960	3.0	150742.900	3.0
293.1792	14.02	-1.89	214994.650	1.0	249093.500	1.0
293.1799	26.00	-4.13	17726.985	2.0	51825.758	3.0
293.1804	26.00	-2.13	21999.132	4.0	56097.850	3.0
293.1804	28.01	-2.39	101366.140	2.5	135464.860	3.5
293.1816	23.01	-2.41	20617.050	2.0	54715.630	2.0
293.1830	38.00	-2.15	0.000	0.0	34108.390	0.0
293.1831	9.02	-2.66	355981.900	1.5	390080.300	1.5
293.1854	24.00	-4.32	7927.470	2.0	42025.600	3.0
293.1860	23.01	-1.02	18293.870	2.0	52391.940	3.0
293.1862	14.02	-1.67	214995.460	0.0	249093.500	1.0
293.1891	16.01	-2.65	130134.080	2.5	164231.780	2.5
293.1940	45.00	-.88	5646.026	0.0	39753.136	0.0
293.2046	9.02	-1.45	355981.900	1.5	390077.800	2.5
293.2088	28.01	-4.02	101366.140	2.5	135461.550	2.5
293.2106	10.01	-.92	279324.890	1.5	313420.090	2.5
293.2196	10.01	-1.64	279324.890	1.5	313419.040	1.5
293.2210	25.01	-2.86	55371.300	3.0	89465.300	4.0
293.2310	75.00	-.60	15647.559	0.0	49750.365	0.0
293.2327	23.01	.03	20622.990	3.0	54715.630	2.0
293.2333	26.02	-2.42	82382.870	3.0	116475.440	3.0
293.2450	76.00	-.39	15324.929	0.0	49426.107	0.0
293.2583	24.01	-1.10	42898.120	2.5	76987.780	2.5
293.2590	18.01	-2.18	139258.250	.5	173347.830	1.5
293.2630	49.00	-.50	2177.753	0.0	36276.838	0.0
293.2660	41.01	-.10	10727.450	0.0	44826.186	0.0
293.2661	28.00	-8.23	14728.847	0.0	48817.600	1.0
293.2700	73.00	.24	12179.286	0.0	46277.557	0.0
293.2704	24.01	-.39	31168.780	3.5	65257.030	3.5
293.2724	10.00	-4.12	135888.717	1.0	169976.740	0.0
293.2814	26.02	-2.96	84159.550	4.0	118246.520	3.0
293.2929	24.01	-1.58	38563.150	4.5	72648.790	3.5
293.2931	26.02	-4.28	165719.200	4.0	199804.810	4.0
293.2960	69.00	-1.10	0.000	0.0	34095.248	0.0
293.2970	28.01	-4.00	99442.860	4.5	133528.020	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
293.3006	25.01	-3.36	39826.570	1.0	73911.310	1.0
293.3023	26.02	-4.38	82382.870	3.0	116467.410	4.0
293.3044	24.02	-4.87	120765.300	5.0	154849.600	5.0
293.3060	29.00	-1.90	39038.240	0.0	73132.326	0.0
293.3065	25.01	-.06	9472.970	2.0	43557.030	1.0
293.3085	27.01	-4.29	51512.200	3.0	85596.030	2.0
293.3090	90.01	-.67	9678.902	0.0	43772.639	0.0
293.3153	25.01	-1.32	51553.060	5.0	85636.100	6.0
293.3158	24.00	-3.57	32097.360	6.0	66180.340	5.0
293.3199	27.02	-2.35	73214.500	.5	107297.000	1.5
293.3227	23.00	-.21	16572.540	3.5	50654.720	2.5
293.3237	22.00	-4.16	7255.369	2.0	41337.430	2.0
293.3377	25.01	-.39	70940.240	2.0	105020.670	1.0
293.3424	26.00	-4.69	17550.180	3.0	51630.070	2.0
293.3442	25.00	-2.06	25281.040	2.5	59360.720	2.5
293.3481	26.01	-3.17	31999.120	3.5	66078.340	2.5
293.3493	25.00	-4.45	17451.520	2.5	51530.610	3.5
293.3536	22.00	-1.88	0.000	2.0	34078.580	3.0
293.3543	24.00	-3.85	27597.220	3.0	61675.720	2.0
293.3550	73.00	-.53	0.000	0.0	34088.391	0.0
293.3554	26.01	-3.72	44446.890	3.5	78525.270	2.5
293.3558	28.01	-4.53	101366.140	2.5	135444.470	3.5
293.3581	28.01	-4.09	101357.200	4.5	135435.260	4.5
293.3610	24.01	-.36	47354.630	2.5	81432.360	3.5
293.3629	28.01	-4.59	100078.780	1.5	134156.280	1.5
293.3641	26.01	-3.85	66672.390	3.5	100749.750	2.5
293.3689	25.01	-2.06	53781.700	3.0	87858.510	2.0
293.3715	10.01	-1.19	246192.450	2.5	280268.960	2.5
293.3753	25.01	-2.58	52373.180	3.0	86449.240	4.0
293.3785	25.01	-1.38	32818.100	0.0	66893.790	1.0
293.3833	23.01	-.96	14655.630	5.0	48730.760	4.0
293.3873	25.02	.13	174575.870	3.5	208650.540	3.5
293.3879	27.02	-2.73	70934.100	2.5	105008.700	3.5
293.3897	26.01	-4.02	38164.240	2.5	72238.630	2.5
293.3923	25.01	-1.76	47073.560	3.0	81147.650	2.0
293.3954	24.01	.04	31083.110	1.5	65156.840	2.5
293.3980	76.00	-.19	18147.942	0.0	52231.337	0.0
293.4013	27.00	-1.51	15774.040	1.5	49847.080	2.5
293.4019	25.00	-.60	25287.740	3.5	59360.720	2.5
293.4068	11.01	-.06	297639.340	2.0	331711.750	3.0
293.4068	11.01	-.06	297639.340	2.0	331711.750	3.0
293.4080	25.01	-2.17	32856.950	3.0	66929.220	2.0
293.4116	22.00	-6.31	6598.749	2.0	40670.600	2.0
293.4129	24.02	-1.02	66027.800	4.0	100099.500	4.0
293.4180	22.01	-1.66	31113.610	3.5	65184.720	3.5
293.4243	25.01	-2.44	32858.840	2.0	66929.220	2.0
293.4286	10.01	-2.09	246192.450	2.5	280262.330	3.5
293.4287	26.02	-4.50	179904.560	6.0	213974.420	6.0
293.4287	26.02	-4.63	179904.560	7.0	213974.420	6.0
293.4297	24.01	-1.46	35569.020	2.5	69638.770	1.5
293.4300	42.01	.67	11695.340	0.0	45775.018	0.0
293.4303	25.01	-1.87	48317.850	4.0	82387.530	3.0
293.4303	24.00	-2.10	24093.160	2.0	58162.840	2.0
293.4350	58.01	-.95	4436.164	0.0	38515.262	0.0
293.4365	26.00	-3.20	17550.180	3.0	51619.140	3.0
293.4388	23.01	-.95	2604.820	1.0	36673.510	2.0
293.4423	25.01	-1.18	36274.290	2.0	70342.580	3.0
293.4469	9.01	-3.71	254014.830	1.0	288082.590	1.0
293.4475	23.00	-1.53	8412.940	.5	42480.620	.5
293.4487	26.01	-1.78	30764.460	3.5	64832.000	4.5
293.4518	9.01	-4.06	254015.400	2.0	288082.590	1.0
293.4523	28.01	-.72	74300.930	1.5	108368.050	2.5
293.4610	40.01	-.62	2500.383	0.0	36576.461	0.0
293.4631	25.00	-3.09	33825.490	2.5	67891.360	3.5
293.4640	77.00	-.06	6291.287	0.0	40367.017	0.0
293.4640	76.00	-1.10	2661.698	0.0	36737.428	0.0
293.4653	23.00	-2.95	0.000	1.5	34065.610	2.5
293.4661	25.01	-4.66	52383.720	4.0	86449.240	4.0
293.4728	25.01	-2.09	32836.400	1.0	66901.140	2.0
293.4734	23.00	.70	17136.440	6.5	51201.120	6.5
293.4745	26.02	-4.63	145618.390	2.0	179682.940	1.0
293.4749	26.02	-2.98	82410.940	2.0	116475.440	3.0
293.4840	42.00	.31	25407.119	0.0	59480.527	0.0
293.4850	73.00	-.74	9598.245	0.0	43671.537	0.0
293.4990	74.00	-.85	1613.150	0.0	35684.816	0.0
293.5018	25.02	-2.23	174874.500	4.5	208935.880	4.5
293.5095	28.01	-3.03	104503.220	2.5	138563.710	3.5
293.5100	70.01	-.40	34198.789	0.0	68269.178	0.0
293.5143	28.01	-2.80	68965.650	1.5	103025.580	2.5
293.5164	24.01	.27	30864.610	2.5	64924.300	3.5
293.5176	25.02	-2.78	143209.800	2.5	177269.340	1.5
293.5200	42.01	0.00	15808.874	0.0	49878.103	0.0
293.5262	10.01	-1.44	246415.040	1.5	280473.580	1.5
293.5290	41.01	-.36	9436.930	0.0	43505.114	0.0
293.5294	25.02	-4.28	143127.000	.5	177185.180	.5
293.5352	25.01	-1.07	55371.300	3.0	89428.800	3.0
293.5362	25.01	-1.81	32836.400	1.0	66893.790	1.0
293.5426	25.02	-.02	174975.650	5.5	209032.300	5.5
293.5526	25.00	-1.59	30354.210	3.5	64409.690	3.5
293.5539	18.01	-3.04	170530.310	3.5	204585.640	2.5
293.5586	10.01	-2.49	249839.630	.5	283894.410	.5
293.5602	24.00	-4.09	24093.160	2.0	58147.760	3.0
293.5620	74.00	-.38	15324.929	0.0	49389.283	0.0
293.5634	28.01	-1.19	103653.030	3.5	137707.260	3.5
293.5644	25.00	-2.03	25285.430	4.5	59339.550	3.5
293.5682	28.01	-1.07	103653.030	3.5	137706.710	2.5
293.5748	26.02	-3.89	184951.620	3.0	219004.530	4.0
293.5751	26.02	-3.95	89697.520	3.0	123750.390	3.0
293.5805	28.01	-3.43	105439.850	1.5	139492.100	2.5
293.5843	25.00	-4.09	25287.740	3.5	59339.550	3.5
293.5859	25.01	-3.24	49882.150	4.0	83933.770	3.0
293.5879	23.00	-1.08	323.420	3.5	34374.810	3.5
293.5884	25.01	-4.50	31514.350	4.0	65565.680	4.0
293.5954	25.01	-5.00	66644.780	1.0	100695.300	1.0
293.6000	74.00	-1.15	6129.972	0.0	40189.918	0.0
293.6010	26.01	-2.06	33466.500	4.5	67516.370	5.5
293.6022	26.02	-3.99	84671.870	3.0	118721.600	2.0
293.6032	26.00	-2.95	26627.612	4.0	60677.230	5.0
293.6100	24.01	-2.65	31168.780	3.5	65217.610	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
293.6108	28.01	-2.91	100332.090	4.5	134380.820	3.5
293.6118	26.00	-2.52	12968.552	2.0	47017.170	3.0
293.6154	25.00	-1.70	17052.290	4.5	51100.490	4.5
293.6160	22.01	-1.14	30836.520	1.5	64884.650	2.5
293.6189	28.01	-3.50	32523.540	3.5	66571.340	2.5
293.6258	28.01	-3.18	77736.790	4.5	111784.790	3.5
293.6271	25.01	-2.80	33248.320	4.0	67295.160	4.0
293.6296	16.01	-2.31	130134.080	2.5	164180.630	3.5
293.6310	40.01	-.53	3226.301	0.0	37282.651	0.0
293.6346	24.01	-2.94	32603.730	2.5	66649.710	1.5
293.6376	28.01	-2.54	67694.640	2.5	101740.270	3.5
293.6441	23.01	-1.07	39234.050	3.0	73278.920	4.0
293.6461	28.01	-4.90	98969.440	5.5	133014.080	5.5
293.6500	25.01	-1.35	32856.950	3.0	66901.140	2.0
293.6500	42.00	.27	21212.928	0.0	55267.074	0.0
293.6500	75.00	-.24	16534.792	0.0	50588.938	0.0
293.6510	12.01	-.24	35760.880	1.5	69804.950	.5
293.6524	25.01	-1.13	49889.860	3.0	83933.770	3.0
293.6540	27.00	-3.55	1406.840	2.5	35450.560	3.5
293.6562	28.01	-4.79	101357.200	4.5	135400.670	3.5
293.6663	25.01	-1.13	32858.840	2.0	66901.140	2.0
293.6680	77.00	-.48	4032.876	0.0	38084.935	0.0
293.6741	12.00	-2.39	21850.405	0.0	55891.800	1.0
293.6748	28.01	-2.98	71457.740	3.5	105499.050	3.5
293.6769	25.01	-1.26	55759.270	3.0	89800.340	4.0
293.6780	92.01	-1.37	1693.808	0.0	35744.707	0.0
293.6810	76.00	-.72	13953.751	0.0	48004.302	0.0
293.6846	25.01	-3.38	35004.430	3.0	69044.610	2.0
293.6905	26.00	-.75	0.000	4.0	34039.495	4.0
293.6911	26.02	-3.29	87901.870	3.0	121941.290	4.0
293.6926	24.01	-.64	31117.590	2.5	65156.840	2.5
293.6956	28.02	-2.26	121802.800	3.0	155841.700	4.0
293.6982	17.02	-3.65	209042.100	.5	243080.700	1.5
293.6990	76.00	-.17	12663.231	0.0	46711.696	0.0
293.7008	24.02	-2.97	63038.600	1.0	97076.900	1.0
293.7030	23.01	-2.04	18353.890	3.0	52391.940	3.0
293.7074	24.01	-1.71	31219.490	4.5	65257.030	3.5
293.7139	25.02	-3.16	143148.400	1.5	177185.180	.5
293.7140	74.00	.20	19680.435	0.0	53727.161	0.0
293.7175	23.00	-8.27	2424.890	4.5	36461.260	3.5
293.7180	70.01	-.80	36860.487	0.0	70906.749	0.0
293.7213	25.00	-1.91	34250.520	5.5	68286.440	4.5
293.7281	26.00	-3.85	17726.985	2.0	51762.120	2.0
293.7307	22.00	-1.83	170.132	3.0	34204.971	4.0
293.7308	15.01	-2.29	107923.570	2.0	141958.400	1.0
293.7330	41.01	-.13	10485.478	0.0	44530.001	0.0
293.7333	28.01	-4.97	101366.140	2.5	135400.670	3.5
293.7430	90.01	-.20	12824.546	0.0	46867.910	0.0
293.7467	28.01	-4.28	68709.760	.5	102742.740	1.5
293.7474	22.03	.19	196880.500	2.5	230913.400	1.5
293.7595	28.02	-4.40	121412.200	2.0	155443.700	2.0
293.7679	23.02	-4.82	107165.900	1.5	141196.430	2.5
293.7685	23.00	-1.83	137.380	2.5	34167.840	2.5
293.7705	25.01	-.07	49882.150	4.0	83912.380	5.0
293.7719	11.01	-.11	297639.340	2.0	331669.400	2.0
293.7719	11.01	-.11	297639.340	2.0	331669.400	2.0
293.7721	23.00	-2.14	0.000	1.5	34030.040	1.5
293.7788	26.01	-2.86	58666.360	3.5	92695.620	2.5
293.7800	72.01	.15	8307.725	0.0	42346.802	0.0
293.7897	27.02	-3.72	138774.700	2.5	172802.700	2.5
293.7966	24.01	-3.41	32844.920	1.5	66872.120	.5
293.8000	73.01	.74	18470.572	0.0	52507.332	0.0
293.8038	24.00	-1.80	24833.860	3.0	58860.230	2.0
293.8046	25.01	-2.93	30523.450	6.0	64549.720	6.0
293.8070	41.00	-.65	2097.096	0.0	36133.045	0.0
293.8100	90.01	-1.04	9114.300	0.0	43149.901	0.0
293.8109	25.01	-2.66	44315.170	6.0	78340.720	6.0
293.8231	26.01	-3.34	38214.500	1.5	72238.630	2.5
293.8254	23.01	-.96	14556.090	4.0	48579.960	3.0
293.8293	25.00	-3.25	17282.000	3.5	51305.410	2.5
293.8300	42.01	.33	28794.735	0.0	62828.020	0.0
293.8300	83.00	.89	15324.929	0.0	49358.214	0.0
293.8322	23.00	-.16	16728.750	4.5	50751.830	3.5
293.8380	76.00	-.14	18954.517	0.0	52986.875	0.0
293.8425	24.00	-1.83	31987.060	4.0	66008.950	3.0
293.8430	73.00	-.65	12743.888	0.0	46775.667	0.0
293.8450	19.02	-.43	207421.900	2.5	241443.500	2.5
293.8470	77.00	-.83	5726.684	0.0	39758.000	0.0
293.8473	12.00	-1.91	21870.464	1.0	55891.800	1.0
293.8560	26.00	-2.78	22838.320	2.0	56858.650	2.0
293.8657	28.02	-2.80	82172.900	3.0	116192.100	4.0
293.8664	23.00	-3.08	0.000	1.5	34019.120	1.5
293.8681	25.01	-1.80	53698.700	2.0	87717.620	3.0
293.8686	22.01	-1.44	30958.700	2.5	64977.570	3.5
293.8719	26.00	-3.97	17927.378	1.0	51945.860	1.0
293.8767	26.00	-3.38	17927.378	1.0	51945.310	2.0
293.8772	26.02	-4.48	87901.870	3.0	121919.740	3.0
293.8853	24.00	-2.43	20519.600	6.0	54536.530	5.0
293.8856	28.01	-4.41	105439.850	1.5	139456.750	1.5
293.8867	25.01	-1.26	33278.390	3.0	67295.160	4.0
293.8867	26.01	-.70	65556.340	4.5	99573.110	4.5
293.8909	18.01	-3.28	170400.940	2.5	204417.230	1.5
293.8930	25.01	-4.93	66676.560	2.0	100692.600	2.0
293.8950	24.00	-1.23	25106.340	3.0	59122.150	3.0
293.9010	28.01	-3.82	99154.810	4.5	133169.920	3.5
293.9040	74.00	-1.00	6129.972	0.0	40154.688	0.0
293.9050	26.00	-.91	26351.049	5.0	60365.700	6.0
293.9073	26.00	-4.16	17927.378	1.0	51941.760	0.0
293.9074	26.02	-4.35	84671.870	3.0	118686.250	4.0
293.9117	24.01	-1.10	48749.570	.5	82763.450	1.5
293.9131	26.01	-4.21	31999.120	3.5	66012.830	4.5
293.9163	25.01	-1.48	44899.820	3.0	78913.170	2.0
293.9205	23.01	-.17	39403.770	4.0	73416.630	5.0
293.9207	24.00	-4.86	20523.690	4.0	54536.530	5.0
293.9228	24.00	-3.53	20523.940	5.0	54536.530	5.0
293.9260	26.02	-4.67	117521.910	4.0	151534.130	3.0
293.9270	77.00	-.78	7017.204	0.0	41039.257	0.0
293.9280	73.00	-.20	11130.738	0.0	45152.675	0.0
293.9319	25.01	-4.73	66676.560	2.0	100688.100	3.0

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WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
293.9320	25.01	.16	9472.970	2.0	43484.500	2.0
293.9371	24.01	-.83	54625.760	2.5	88636.700	1.5
293.9428	24.00	-3.08	24282.340	4.0	58292.620	4.0
293.9435	25.01	-4.98	55115.800	2.0	89126.000	3.0
293.9447	24.01	.32	50667.330	3.5	84677.390	3.5
293.9487	22.00	-5.16	6661.003	3.0	40670.600	2.0
293.9503	26.01	-2.71	8391.920	2.5	42401.330	1.5
293.9520	70.01	-.55	31375.775	0.0	65394.935	0.0
293.9522	25.00	-2.43	25281.040	2.5	59290.230	3.5
293.9586	26.02	-2.36	82410.940	2.0	116419.390	2.0
293.9615	24.01	-.72	54418.080	.5	88426.200	.5
293.9752	22.01	-.79	31300.920	4.5	65307.450	4.5
293.9797	24.01	-1.77	36101.820	3.5	70107.830	4.5
293.9816	28.01	-3.68	101740.270	3.5	135746.060	3.5
293.9882	26.01	-4.46	44232.510	4.5	78237.540	3.5
293.9892	26.01	-4.41	38164.240	2.5	72169.150	1.5
293.9902	25.00	-.84	25285.430	4.5	59290.230	3.5
293.9934	23.00	-2.20	8476.200	1.5	42480.620	.5
293.9940	44.00	-.40	11695.340	0.0	45709.640	0.0
294.0060	73.00	.22	10566.135	0.0	44579.046	0.0
294.0067	28.01	-2.99	99442.860	4.5	133445.750	4.5
294.0100	42.01	.67	26939.612	0.0	60952.061	0.0
294.0101	25.00	-1.16	25287.740	3.5	59290.230	3.5
294.0128	26.01	-.23	69606.640	3.5	103608.820	4.5
294.0174	25.01	-4.74	66686.450	3.0	100688.100	3.0
294.0220	73.00	-.69	0.000	0.0	34011.060	0.0
294.0226	24.01	.14	42986.730	1.5	76987.780	2.5
294.0346	26.02	-3.11	89697.520	3.0	123697.180	2.0
294.0360	29.01	-3.97	114482.500	2.0	148482.000	3.0
294.0360	44.00	-.75	7420.492	0.0	41429.933	0.0
294.0379	25.02	-4.84	144817.680	3.5	178816.960	2.5
294.0382	22.00	-7.90	6556.828	1.0	40556.070	1.0
294.0438	26.01	-2.92	38214.500	1.5	72213.100	.5
294.0507	28.02	-2.76	82194.300	5.0	116192.100	4.0
294.0540	77.00	.09	15970.189	0.0	49977.548	0.0
294.0580	90.01	-.89	7259.177	0.0	41266.074	0.0
294.0650	10.01	-.75	279422.890	.5	313419.040	1.5
294.0676	25.01	-4.16	66686.450	3.0	100682.300	4.0
294.0739	25.01	-4.50	30523.450	6.0	64518.570	5.0
294.0770	72.00	-.26	0.000	0.0	34004.699	0.0
294.0776	25.00	-1.42	34343.900	4.5	68338.590	3.5
294.0790	58.01	-.82	3548.931	0.0	37553.399	0.0
294.0824	25.00	-2.49	17451.520	2.5	51445.650	1.5
294.0870	25.01	-1.45	54846.000	0.0	88839.600	1.0
294.0895	25.01	-1.73	49882.150	4.0	83875.460	4.0
294.0918	28.01	-4.74	105499.050	3.5	139492.100	2.5
294.0920	26.01	-2.61	65580.090	5.5	99573.110	4.5
294.0980	42.00	0.00	20245.038	0.0	54247.309	0.0
294.0983	24.01	-.69	35356.060	1.5	69348.360	1.5
294.1001	26.01	-2.25	65696.110	4.5	99688.200	3.5
294.1035	25.00	-.75	25265.740	5.5	59257.440	4.5
294.1069	28.01	-3.97	100389.520	2.5	134380.820	3.5
294.1080	77.00	-1.02	10485.478	0.0	44486.593	0.0
294.1125	23.00	-3.57	137.380	2.5	34128.040	3.5
294.1167	25.01	-3.36	51553.060	5.0	85543.230	5.0
294.1175	25.00	-4.90	30419.610	2.5	64409.690	3.5
294.1177	27.00	-2.36	14036.280	1.5	48026.340	.5
294.1190	27.02	-2.61	73540.200	3.5	107530.100	3.5
294.1220	23.01	-1.41	30613.970	4.0	64603.530	3.0
294.1220	42.01	.80	30085.255	0.0	64084.752	0.0
294.1240	74.00	-.58	13227.833	0.0	47227.099	0.0
294.1296	24.00	-4.10	24303.940	3.0	58292.620	4.0
294.1297	23.01	-.76	39234.050	3.0	73222.720	4.0
294.1344	26.00	-1.62	704.003	2.0	34692.130	1.0
294.1350	24.01	-1.67	31168.780	3.5	65156.840	2.5
294.1370	73.00	.06	13227.833	0.0	47225.596	0.0
294.1375	23.01	-.24	3162.800	5.0	37150.570	4.0
294.1434	24.01	-4.73	20512.620	2.5	54499.700	1.5
294.1450	19.02	-1.28	209461.300	.5	243448.200	1.5
294.1485	23.01	-.72	2687.010	2.0	36673.510	2.0
294.1515	26.00	-4.86	23711.443	4.0	57697.590	4.0
294.1540	41.01	.41	3468.273	0.0	37464.071	0.0
294.1560	75.00	-.49	20325.695	0.0	54321.262	0.0
294.1563	25.01	-.85	49889.860	3.0	83875.460	4.0
294.1649	24.00	-3.64	8095.210	3.0	42079.810	4.0
294.1675	25.00	-1.92	17568.480	1.5	51552.780	.5
294.1821	26.02	-4.54	165719.200	4.0	199701.820	3.0
294.1866	27.02	-4.43	139627.200	1.5	173609.300	1.5
294.1866	27.02	-4.43	139627.200	1.5	173609.300	1.5
294.1866	27.02	-4.22	139627.200	1.5	173609.300	1.5
294.1879	24.00	-2.02	7593.160	2.0	41575.100	3.0
294.1886	9.02	-1.33	431432.270	1.5	465414.140	2.5
294.1890	90.01	-1.11	9356.272	0.0	43348.026	0.0
294.1893	18.01	-2.05	158730.210	2.5	192712.000	1.5
294.1920	92.01	.22	5484.711	0.0	39476.118	0.0
294.1931	26.00	-4.42	17726.985	2.0	51708.330	2.0
294.1969	24.01	.28	42898.120	2.5	76879.030	3.5
294.1979	25.01	-2.20	47073.560	3.0	81054.350	2.0
294.1988	22.01	-.39	31113.610	3.5	65094.290	4.5
294.1992	22.00	-.95	0.000	2.0	33980.639	2.0
294.1994	12.00	-1.69	21911.178	2.0	55891.800	1.0
294.2040	70.01	-.72	32182.351	0.0	66172.372	0.0
294.2120	92.01	-1.20	241.973	0.0	34231.069	0.0
294.2140	73.00	-.90	3871.561	0.0	37860.426	0.0
294.2200	76.00	-.58	10082.190	0.0	44070.362	0.0
294.2215	25.01	-1.98	47073.560	3.0	81051.620	3.0
294.2234	7.01	-.51	187091.370	2.0	221069.220	3.0
294.2283	22.01	-1.33	31207.440	2.5	65184.720	3.5
294.2285	25.01	-1.96	71078.180	1.0	105055.430	2.0
294.2298	25.01	-2.44	39808.140	3.0	73785.250	2.0
294.2299	28.01	-3.75	100309.290	5.5	134286.380	4.5
294.2325	23.00	-1.02	553.020	4.5	34529.810	4.5
294.2377	23.01	-1.14	18269.490	1.0	52245.680	2.0
294.2392	23.00	-1.71	0.000	1.5	33976.020	1.5
294.2421	24.01	-3.19	33418.110	2.5	67393.800	3.5
294.2446	27.02	-3.75	91715.100	2.5	125690.500	3.5
294.2478	26.00	-1.62	19788.248	4.0	53763.280	3.0
294.2617	27.00	-2.81	8460.810	2.5	42434.230	2.5
294.2620	90.01	-.50	8307.725	0.0	42291.046	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
294.2635	26.01	-9.85	20516.980	2.5	54490.200	3.5
294.2654	9.03	-.88	556051.000	1.0	590024.000	2.0
294.2658	11.01	-1.61	299193.750	2.0	333166.700	1.0
294.2658	11.01	-1.61	299193.750	2.0	333166.700	1.0
294.2659	19.00	-4.03	0.000	.5	33972.940	1.5
294.2682	25.01	-.96	39808.140	3.0	73780.810	3.0
294.2700	9.00	-3.22	104731.050	1.5	138703.520	2.5
294.2708	28.01	-2.90	100309.290	5.5	134281.660	5.5
294.2711	19.00	-4.33	0.000	.5	33972.340	.5
294.2717	28.01	-3.45	23108.280	2.5	57080.550	3.5
294.2739	25.00	-.96	25285.430	4.5	59257.440	4.5
294.2751	25.01	-.77	39813.380	2.0	73785.250	2.0
294.2760	78.00	.08	30004.597	0.0	63986.301	0.0
294.2802	26.01	-3.19	58631.650	4.5	92602.940	3.5
294.2850	42.00	-.68	11372.710	0.0	45353.375	0.0
294.2850	76.00	-1.04	4113.534	0.0	38094.199	0.0
294.2850	92.01	-1.04	887.233	0.0	34867.898	0.0
294.2858	24.00	-4.22	24093.160	2.0	58063.800	2.0
294.2892	18.01	-.63	138243.550	1.5	172213.800	1.5
294.2914	27.01	-.22	51512.200	3.0	85482.190	4.0
294.2938	26.01	-1.01	66522.320	2.5	100492.040	3.5
294.2939	25.00	-1.96	25287.740	3.5	59257.440	4.5
294.2972	24.00	-2.81	23163.270	0.0	57132.590	1.0
294.2984	24.01	-2.23	33418.110	2.5	67387.300	2.5
294.2989	26.02	-3.73	82410.940	2.0	116380.070	1.0
294.3027	28.01	-4.32	99559.330	2.5	133528.020	3.5
294.3046	23.01	.49	30318.630	4.0	64287.100	5.0
294.3062	26.01	-2.95	65363.660	5.5	99331.950	4.5
294.3101	22.01	-1.35	31490.820	3.5	65458.650	3.5
294.3136	25.01	.17	39813.380	2.0	73780.610	3.0
294.3140	75.00	.08	14115.066	0.0	48092.383	0.0
294.3150	77.00	.28	6291.287	0.0	40268.488	0.0
294.3191	26.02	-2.35	89783.590	4.0	123750.390	3.0
294.3198	23.00	-1.51	0.000	1.5	33966.720	.5
294.3291	7.01	-1.69	187091.370	2.0	221057.010	2.0
294.3299	27.00	-3.42	18389.570	1.5	52355.120	.5
294.3318	28.01	-3.28	100309.290	5.5	134274.620	5.5
294.3347	26.00	-4.46	17726.985	2.0	51691.980	3.0
294.3508	7.01	-.47	187091.370	2.0	221054.500	3.0
294.3511	25.01	-1.00	55115.800	2.0	89078.900	2.0
294.3524	25.00	-2.52	23549.200	2.5	57512.160	1.5
294.3550	25.00	-3.22	17052.290	4.5	51014.950	3.5
294.3581	28.01	-3.92	100309.290	5.5	134271.590	4.5
294.3622	23.01	-1.91	30641.710	3.0	64603.530	3.0
294.3623	24.01	-2.62	33418.110	2.5	67379.920	1.5
294.3640	31.00	.17	806.575	0.0	34778.120	0.0
294.3710	12.02	-.53	536152.000	1.0	570112.800	0.0
294.3760	25.02	-3.72	174975.650	5.5	208935.880	4.5
294.3846	26.00	-2.95	20641.110	4.0	54600.350	3.0
294.3880	23.00	-.19	16917.150	5.5	50876.000	4.5
294.3895	25.01	-.01	39826.570	1.0	73785.250	2.0
294.3909	28.00	-1.04	204.786	3.0	34163.294	2.0
294.3920	44.00	-.50	8469.040	0.0	42437.354	0.0
294.3961	28.01	-3.06	100309.290	5.5	134267.200	6.5
294.4012	22.00	-5.59	6598.749	2.0	40556.070	1.0
294.4059	25.01	-1.96	36274.290	2.0	70231.070	2.0
294.4060	68.00	-1.12	403.288	0.0	34369.987	0.0
294.4132	23.01	-2.34	32040.760	2.0	65996.700	3.0
294.4180	31.00	-.63	806.575	0.0	34771.890	0.0
294.4204	10.00	-3.72	135888.717	1.0	169843.820	2.0
294.4210	42.00	-1.67	0.000	0.0	33964.969	0.0
294.4244	26.01	-3.49	38214.500	1.5	72169.150	1.5
294.4275	28.01	-2.37	100332.090	4.5	134286.380	4.5
294.4320	75.00	-.78	13711.778	0.0	47675.478	0.0
294.4393	26.01	-1.00	13673.210	1.5	47626.140	.5
294.4400	74.00	-.16	2903.671	0.0	36866.448	0.0
294.4463	26.00	-2.95	21038.987	2.0	54991.110	1.0
294.4490	23.01	-.57	18293.870	2.0	52245.680	2.0
294.4560	23.01	-.08	2968.220	4.0	36919.230	3.0
294.4565	27.00	-1.51	17233.680	3.5	51184.630	3.5
294.4584	10.00	-3.60	135888.717	1.0	169839.450	1.0
294.4665	24.02	-1.13	65890.900	3.0	99840.700	3.0
294.4685	28.01	-1.99	100332.090	4.5	134281.660	5.5
294.4710	72.00	-1.35	0.000	0.0	33959.201	0.0
294.4725	23.00	-1.61	8412.940	.5	42362.040	.5
294.4750	78.00	-1.54	6533.259	0.0	40491.999	0.0
294.4812	24.02	-2.11	63172.200	2.0	97120.300	3.0
294.4820	42.01	.99	34924.706	0.0	68882.639	0.0
294.4899	26.00	-2.97	26224.961	3.0	60172.060	4.0
294.4900	9.02	-4.67	430374.750	2.5	464321.840	2.5
294.4946	24.01	-3.73	31083.110	1.5	65029.670	.5
294.4947	24.00	-7.18	8307.570	4.0	42254.110	3.0
294.5069	25.02	-3.55	174874.500	4.5	208819.640	3.5
294.5082	26.00	-4.53	22838.320	2.0	56783.306	3.0
294.5100	2.00	-1.47	159856.000	0.0	193810.704	0.0
294.5102	24.00	-1.31	25177.390	4.0	59122.150	3.0
294.5123	23.01	-2.62	30641.710	3.0	64586.230	2.0
294.5159	17.01	-2.28	127726.900	1.0	161671.000	0.0
294.5260	26.01	-3.31	8391.920	2.5	42334.860	2.5
294.5281	24.01	-1.64	48749.570	.5	82692.260	.5
294.5294	25.00	-2.23	34343.900	4.5	68286.440	4.5
294.5295	28.01	-3.08	100332.090	4.5	134274.620	5.5
294.5299	25.01	-.81	71078.180	1.0	105020.670	1.0
294.5362	28.01	-3.59	99040.750	1.5	132982.510	1.5
294.5371	27.00	-2.96	14036.280	1.5	47977.940	.5
294.5381	28.01	-3.37	93390.060	2.5	127331.600	2.5
294.5390	29.01	-4.50	88926.090	0.0	122867.530	1.0
294.5430	42.00	.25	20809.640	0.0	54760.540	0.0
294.5443	26.01	-4.53	44784.780	2.5	78725.610	1.5
294.5456	22.01	-.34	31300.920	4.5	65241.600	5.5
294.5460	40.01	-.25	7662.464	0.0	41613.018	0.0
294.5558	28.01	-3.32	100332.090	4.5	134271.590	4.5
294.5576	28.01	-2.58	70358.940	4.5	104298.230	4.5
294.5592	25.02	-4.26	144619.190	1.5	178558.300	1.5
294.5654	24.02	-2.18	63420.300	3.0	97358.700	4.0
294.5660	42.00	-.31	11050.080	0.0	44998.329	0.0
294.5690	73.00	-.73	12179.286	0.0	46127.190	0.0
294.5691	11.01	-.72	297252.520	3.0	331190.490	3.0
294.5691	11.01	-.72	297252.520	3.0	331190.490	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
294.5699	25.00	-4.69	23549.200	2.5	57487.080	2.5
294.5718	24.01	-.85	50667.330	3.5	84604.990	2.5
294.5754	26.00	-5.03	11976.239	4.0	45913.480	3.0
294.5763	24.01	-.75	35569.020	2.5	69506.160	3.5
294.5812	26.01	-1.38	58666.360	3.5	92602.940	3.5
294.5833	26.00	-2.82	20874.482	3.0	54810.820	4.0
294.5869	25.01	-1.02	53781.700	3.0	87717.620	3.0
294.5880	41.01	.39	10727.450	0.0	44673.164	0.0
294.5890	92.01	-1.03	1693.808	0.0	35639.407	0.0
294.5900	70.01	.01	34602.076	0.0	68547.560	0.0
294.5941	27.00	-4.29	14399.280	.5	48334.370	1.5
294.6010	42.00	-.15	11372.710	0.0	45316.926	0.0
294.6011	27.00	-3.59	16778.160	2.5	50712.450	2.5
294.6019	26.00	-2.29	19788.248	4.0	53722.440	5.0
294.6044	10.01	-1.65	283894.410	.5	317828.320	.5
294.6092	24.00	-4.40	23163.270	0.0	57096.620	1.0
294.6100	26.00	-4.35	12968.552	2.0	46901.808	1.0
294.6120	41.01	-.54	2984.328	0.0	36927.277	0.0
294.6180	26.01	-3.50	31999.120	3.5	65931.460	3.5
294.6250	90.01	-.88	10485.478	0.0	44426.929	0.0
294.6283	9.01	-3.90	235642.480	1.0	269573.640	1.0
294.6300	70.01	-.48	39844.815	0.0	73785.690	0.0
294.6349	23.01	-2.79	30673.140	2.0	64603.530	3.0
294.6349	24.00	-5.38	8095.210	3.0	42025.600	3.0
294.6385	28.01	-4.82	100332.090	4.5	134262.070	3.5
294.6388	16.02	-2.32	170648.940	3.0	204578.890	2.0
294.6438	25.01	-1.69	52373.180	3.0	86302.550	3.0
294.6455	28.01	-4.39	104646.520	3.5	138575.690	2.5
294.6457	28.01	-2.28	100309.290	5.5	134238.440	6.5
294.6537	23.00	-1.88	137.380	2.5	34065.610	2.5
294.6566	17.01	-1.67	127726.900	1.0	161654.800	1.0
294.6570	75.00	-.31	20325.695	0.0	54263.460	0.0
294.6592	24.01	-2.79	33521.230	3.5	67448.820	4.5
294.6687	24.01	-1.12	54499.700	1.5	88426.200	.5
294.6690	42.01	.91	30085.255	0.0	64021.638	0.0
294.6700	27.00	-3.40	17233.680	3.5	51160.030	2.5
294.6703	24.01	-.57	33418.110	2.5	67344.420	2.5
294.6735	22.01	-1.73	30958.700	2.5	64884.650	2.5
294.6738	10.00	-3.51	135888.717	1.0	169814.630	2.0
294.6760	70.01	-.85	43716.376	0.0	77651.953	0.0
294.6823	24.01	.18	34813.060	5.5	68737.990	5.5
294.6860	26.02	-2.83	82494.880	1.0	116419.390	2.0
294.6900	41.01	-.62	2581.041	0.0	36515.006	0.0
294.6910	73.00	-.45	9194.957	0.0	43128.806	0.0
294.6918	29.01	-2.92	116326.160	3.0	150250.000	2.0
294.6970	77.00	.04	12985.861	0.0	46919.019	0.0
294.6976	25.01	-2.08	52379.380	2.0	86302.550	3.0
294.6980	74.00	-.16	2903.671	0.0	36836.714	0.0
294.6990	44.00	-.16	7985.094	0.0	41918.022	0.0
294.7051	15.01	-1.33	106001.990	1.0	139924.300	2.0
294.7115	26.00	-1.03	26627.612	4.0	60549.180	5.0
294.7126	9.01	-2.79	235642.480	1.0	269563.930	2.0
294.7130	72.01	-.21	15002.299	0.0	48933.615	0.0
294.7186	28.01	-3.09	100332.090	4.5	134252.850	3.5
294.7227	21.01	-1.44	26081.320	2.0	60001.600	3.0
294.7257	26.00	-2.60	12968.552	2.0	45888.494	2.0
294.7275	26.02	-4.52	185003.350	2.0	218923.080	3.0
294.7276	18.01	-2.61	172335.520	2.5	206255.230	2.5
294.7280	42.01	.71	28875.392	0.0	62804.981	0.0
294.7285	24.00	-2.77	24940.610	2.0	58860.230	2.0
294.7286	28.01	-4.05	66571.340	2.5	100490.950	1.5
294.7290	63.01	-2.12	0.000	0.0	33929.474	0.0
294.7299	10.00	-3.00	134459.287	1.0	168378.740	2.0
294.7347	27.01	-5.56	27469.200	5.0	61388.100	4.0
294.7353	25.01	-1.63	52383.720	4.0	86302.550	3.0
294.7358	26.00	-1.28	18378.187	2.0	52296.960	2.0
294.7373	28.02	-4.47	78482.900	1.0	112401.500	1.0
294.7380	74.00	-.63	4758.794	0.0	38687.232	0.0
294.7390	23.01	-3.47	34228.790	3.0	68147.200	4.0
294.7391	28.02	-2.92	98238.200	4.0	132156.600	4.0
294.7438	11.01	-.44	299193.750	2.0	333111.600	1.0
294.7447	28.01	-1.83	24788.200	1.5	58705.950	1.5
294.7481	24.01	.15	50687.630	2.5	84604.990	2.5
294.7496	28.01	-3.36	104646.520	3.5	138563.710	3.5
294.7520	7.01	-1.94	187437.560	1.0	221354.470	2.0
294.7591	24.01	-2.24	33418.110	2.5	67334.200	3.5
294.7631	25.00	-2.47	17637.150	.5	51552.780	.5
294.7652	26.01	-.96	13474.430	2.5	47389.820	1.5
294.7658	25.00	-2.21	34423.270	3.5	68338.590	3.5
294.7718	22.00	-1.93	7255.369	2.0	41170.003	3.0
294.7744	25.01	-3.45	48317.850	4.0	82232.180	5.0
294.7767	7.01	-1.50	187437.560	1.0	221351.630	1.0
294.7800	64.01	-1.32	3064.986	0.0	36988.590	0.0
294.7852	23.01	-1.96	30673.140	2.0	64586.230	2.0
294.7877	26.00	-.77	415.932	3.0	34328.733	3.0
294.7961	26.00	-2.45	22946.810	1.0	56858.650	2.0
294.7963	25.01	-2.13	53805.800	4.0	87717.620	3.0
294.7974	23.01	-1.28	18269.490	1.0	52181.180	1.0
294.7979	23.01	-1.91	39234.050	3.0	73145.680	3.0
294.8010	64.01	-.74	5242.739	0.0	39163.927	0.0
294.8013	28.01	-4.46	66579.710	1.5	100490.950	1.5
294.8080	23.01	-.97	30318.630	4.0	64229.100	5.0
294.8090	92.01	-1.02	241.973	0.0	34162.240	0.0
294.8108	22.00	-7.03	6556.828	1.0	40466.979	2.0
294.8116	18.01	-3.48	172335.520	2.5	206245.570	3.5
294.8165	26.00	-3.84	17927.378	1.0	51836.870	1.0
294.8176	27.00	-3.34	16195.680	.5	50105.050	1.5
294.8204	24.01	-2.24	35569.020	2.5	69478.060	2.5
294.8230	76.00	-.13	5726.684	0.0	39645.340	0.0
294.8256	22.00	-.81	170.132	3.0	34078.580	3.0
294.8287	26.00	-.88	21999.132	4.0	55907.220	5.0
294.8294	27.00	-2.02	16467.900	4.5	50375.910	5.5
294.8295	17.01	-3.81	127726.900	1.0	161634.900	2.0
294.8329	16.02	-.02	172631.270	0.0	206538.870	1.0
294.8375	26.02	-1.61	83161.480	4.0	117068.560	3.0
294.8400	39.00	-.57	0.000	0.0	33916.701	0.0
294.8431	26.00	-.37	21999.132	4.0	55905.560	4.0
294.8479	24.01	-.67	31351.150	2.5	65257.030	3.5
294.8514	23.00	-2.26	8412.940	.5	42318.420	1.5
294.8515	28.01	-2.00	100389.520	2.5	134294.990	2.5
294.8556	28.01	-4.36	100475.820	3.5	134380.820	3.5
294.8574	28.01	-4.72	101357.200	4.5	135261.990	4.5
294.8582	24.02	-3.46	63172.200	2.0	97076.900	1.0
294.8601	28.01	-2.83	66571.340	2.5	100475.820	3.5
294.8610	24.00	-4.62	20520.920	3.0	54425.290	4.0
294.8646	25.01	-3.40	31661.720	3.0	65565.680	4.0
294.8660	27.01	-5.18	27484.300	3.0	61388.100	4.0
294.8688	28.00	-4.18	13521.352	2.0	47424.830	1.0
294.8722	26.00	-4.25	17726.985	2.0	51630.070	2.0
294.8741	26.01	-3.47	66589.170	4.5	100492.040	3.5
294.8750	24.00	-4.06	24299.890	2.0	58202.650	3.0
294.8827	23.01	-1.85	20242.320	4.0	54144.200	4.0
294.8827	24.00	-4.12	24093.160	2.0	57995.040	1.0
294.8851	24.00	-3.37	20523.690	4.0	54425.290	4.0
294.8860	25.01	-1.12	54938.100	1.0	88839.600	1.0
294.8873	24.00	-2.54	20523.940	5.0	54425.290	4.0
294.8940	40.01	.31	7743.122	0.0	41653.612	0.0
294.8957	22.01	-3.82	29544.370	2.5	63444.760	3.5
294.8968	28.01	-1.87	101740.270	3.5	135640.530	4.5
294.8972	26.00	-3.70	17927.378	1.0	51827.590	2.0
294.8973	19.02	-1.51	212725.400	1.5	246625.600	1.5
294.9034	26.02	-3.40	79840.120	7.0	113739.620	6.0
294.9048	10.00	-3.76	134459.287	1.0	168358.630	1.0
294.9060	90.01	-.91	4436.164	0.0	38345.274	0.0
294.9067	25.01	-3.12	48333.060	5.0	82232.180	5.0
294.9090	75.00	-.23	17180.052	0.0	51088.817	0.0
294.9091	25.01	-1.65	32787.600	4.0	66686.450	3.0
294.9103	24.00	-3.89	24303.940	3.0	58202.650	3.0
294.9116	24.01	-1.41	35607.600	3.5	69506.160	3.5
294.9164	26.02	-2.06	105929.160	3.0	139827.170	4.0
294.9169	23.01	-.18	22273.540	1.0	56171.490	1.0
294.9174	26.01	-.59	30388.550	4.5	64286.440	3.5
294.9217	25.01	.31	9472.970	2.0	43370.370	3.0
294.9319	10.00	-3.47	134459.287	1.0	168355.510	1.0
294.9368	24.01	-2.03	35610.500	4.5	69506.160	3.5
294.9436	26.02	-4.59	79844.740	6.0	113739.620	6.0
294.9457	25.01	-1.91	51553.060	5.0	85447.700	5.0
294.9461	24.01	-.52	33694.470	5.5	67589.060	6.5
294.9475	24.00	-2.39	24833.860	3.0	58728.490	4.0
294.9500	44.00	-.05	6452.602	0.0	40356.654	0.0
294.9530	76.00	-.38	2661.698	0.0	36565.405	0.0
294.9608	7.01	-1.72	187461.560	2.0	221354.470	2.0
294.9629	23.00	-2.08	137.380	2.5	34030.040	1.5
294.9636	26.01	-2.32	65931.460	3.5	99824.040	2.5
294.9673	26.00	-3.48	17726.985	2.0	51619.140	3.0
294.9705	23.01	-1.72	18353.890	3.0	52245.680	2.0
294.9730	71.00	-.72	7420.492	0.0	41321.900	0.0
294.9760	77.00	-.02	12985.861	0.0	46886.924	0.0
294.9765	27.01	-3.87	18338.500	1.0	52229.600	2.0
294.9802	24.01	-.55	35607.600	3.5	69498.270	4.5
294.9810	76.00	-.18	10969.423	0.0	44869.912	0.0
294.9829	28.01	-3.43	101740.270	3.5	135630.630	2.5
294.9833	24.01	-3.02	32836.840	3.5	66727.160	2.5
294.9855	7.01	-1.90	187461.560	2.0	221351.630	1.0
294.9856	23.01	-1.87	39403.770	4.0	73293.820	5.0
294.9859	9.02	-.72	384358.540	.5	418248.560	1.5
294.9873	23.00	-.38	17136.440	6.5	51026.300	5.5
294.9880	75.00	-.57	16212.162	0.0	50111.846	0.0
294.9904	21.01	-1.61	30815.650	1.0	64705.160	2.0
294.9920	73.01	.43	14518.354	0.0	48417.578	0.0
294.9936	28.01	-2.62	101740.270	3.5	135629.400	3.5
295.0023	28.01	-2.31	101740.270	3.5	135628.410	4.5
295.0044	28.01	-4.28	92792.080	3.5	126679.980	4.5
295.0055	24.01	-2.69	35610.500	4.5	69498.270	4.5
295.0089	10.01	-2.97	283894.410	.5	317781.790	1.5
295.0095	23.01	-1.27	18293.870	2.0	52181.180	1.0
295.0103	28.01	-3.26	99040.750	1.5	132927.970	1.5
295.0104	24.01	-1.13	33619.130	4.5	67506.340	5.5
295.0212	23.01	-1.22	39612.970	5.0	73498.930	6.0
295.0216	25.02	-4.38	144672.380	2.5	178558.300	1.5
295.0223	23.00	-1.83	8476.200	1.5	42362.040	.5
295.0223	16.02	.32	172785.770	1.0	206671.610	2.0
295.0226	24.02	-3.52	63420.300	3.0	97306.100	2.0
295.0248	24.00	-2.49	24282.340	4.0	58167.890	4.0
295.0268	23.01	-3.20	19191.500	6.0	53076.820	6.0
295.0280	26.02	-2.44	82494.880	1.0	116380.070	1.0
295.0296	9.03	-.88	556316.000	2.0	590201.000	1.0
295.0305	24.00	-4.65	27223.050	2.0	61107.950	2.0
295.0320	70.01	-.69	34844.049	0.0	68738.677	0.0
295.0338	23.01	-.79	2604.820	1.0	36469.340	1.0
295.0349	17.01	-.92	153257.000	2.0	187141.400	2.0
295.0401	22.01	-3.36	31300.920	4.5	65184.720	3.5
295.0402	25.02	-4.90	97239.860	6.5	131123.640	5.5
295.0430	90.01	-.62	8952.985	0.0	42846.350	0.0
295.0488	24.02	-2.26	63038.600	1.0	96921.400	2.0
295.0500	57.01	.86	28391.447	0.0	62264.008	0.0
295.0529	28.01	-2.44	101740.270	3.5	135622.600	3.5
295.0536	24.01	-4.32	32844.920	1.5	66727.160	2.5
295.0580	23.00	-2.92	137.380	2.5	34019.120	1.5
295.0618	28.01	-4.02	99132.780	5.5	133014.080	5.5
295.0671	24.01	-3.17	30150.160	6.5	64030.850	6.5
295.0680	72.00	-.18	2339.068	0.0	36229.561	0.0
295.0711	28.01	-3.39	58493.210	2.5	92373.450	2.5
295.0784	12.02	-1.23	530420.600	1.0	564300.000	0.0
295.0821	26.01	-2.71	38164.240	2.5	72043.210	1.5
295.0830	75.00	-.75	11534.025	0.0	45422.795	0.0
295.0880	27.02	-2.98	139731.000	.5	173609.300	1.5
295.0880	27.02	-2.98	139731.000	.5	173609.300	1.5
295.0880	27.02	-3.94	139731.000	.5	173609.300	1.5
295.0880	41.01	.59	4113.534	0.0	38001.730	0.0
295.0881	24.01	-1.51	47354.630	2.5	81232.910	2.5
295.0922	28.01	-3.39	101740.270	3.5	135618.080	2.5
295.0956	23.01	-3.94	13542.680	3.0	47420.100	4.0
295.0978	25.00	-2.33	17568.480	1.5	51445.650	1.5
295.0984	25.02	.12	174874.500	4.5	208751.600	4.5
295.0993	28.02	-2.18	121566.700	1.0	155443.700	2.0
295.0993	26.01	-1.59	65696.110	4.5	99573.110	4.5
295.1010	24.02	-2.32	66222.700	5.0	100099.500	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
295.1049	10.01	-1.51	249445.990	2.5	283322.350	1.5
295.1054	24.00	-3.56	24286.540	1.0	58162.840	2.0
295.1063	28.01	-4.62	99154.810	4.5	133031.000	4.5
295.1071	25.01	-3.12	36274.290	2.0	70150.390	1.0
295.1092	10.01	-1.00	246597.710	.5	280473.580	1.5
295.1093	26.01	-2.40	25787.600	1.5	59663.450	1.5
295.1154	24.01	-1.00	49006.150	1.5	82881.300	2.5
295.1154	23.01	-1.80	39403.770	4.0	73278.920	4.0
295.1170	25.01	.30	39808.140	3.0	73683.110	4.0
295.1220	77.00	-.87	0.000	0.0	33884.292	0.0
295.1233	11.01	.71	297252.520	3.0	331126.760	4.0
295.1233	11.01	.71	297252.520	3.0	331126.760	4.0
295.1254	8.03	-1.49	602714.500	3.5	636588.500	2.5
295.1352	26.00	-2.05	19788.248	4.0	53661.130	3.0
295.1376	27.01	-4.71	27585.300	1.0	61457.900	0.0
295.1379	24.01	-.53	33521.230	3.5	67393.800	3.5
295.1380	28.01	-3.89	100389.520	2.5	134262.070	3.5
295.1422	24.01	-4.75	32855.090	2.5	66727.160	2.5
295.1464	25.02	-3.91	97023.800	3.5	130895.390	4.5
295.1480	40.01	-.42	3226.301	0.0	37107.608	0.0
295.1481	28.01	-3.16	99040.750	1.5	132912.150	2.5
295.1563	24.01	-.39	35607.600	3.5	69478.060	2.5
295.1601	28.01	-3.71	24835.930	.5	58705.950	1.5
295.1613	26.02	-3.02	82494.880	1.0	116364.760	0.0
295.1672	12.02	-1.82	530420.600	1.0	564289.800	1.0
295.1679	26.02	-3.29	105895.350	1.0	139764.480	2.0
295.1690	71.01	.20	17180.052	0.0	51058.948	0.0
295.1757	22.00	-6.14	6598.749	2.0	40466.979	2.0
295.1884	25.01	-1.70	36364.300	1.0	70231.070	2.0
295.1900	72.00	-.85	10404.820	0.0	44281.306	0.0
295.1905	28.01	-4.69	100389.520	2.5	134256.050	2.5
295.1920	73.00	-.82	1935.780	0.0	35812.037	0.0
295.1945	24.01	-3.04	33521.230	3.5	67387.300	2.5
295.1960	27.02	-3.93	139743.400	2.5	173609.300	1.5
295.1960	27.02	-3.93	139743.400	2.5	173609.300	1.5
295.2002	24.00	-3.92	24282.340	4.0	58147.760	3.0
295.2009	26.02	-4.91	165939.470	5.0	199804.810	4.0
295.2024	28.01	-2.35	100389.520	2.5	134254.690	1.5
295.2060	23.01	-.32	2808.760	3.0	36673.510	2.0
295.2125	23.01	-1.24	20280.190	5.0	54144.200	4.0
295.2129	22.01	-1.51	31113.610	3.5	64977.570	3.5
295.2130	24.00	-3.65	24303.940	3.0	58167.890	4.0
295.2184	28.01	-2.07	100389.520	2.5	134252.850	3.5
295.2193	28.01	-3.35	103663.500	1.5	137526.730	2.5
295.2198	25.00	-3.40	34423.270	3.5	68286.440	4.5
295.2217	24.00	-3.52	24299.890	2.0	58162.840	2.0
295.2240	40.01	-1.01	1290.520	0.0	35163.105	0.0
295.2250	7.01	-2.09	187491.900	3.0	221354.470	2.0
295.2290	74.01	1.21	14840.984	0.0	48712.995	0.0
295.2300	29.01	-3.10	116388.000	2.0	150250.000	2.0
295.2340	76.00	-.41	10969.423	0.0	44840.861	0.0
295.2391	11.01	-.58	297639.340	2.0	331500.290	2.0
295.2461	24.01	-.51	47372.750	1.5	81232.910	2.5
295.2496	15.01	-2.01	105550.450	2.0	139410.200	2.0
295.2500	3.01	-1.10	558779.000	0.0	592648.602	0.0
295.2500	44.00	-1.47	3064.986	0.0	36934.588	0.0
295.2524	10.00	-4.49	135888.717	1.0	169748.150	1.0
295.2538	28.01	-2.33	99154.810	4.5	133014.080	5.5
295.2562	26.00	-4.37	17550.180	3.0	51409.180	4.0
295.2570	24.00	-3.71	24303.940	3.0	58162.840	2.0
295.2589	7.01	-1.73	187437.560	1.0	221296.240	2.0
295.2637	24.01	-3.39	40415.340	.5	74273.480	1.5
295.2680	63.01	-1.40	1613.150	0.0	35480.687	0.0
295.2733	24.00	-1.63	24897.550	4.0	58754.580	5.0
295.2736	26.00	-3.59	11976.239	4.0	45833.240	4.0
295.2847	28.01	-4.36	103663.500	1.5	137519.230	2.5
295.2875	25.01	-.85	32787.600	4.0	66643.010	4.0
295.2890	24.00	-3.62	27223.050	2.0	61078.280	3.0
295.2990	73.01	.34	9598.245	0.0	43462.227	0.0
295.3005	10.01	-2.85	246415.040	1.5	280268.960	2.5
295.3007	25.00	-1.92	17451.520	2.5	51305.410	2.5
295.3066	24.00	-4.81	30858.820	2.0	64712.040	3.0
295.3139	24.01	-2.09	36101.820	3.5	69954.200	2.5
295.3183	25.02	-4.30	97271.760	5.5	131123.640	5.5
295.3318	24.01	-.35	29952.080	.5	63802.410	.5
295.3446	23.01	-1.86	19902.600	0.0	53751.460	1.0
295.3485	26.00	-.39	22249.430	3.0	56097.850	3.0
295.3486	13.01	-4.64	105438.400	1.0	139286.800	2.0
295.3533	24.00	-3.97	24299.890	2.0	58147.760	3.0
295.3534	21.01	-4.23	26081.320	2.0	59929.180	2.0
295.3550	18.01	-4.70	185093.230	4.5	218940.900	4.5
295.3550	18.01	-2.95	185093.230	4.5	218940.900	5.5
295.3556	28.02	-3.69	82826.900	4.0	116674.500	4.0
295.3560	42.00	-.22	16696.107	0.0	50553.554	0.0
295.3681	24.00	-3.23	8307.570	4.0	42153.740	5.0
295.3698	24.01	.12	34631.140	4.5	68477.110	4.5
295.3772	26.01	-1.51	8391.920	2.5	42237.050	3.5
295.3823	23.01	-3.50	32040.760	2.0	65885.300	2.0
295.3834	23.00	-3.03	323.420	3.5	34167.840	2.5
295.3863	28.01	-4.43	73893.730	1.5	107737.810	1.5
295.3886	24.00	-3.36	24303.940	3.0	58147.760	3.0
295.3941	26.00	-.95	704.003	2.0	34547.192	2.0
295.3998	26.02	-1.78	89907.850	4.0	123750.390	3.0
295.4020	41.01	.10	14599.011	0.0	48451.185	0.0
295.4026	23.00	-1.64	8476.200	1.5	42318.420	1.5
295.4048	26.01	-1.49	27314.930	3.5	61156.900	3.5
295.4099	27.00	-2.57	15184.040	2.5	49025.420	1.5
295.4200	72.00	.02	4516.821	0.0	38366.933	0.0
295.4206	25.01	-1.02	32836.400	1.0	66676.560	2.0
295.4221	28.01	-2.65	101740.270	3.5	135580.250	4.5
295.4223	26.01	-2.19	66078.340	2.5	99918.300	1.5
295.4278	25.01	-3.30	30679.240	5.0	64518.570	5.0
295.4316	19.02	-.96	208687.800	1.5	242526.700	.5
295.4338	23.00	-1.50	137.380	2.5	33976.020	1.5
295.4340	75.00	-.53	13711.778	0.0	47560.286	0.0
295.4341	9.02	-1.08	356371.820	2.5	390210.430	3.5
295.4390	92.01	-.97	2258.411	0.0	36106.346	0.0
295.4490	44.00	-.27	7985.094	0.0	41831.883	0.0
295.4530	41.01	.41	14679.669	0.0	48526.000	0.0
295.4569	25.01	-.72	71078.180	1.0	104914.180	0.0
295.4607	25.00	-4.53	25281.040	2.5	59116.600	2.5
295.4628	26.02	-3.72	105929.160	3.0	139764.480	2.0
295.4641	24.01	-1.40	36272.660	4.5	70107.830	4.5
295.4654	26.00	-1.09	18378.187	2.0	52213.207	3.0
295.4674	8.02	-3.97	367952.200	1.0	401787.000	2.0
295.4684	7.01	-1.14	187461.560	2.0	221296.240	2.0
295.4757	22.01	.81	34748.500	4.5	68582.340	5.5
295.4826	27.00	-2.06	16778.160	2.5	50611.220	3.5
295.4862	28.01	-1.52	58493.210	2.5	92325.850	3.5
295.4886	24.01	-2.82	33521.230	3.5	67353.600	4.5
295.4895	26.02	-3.80	79844.740	6.0	113677.010	5.0
295.4901	27.02	-3.52	138970.500	1.5	172802.700	2.5
295.4979	26.00	-3.79	17550.180	3.0	51381.480	4.0
295.5000	76.00	-.12	15082.956	0.0	48923.904	0.0
295.5028	24.00	-1.78	24897.550	4.0	58726.290	4.0
295.5028	7.01	-2.66	187461.560	2.0	221292.310	3.0
295.5030	90.01	-.57	10566.135	0.0	44406.739	0.0
295.5032	26.02	-2.62	83237.860	3.0	117068.560	3.0
295.5056	21.01	-2.44	30815.650	1.0	64646.080	1.0
295.5098	9.02	-.43	384358.540	.5	418188.480	.5
295.5101	28.01	-4.40	93390.060	2.5	127219.970	3.5
295.5120	24.01	-.59	33619.130	4.5	67448.820	4.5
295.5136	25.01	-.87	32856.950	3.0	66686.450	3.0
295.5148	28.01	-2.45	99340.550	3.5	133169.920	3.5
295.5178	25.01	-1.14	52379.380	2.0	86208.400	1.0
295.5192	25.00	-3.32	25287.740	3.5	59116.600	2.5
295.5205	26.01	-3.48	38214.500	1.5	72043.210	1.5
295.5289	22.00	-6.29	6556.828	1.0	40384.580	1.0
295.5302	25.01	-3.20	32858.840	2.0	66686.450	3.0
295.5306	26.02	-3.88	166498.000	3.0	200325.560	4.0
295.5310	70.01	-.63	26616.982	0.0	60454.380	0.0
295.5383	25.01	-1.88	32818.100	0.0	66644.780	1.0
295.5387	18.01	-.85	158730.210	2.5	192556.840	2.5
295.5410	45.00	-1.07	9114.300	0.0	42950.553	0.0
295.5450	41.00	-.12	10162.848	0.0	43998.643	0.0
295.5579	23.01	.34	30306.400	3.0	64130.840	4.0
295.5600	58.01	-.39	7178.519	0.0	41012.597	0.0
295.5600	90.01	-1.02	6936.547	0.0	40770.625	0.0
295.5676	28.01	-3.47	105668.780	2.5	139492.100	2.5
295.5688	24.01	-1.30	33521.230	3.5	67344.420	2.5
295.5725	10.01	-.18	219130.780	2.5	252953.540	1.5
295.5780	40.01	1.05	13953.751	0.0	47785.766	0.0
295.5801	22.01	-2.50	31490.820	3.5	65312.710	2.5
295.5810	23.00	-2.88	553.020	4.5	34374.810	3.5
295.5840	42.01	.66	26294.352	0.0	60125.683	0.0
295.5878	26.00	-.86	26351.049	5.0	60172.060	4.0
295.5884	25.01	-4.12	31661.720	3.0	65482.660	3.0
295.5904	26.00	-.68	26105.908	6.0	59926.620	5.0
295.5940	58.01	-.53	2339.068	0.0	36169.254	0.0
295.5997	26.01	-3.27	66672.390	3.5	100492.040	3.5
295.6001	25.01	-2.56	32856.950	3.0	66676.560	2.0
295.6028	27.02	-4.02	139314.200	.5	173133.500	1.5
295.6035	7.01	-2.16	187491.900	3.0	221311.110	4.0
295.6039	28.01	-3.84	100475.820	3.5	134294.990	2.5
295.6058	23.01	-1.45	39403.770	4.0	73222.720	4.0
295.6060	42.01	.16	11937.313	0.0	45766.126	0.0
295.6073	28.01	-3.14	100389.520	2.5	134208.300	2.5
295.6099	25.00	-1.43	17282.000	3.5	51100.490	4.5
295.6126	28.01	-3.00	66571.340	2.5	100389.520	2.5
295.6133	22.00	-.60	386.874	4.0	34204.971	4.0
295.6166	25.01	-2.88	32858.840	2.0	66676.560	2.0
295.6229	25.01	-1.39	52373.180	3.0	86190.180	2.0
295.6259	27.00	-3.14	13795.520	2.5	47612.180	1.5
295.6261	22.01	-2.36	31490.820	3.5	65307.450	4.5
295.6265	26.02	-4.98	79860.420	5.0	113677.010	5.0
295.6299	26.02	-4.28	166187.500	6.0	200003.700	7.0
295.6311	24.00	-3.71	0.000	3.0	33816.060	4.0
295.6328	24.00	-2.30	7593.160	2.0	41409.030	2.0
295.6457	28.01	-4.35	67031.020	.5	100845.410	.5
295.6542	18.01	-1.85	172335.520	2.5	206148.940	3.5
295.6581	24.01	-3.21	33521.230	3.5	67334.200	3.5
295.6585	22.00	-5.89	6556.828	1.0	40369.760	0.0
295.6587	24.02	-2.31	66027.800	4.0	99840.700	3.0
295.6648	23.01	-1.14	30318.630	4.0	64130.840	4.0
295.6677	24.01	-4.28	33694.470	5.5	67506.340	5.5
295.6687	25.01	-3.00	55759.270	3.0	89571.030	3.0
295.6705	24.00	-4.69	20517.400	2.0	54328.950	3.0
295.6710	58.01	-1.42	0.000	0.0	33821.376	0.0
295.6729	26.00	-4.05	17550.180	3.0	51361.460	3.0
295.6745	23.01	-3.99	13609.000	4.0	47420.100	4.0
295.6771	25.01	-1.53	52379.380	2.0	86190.180	2.0
295.6792	28.01	-3.18	100475.820	3.5	134286.380	4.5
295.6797	22.00	-1.90	170.132	3.0	33980.639	2.0
295.6840	73.01	1.07	15647.559	0.0	49467.448	0.0
295.6854	26.00	-1.05	21715.735	5.0	55525.580	5.0
295.6858	28.01	-2.25	66579.710	1.5	100389.520	2.5
295.6890	41.01	-.40	7823.779	0.0	41643.096	0.0
295.6893	25.01	-3.18	48333.060	5.0	82142.460	6.0
295.6900	42.01	.66	34924.706	0.0	68743.909	0.0
295.6937	27.02	-2.34	138774.700	2.5	172583.600	3.5
295.6937	27.02	-2.34	138774.700	2.5	172583.600	3.5
295.6937	27.02	-2.41	138774.700	2.5	172583.600	3.5
295.6971	25.02	-4.91	143161.500	4.5	176970.010	5.5
295.6972	25.00	-1.79	17637.150	.5	51445.650	1.5
295.6983	25.01	-1.75	32836.400	1.0	66644.780	1.0
295.7010	49.00	-2.26	2177.753	0.0	35995.697	0.0
295.7013	24.00	-3.37	20520.920	3.0	54328.950	3.0
295.7060	28.00	-3.07	13521.352	2.0	47328.850	2.0
295.7129	24.01	-3.01	31117.590	2.5	64924.300	3.5
295.7193	22.00	-5.78	6661.003	3.0	40466.979	2.0
295.7218	24.01	-1.13	31351.150	2.5	65156.840	2.5
295.7256	24.00	-2.67	20523.690	4.0	54328.950	3.0
295.7297	24.01	-2.08	32844.920	1.5	66649.710	1.5
295.7312	23.00	-2.47	323.420	3.5	34128.040	3.5
295.7336	7.01	-1.96	187491.900	3.0	221296.240	2.0
295.7362	28.01	-3.43	100490.950	1.5	134294.990	2.5
295.7366	26.00	-1.23	888.132	1.0	34692.130	1.0
295.7396	23.01	-1.73	39612.970	5.0	73416.630	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
295.7410	27.02	-3.41	73726.600	2.5	107530.100	3.5
295.7439	28.01	-3.81	93528.440	3.5	127331.600	2.5
295.7471	22.03	-.06	196794.800	1.5	230597.600	.5
295.7485	26.00	-1.31	18378.187	2.0	52180.820	1.0
295.7512	23.01	-.71	2687.010	2.0	36489.340	1.0
295.7523	24.01	-.52	44307.440	.5	78109.640	1.5
295.7533	18.01	-2.05	172829.580	1.5	206631.670	2.5
295.7572	24.01	-1.34	36101.820	3.5	69903.460	3.5
295.7576	24.01	-4.14	39684.000	3.5	73485.600	3.5
295.7580	90.01	-.85	4436.164	0.0	38247.591	0.0
295.7600	73.00	-.86	5565.369	0.0	39376.567	0.0
295.7611	25.03	-3.98	152858.200	3.0	186659.400	4.0
295.7666	27.00	-.96	16778.160	2.5	50578.730	3.5
295.7666	26.01	-3.17	38164.240	2.5	71964.810	2.5
295.7680	7.01	-.79	187491.900	3.0	221292.310	3.0
295.7748	21.01	-4.03	30815.650	1.0	64615.280	0.0
295.7759	26.01	-4.09	45044.210	1.5	78843.720	.5
295.7776	25.01	-3.46	48317.850	4.0	82117.160	5.0
295.7844	25.01	-1.84	53781.700	3.0	87580.230	4.0
295.7880	73.01	-.14	9678.902	0.0	43486.900	0.0
295.7910	75.01	1.02	23229.366	0.0	57037.021	0.0
295.8000	44.00	-.57	7985.094	0.0	41791.720	0.0
295.8020	72.00	-.15	5565.369	0.0	39371.767	0.0
295.8047	25.01	-2.77	48435.960	6.0	82232.180	5.0
295.8057	28.02	-2.31	97996.300	3.0	131792.400	4.0
295.8068	25.01	-.18	52653.270	4.0	86449.240	4.0
295.8086	28.01	-2.85	100475.820	3.5	134271.590	4.5
295.8103	26.01	-1.15	58631.650	4.5	92427.220	4.5
295.8187	24.01	-2.46	32855.090	2.5	66649.710	1.5
295.8272	26.02	-1.93	84369.920	2.0	118163.560	2.0
295.8280	28.00	-2.08	15609.861	2.0	49403.420	1.0
295.8288	21.01	-1.86	26081.320	2.0	59874.790	1.0
295.8296	22.01	-1.60	31300.920	4.5	65094.290	4.5
295.8301	26.00	-4.63	24180.848	3.0	57974.160	2.0
295.8340	76.00	-.41	14276.381	0.0	48079.122	0.0
295.8345	28.01	-4.73	100490.950	1.5	134283.760	.5
295.8360	25.00	-3.09	23719.520	1.5	57512.160	1.5
295.8368	26.01	-4.51	50076.100	1.5	83868.650	2.5
295.8416	28.02	-3.83	79143.300	2.0	112935.300	3.0
295.8452	26.00	-4.81	21999.132	4.0	55790.720	3.0
295.8459	25.01	-3.14	71263.920	1.0	105055.430	2.0
295.8463	25.01	-4.57	66901.140	2.0	100692.600	2.0
295.8469	17.02	-3.76	205938.500	1.5	239729.900	2.5
295.8534	26.01	-1.55	44446.890	3.5	78237.540	3.5
295.8538	24.01	-1.90	35707.660	5.5	69498.270	4.5
295.8597	23.01	.26	30267.460	2.0	64057.390	3.0
295.8689	25.01	-1.61	32836.400	1.0	66625.280	0.0
295.8780	28.01	-3.87	100592.980	3.5	134380.820	3.5
295.8857	25.01	-4.37	66901.140	2.0	100688.100	3.0
295.8910	63.00	-1.17	0.000	0.0	33796.229	0.0
295.8920	28.01	-2.90	100475.820	3.5	134262.070	3.5
295.8934	25.01	-2.18	36364.300	1.0	70150.390	1.0
295.8936	25.01	-1.80	32856.950	3.0	66643.010	4.0
295.8945	24.00	-4.39	30965.460	3.0	64751.420	4.0
295.8947	25.01	-1.35	32858.840	2.0	66644.780	1.0
295.8956	22.00	-5.96	6598.749	2.0	40384.580	1.0
295.8977	22.01	.72	34543.360	3.5	68328.950	4.5
295.9058	24.00	-2.70	24940.610	2.0	58725.280	1.0
295.9100	78.00	-.60	15405.586	0.0	49199.645	0.0
295.9108	25.01	-2.81	48333.060	5.0	82117.160	5.0
295.9174	27.00	-3.99	7442.410	3.5	41225.760	4.5
295.9205	17.02	-2.99	205946.900	2.5	239729.900	2.5
295.9274	10.01	-4.22	313461.970	4.5	347244.170	4.5
295.9276	10.01	-4.09	313461.990	5.5	347244.170	4.5
295.9277	10.01	-3.74	313461.970	4.5	347244.130	5.5
295.9279	10.01	-2.29	313461.990	5.5	347244.130	5.5
295.9294	25.01	-3.23	48317.850	4.0	82099.820	4.0
295.9384	26.00	-4.82	17927.378	1.0	51708.330	2.0
295.9447	28.01	-3.20	100475.820	3.5	134256.050	2.5
295.9470	63.01	-2.37	0.000	0.0	33789.834	0.0
295.9480	42.00	.21	20003.065	0.0	53792.785	0.0
295.9497	25.01	-2.20	49291.310	3.0	83070.970	2.0
295.9525	24.01	-.53	35569.020	2.5	69348.360	1.5
295.9548	23.01	-1.83	20089.560	1.0	53868.630	2.0
295.9598	26.01	-.93	27314.930	3.5	61093.440	2.5
295.9636	9.02	-1.61	357479.350	1.5	391257.420	2.5
295.9651	27.01	-3.29	13261.100	2.0	47039.000	3.0
295.9677	8.02	.12	290956.620	1.0	324734.220	2.0
295.9707	24.00	-3.91	24286.540	1.0	58063.800	2.0
295.9727	28.01	-3.23	100475.820	3.5	134252.850	3.5
295.9740	44.00	-1.07	7420.492	0.0	41207.244	0.0
295.9780	26.00	-4.30	12968.552	2.0	46744.975	3.0
295.9800	42.00	-.49	11775.998	0.0	45562.065	0.0
295.9814	25.02	-1.01	174874.500	4.5	208650.540	3.5
295.9822	25.02	-1.30	174975.650	5.5	208751.600	4.5
295.9825	26.01	-.70	44915.070	3.5	78690.980	2.5
295.9835	27.01	-4.03	27484.300	3.0	61260.100	2.0
295.9852	26.01	-.35	65556.340	4.5	99331.950	4.5
295.9867	23.01	-4.66	32040.760	2.0	65816.200	1.0
295.9889	28.00	-3.49	28068.091	4.0	61843.280	5.0
295.9934	24.01	-1.16	33619.130	4.5	67393.800	3.5
295.9955	25.01	-.88	53805.800	4.0	87580.230	4.0
295.9970	41.00	-1.34	2097.096	0.0	35881.222	0.0
295.9972	26.02	-4.49	105906.230	2.0	139680.470	3.0
295.9986	26.00	-.13	21715.735	5.0	55489.810	6.0
296.0109	11.01	-.32	299193.750	2.0	332966.420	2.0
296.0109	11.01	-.32	299193.750	2.0	332966.420	2.0
296.0111	28.01	-4.66	101740.270	3.5	135512.920	2.5
296.0140	74.00	-.30	13227.833	0.0	47010.019	0.0
296.0147	24.00	-4.87	8307.570	4.0	42079.810	4.0
296.0210	63.01	-1.29	1613.150	0.0	35394.537	0.0
296.0216	26.01	-4.19	44753.820	3.5	78525.270	2.5
296.0240	18.01	-1.16	174820.930	.5	208592.110	.5
296.0240	42.01	-.07	13389.148	0.0	47170.193	0.0
296.0251	26.02	-2.66	84671.870	3.0	118442.920	3.0
296.0252	22.01	-4.38	31113.610	3.5	64884.650	2.5
296.0269	18.01	-1.37	174820.930	.5	208591.780	1.5
296.0295	26.00	-1.38	20037.815	0.0	53808.370	1.0
296.0332	22.01	-.52	31207.440	2.5	64977.570	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
296.0341	25.01	-.83	44315.170	6.0	78085.200	5.0
296.0449	25.01	-4.93	55696.500	4.0	89465.300	4.0
296.0455	10.01	-1.96	283894.410	.5	317663.130	1.5
296.0457	12.02	-1.67	530962.900	0.0	564731.600	1.0
296.0478	24.00	-3.28	23933.900	4.0	57702.360	5.0
296.0525	18.01	-3.92	172335.520	2.5	206103.450	1.5
296.0557	25.00	-4.40	23719.520	1.5	57487.080	2.5
296.0623	25.02	-4.65	144619.190	1.5	178386.000	.5
296.0627	28.01	-3.94	100389.520	2.5	134156.280	1.5
296.0627	25.01	-2.65	48333.060	5.0	82099.820	4.0
296.0774	7.01	-.74	187461.560	2.0	221226.650	3.0
296.0777	23.01	-1.20	19112.930	4.0	52877.990	5.0
296.0820	72.01	.03	17260.709	0.0	51035.136	0.0
296.0836	28.00	-3.13	28068.091	4.0	61832.470	4.0
296.0870	40.00	-.41	0.000	0.0	33773.857	0.0
296.0872	10.01	-3.78	313480.200	3.5	347244.170	4.5
296.0876	10.01	-2.37	313480.240	4.5	347244.170	4.5
296.0877	24.00	-3.83	24299.890	2.0	58063.800	2.0
296.0879	10.01	-3.99	313480.240	4.5	347244.130	5.5
296.0892	28.01	-3.11	100490.950	1.5	134254.690	1.5
296.0930	64.01	-1.03	3064.986	0.0	36838.159	0.0
296.0940	27.01	-3.48	27585.300	1.0	61348.500	1.0
296.0974	13.02	-1.75	167612.750	2.5	201375.560	1.5
296.1005	13.02	-2.90	167612.750	2.5	201375.200	2.5
296.1010	76.00	-.89	4113.534	0.0	37885.794	0.0
296.1060	13.02	-1.60	167613.370	3.5	201375.200	2.5
296.1083	28.01	-3.25	100619.260	4.5	134380.820	3.5
296.1098	26.01	-2.63	44929.590	2.5	78690.960	2.5
296.1145	26.01	-2.38	58666.360	3.5	92427.220	4.5
296.1165	29.00	-1.40	11211.395	0.0	44981.887	0.0
296.1167	25.01	-2.75	33248.320	4.0	67008.930	3.0
296.1222	25.01	-1.08	55759.270	3.0	89519.250	2.0
296.1233	24.00	-3.76	24303.940	3.0	58063.800	2.0
296.1272	26.01	-2.66	8680.470	1.5	42439.880	.5
296.1328	28.01	-4.75	100490.950	1.5	134249.720	1.5
296.1352	26.00	-5.57	12968.552	2.0	46727.055	2.0
296.1387	15.04	-.59	414458.700	3.5	448216.800	3.5
296.1387	15.04	.96	414458.700	3.5	448216.800	4.5
296.1387	15.04	.85	414458.700	2.5	448216.800	3.5
296.1420	28.01	-4.68	72375.420	1.5	106133.140	1.5
296.1434	26.02	-4.80	179748.170	5.0	213505.730	6.0
296.1457	24.01	-1.77	49006.150	1.5	82763.450	1.5
296.1505	25.01	-3.77	71263.920	1.0	105020.670	1.0
296.1506	26.01	-1.91	65931.460	3.5	99688.200	3.5
296.1527	27.01	-3.26	27484.300	3.0	61240.800	3.0
296.1595	9.02	-2.18	355981.900	1.5	389737.630	.5
296.1600	25.00	-3.24	27201.540	2.5	60957.210	3.5
296.1613	24.01	-1.55	31168.780	3.5	64924.300	3.5
296.1615	9.02	-.03	384493.060	1.5	418248.560	1.5
296.1689	25.01	-.94	32787.600	4.0	66542.260	5.0
296.1690	44.00	-.16	11372.710	0.0	45137.216	0.0
296.1705	26.00	-3.06	17550.180	3.0	51304.650	4.0
296.1716	24.01	-1.24	33694.470	5.5	67448.820	4.5
296.1727	24.01	-.28	30307.600	1.5	64061.820	1.5
296.1740	75.00	-.42	14115.066	0.0	47879.002	0.0
296.1756	24.00	-1.55	25106.340	3.0	58860.230	2.0
296.1800	72.01	-.09	12824.546	0.0	46587.798	0.0
296.1826	16.02	-.24	172785.770	1.0	206538.870	1.0
296.1863	26.00	-4.52	12560.933	3.0	46313.610	2.0
296.1899	24.01	-3.98	39684.000	3.5	73436.270	2.5
296.1935	26.01	-1.86	65580.090	5.5	99331.950	4.5
296.1975	24.01	-3.31	32603.730	2.5	66355.130	1.5
296.1983	26.02	-4.97	105929.160	3.0	139680.470	3.0
296.2011	23.01	-.95	30306.400	3.0	64057.390	3.0
296.2080	24.01	-2.32	33619.130	4.5	67369.330	5.5
296.2080	25.02	-2.49	100001.300	2.5	133751.500	3.5
296.2110	26.00	-2.36	11976.239	4.0	45726.104	5.0
296.2150	76.00	-.64	4113.534	0.0	37872.797	0.0
296.2168	24.02	-2.03	63172.200	2.0	96921.400	2.0
296.2175	26.01	-1.80	67000.630	2.5	100749.750	2.5
296.2270	75.00	-.46	11534.025	0.0	45291.920	0.0
296.2330	76.00	-.01	15324.929	0.0	49084.140	0.0
296.2398	24.00	-4.86	30965.460	3.0	64712.040	3.0
296.2475	26.01	-2.19	66078.340	2.5	99824.040	2.5
296.2516	25.01	-2.21	67744.080	6.0	101489.310	5.0
296.2520	70.01	-.34	34198.789	0.0	67953.835	0.0
296.2624	24.03	-2.45	127202.000	4.5	160946.000	3.5
296.2651	28.02	-4.42	78657.800	0.0	112401.500	1.0
296.2680	40.01	-.17	2823.013	0.0	36576.236	0.0
296.2691	24.01	-4.31	39742.360	2.5	73485.600	3.5
296.2721	27.00	-4.27	16467.900	4.5	50210.800	4.5
296.2783	23.00	-1.34	323.420	3.5	34065.610	2.5
296.2808	23.01	-2.60	39403.770	4.0	73145.680	3.0
296.2870	75.00	-.24	22019.503	0.0	55770.562	0.0
296.2885	26.00	-3.24	26623.726	2.0	60364.760	3.0
296.2914	27.01	-5.26	17771.500	3.0	51512.200	3.0
296.2933	26.01	-1.71	44784.780	2.5	78525.270	2.5
296.2974	7.01	-.36	187491.900	3.0	221231.920	4.0
296.2984	23.00	-3.54	8578.520	2.5	42318.420	1.5
296.2990	77.00	-.32	11775.998	0.0	45525.690	0.0
296.3060	73.00	-.91	10888.765	0.0	44637.660	0.0
296.3085	23.01	-4.86	30318.630	4.0	64057.390	3.0
296.3201	19.00	-3.88	0.000	.5	33737.440	1.5
296.3223	26.02	-3.77	83237.860	3.0	116975.050	2.0
296.3226	26.00	-.98	26627.612	4.0	60364.760	3.0
296.3236	10.01	-.14	274364.570	2.5	308101.610	1.5
296.3245	23.01	-.33	20980.920	2.0	54717.850	1.0
296.3245	25.00	-2.00	17568.480	1.5	51305.410	2.5
296.3261	26.01	-3.30	64832.000	4.5	98568.750	3.5
296.3261	24.00	-.84	25038.610	5.0	58775.360	6.0
296.3266	10.01	-1.28	274364.570	2.5	308101.270	2.5
296.3275	19.00	-4.18	0.000	.5	33736.600	.5
296.3320	71.01	.20	11695.340	0.0	45441.274	0.0
296.3320	73.00	-.35	1935.780	0.0	35681.714	0.0
296.3424	24.02	-1.95	63038.600	1.0	96773.500	1.0
296.3433	24.00	-3.53	20517.400	2.0	54252.190	2.0
296.3433	25.01	-2.08	67766.510	2.0	101501.300	3.0
296.3436	7.01	-1.58	187491.900	3.0	221226.650	3.0
296.3440	23.01	-1.83	20980.920	2.0	54715.630	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
296.3461	24.01	-1.18	33619.130	4.5	67353.600	4.5
296.3562	25.01	-2.78	67766.510	2.0	101499.840	2.0
296.3595	25.00	-1.53	17282.000	3.5	51014.950	3.5
296.3610	90.01	-1.68	4032.876	0.0	37775.507	0.0
296.3620	25.02	-4.97	115780.230	2.5	149512.900	1.5
296.3634	26.02	-4.38	179725.310	6.0	213457.820	7.0
296.3636	28.01	-4.85	100475.820	3.5	134208.300	2.5
296.3652	25.01	-.58	55696.500	4.0	89428.800	3.0
296.3654	25.01	-2.35	71323.150	2.0	105055.430	2.0
296.3669	26.00	-4.83	18378.187	2.0	52110.300	1.0
296.3671	24.01	-2.09	30298.770	5.5	64030.850	6.5
296.3680	41.00	-.69	4920.109	0.0	38661.943	0.0
296.3720	44.00	-.89	6452.602	0.0	40193.981	0.0
296.3743	24.00	-2.81	20520.920	3.0	54252.190	2.0
296.3778	28.00	-1.51	29084.478	4.0	62815.340	5.0
296.3790	42.01	.24	12340.601	0.0	46081.183	0.0
296.3807	25.01	-3.08	33278.390	3.0	67008.930	3.0
296.3826	26.00	-3.96	21715.735	5.0	55446.060	4.0
296.3887	26.01	-.89	65363.660	5.5	99093.290	5.5
296.3910	73.00	-.58	9194.957	0.0	42934.173	0.0
296.3943	23.01	-5.27	18353.890	3.0	52082.880	4.0
296.4060	76.00	-.52	5726.684	0.0	39464.193	0.0
296.4110	90.01	-1.13	6129.972	0.0	39866.912	0.0
296.4113	28.01	-2.56	99442.860	4.5	133169.920	3.5
296.4131	26.01	-2.17	27314.930	3.5	61041.780	2.5
296.4217	26.00	-2.32	20874.482	3.0	54600.350	3.0
296.4223	17.01	-3.59	112608.000	1.0	146333.800	2.0
296.4230	26.01	-3.56	50142.930	2.5	83868.650	2.5
296.4241	28.01	-3.92	106283.160	2.5	140008.760	3.5
296.4271	25.01	-4.11	55371.300	3.0	89096.560	4.0
296.4399	25.01	-1.28	55115.800	2.0	88839.600	1.0
296.4425	25.01	-1.93	67744.080	6.0	101467.580	6.0
296.4487	26.00	-3.65	19552.474	1.0	53275.270	2.0
296.4513	25.01	-2.29	36427.890	0.0	70150.390	1.0
296.4520	74.00	-.92	2903.671	0.0	36635.945	0.0
296.4549	28.01	-2.79	70358.940	4.5	104081.040	4.5
296.4557	17.01	-4.13	112608.000	1.0	146330.000	1.0
296.4581	25.01	-4.05	31760.930	2.0	65482.660	3.0
296.4581	26.01	-4.23	31387.980	2.5	65109.710	3.5
296.4620	76.00	-.31	15324.929	0.0	49056.065	0.0
296.4621	28.01	-4.87	101740.270	3.5	135461.550	2.5
296.4622	26.01	-1.73	13904.870	.5	47626.140	.5
296.4658	26.01	-3.08	8680.470	1.5	42401.330	1.5
296.4716	23.01	-.60	30306.400	3.0	64026.600	4.0
296.4750	70.01	-.09	30085.255	0.0	63814.912	0.0
296.4800	16.02	.55	173191.730	2.0	206910.970	3.0
296.4800	58.01	-.18	5646.026	0.0	39375.114	0.0
296.4839	6.00	-6.84	16.400	1.0	33735.200	2.0
296.4880	72.00	-.13	2339.068	0.0	36067.246	0.0
296.4906	24.00	-6.60	8307.570	4.0	42025.600	3.0
296.4911	24.00	-4.09	24277.060	0.0	57995.040	1.0
296.4931	25.01	-3.49	70150.390	1.0	103868.140	1.0
296.4936	28.00	-2.81	15609.861	2.0	49327.560	3.0
296.4960	39.00	-.56	483.945	0.0	34211.213	0.0
296.4960	42.01	.41	28714.077	0.0	62441.345	0.0
296.4966	28.01	-4.72	100490.950	1.5	134208.300	2.5
296.5001	23.01	-2.49	39234.050	3.0	72951.000	4.0
296.5031	26.01	-1.47	13673.210	1.5	47389.820	1.5
296.5082	22.01	-4.37	10024.740	2.5	43740.770	3.5
296.5088	24.00	-1.80	25038.610	5.0	58754.580	5.0
296.5110	75.00	.28	14115.066	0.0	47840.628	0.0
296.5130	73.01	.01	0.000	0.0	33725.334	0.0
296.5160	44.00	-.44	2016.438	0.0	35741.431	0.0
296.5167	24.01	-1.64	33619.130	4.5	67334.200	3.5
296.5200	77.00	-1.06	9759.560	0.0	43484.098	0.0
296.5210	68.00	-.54	7097.862	0.0	40822.286	0.0
296.5220	22.00	-.53	8492.421	1.0	42206.880	2.0
296.5247	26.00	-.93	21715.735	5.0	55429.890	5.0
296.5256	26.00	-1.55	978.076	0.0	34692.130	1.0
296.5270	42.01	.21	12824.546	0.0	46548.288	0.0
296.5270	58.01	-.36	5081.424	0.0	38805.166	0.0
296.5287	26.01	-2.90	50157.610	4.5	83871.310	4.5
296.5312	25.01	-2.89	56883.380	1.0	90596.800	2.0
296.5328	12.01	-2.11	80619.500	.5	114332.740	1.5
296.5399	26.01	-2.00	27620.390	2.5	61332.820	1.5
296.5430	64.01	-.75	4758.794	0.0	38480.716	0.0
296.5480	41.00	-.39	4920.109	0.0	38641.463	0.0
296.5490	90.01	-.77	6613.917	0.0	40335.157	0.0
296.5540	73.00	-.66	1935.780	0.0	35656.451	0.0
296.5560	17.02	.20	188390.100	2.5	222100.700	1.5
296.5585	22.01	-2.87	29734.450	3.5	63444.760	3.5
296.5630	8.02	-2.42	332777.100	1.0	366486.910	1.0
296.5633	22.00	-.68	8436.618	0.0	42146.390	1.0
296.5641	26.02	-2.95	83358.880	2.0	117068.560	3.0
296.5703	22.00	-.09	8602.340	2.0	42311.310	3.0
296.5742	11.01	-.68	298169.140	1.0	331877.670	1.0
296.5745	24.00	-4.46	24286.540	1.0	57995.040	1.0
296.5747	9.02	-2.44	356371.820	2.5	390080.300	1.5
296.5760	75.00	.32	11695.340	0.0	45413.510	0.0
296.5789	9.03	-.41	556316.000	2.0	590024.000	2.0
296.5791	23.01	-1.75	30318.630	4.0	64026.600	4.0
296.5824	25.01	-.87	55371.300	3.0	89078.900	2.0
296.5855	21.00	-.88	0.000	1.5	33707.250	2.5
296.5920	73.01	-.90	0.000	0.0	33716.351	0.0
296.5921	25.01	-2.26	48435.960	6.0	82142.460	6.0
296.5962	25.01	-.01	55759.270	3.0	89465.300	4.0
296.5967	9.02	-2.95	356371.820	2.5	390077.800	2.5
296.6018	24.01	-3.32	30143.720	5.5	63849.110	5.5
296.6052	28.01	-4.25	24788.200	1.5	58493.210	2.5
296.6069	24.01	-.39	31219.490	4.5	64924.300	3.5
296.6123	28.01	-4.08	101740.270	3.5	135444.470	3.5
296.6123	22.00	-6.78	6598.749	2.0	40302.950	3.0
296.6198	26.00	-2.04	19390.165	6.0	53093.517	6.0
296.6256	26.00	-3.54	17927.378	1.0	51630.070	2.0
296.6316	28.01	-4.33	100592.980	3.5	134294.990	2.5
296.6364	28.01	-2.28	104081.040	4.5	137782.500	4.5
296.6382	25.00	-1.52	27201.540	2.5	60902.800	3.5
296.6493	24.02	-2.41	63420.300	3.0	97120.300	3.0
296.6570	74.00	.03	17018.737	0.0	50727.701	0.0
296.6660	92.01	-1.00	1693.808	0.0	35401.749	0.0
296.6662	25.01	-3.93	30795.750	4.0	64493.830	4.0
296.6711	25.01	-2.34	71323.150	2.0	105020.670	1.0
296.6758	26.01	-2.88	31999.120	3.5	65696.110	4.5
296.6833	25.02	-3.88	145643.450	2.5	179339.590	2.5
296.6844	24.00	-2.93	7593.160	2.0	41289.170	1.0
296.6870	24.00	-4.12	31106.370	4.0	64802.080	5.0
296.6888	28.01	-1.98	104081.040	4.5	137776.550	3.5
296.6896	9.02	-.76	384493.060	1.5	418188.480	.5
296.6900	26.00	-.54	0.000	4.0	33695.378	5.0
296.6920	24.00	-3.87	24299.890	2.0	57995.040	1.0
296.6930	72.00	.02	6533.259	0.0	40238.132	0.0
296.7029	24.01	-4.23	39742.360	2.5	73436.270	2.5
296.7030	22.01	-2.72	31490.820	3.5	65184.720	3.5
296.7070	74.00	-.27	17018.737	0.0	50722.020	0.0
296.7074	28.01	-3.60	100592.980	3.5	134286.380	4.5
296.7084	25.00	-4.14	23818.870	.5	57512.160	1.5
296.7184	10.01	.01	274409.110	3.5	308101.270	2.5
296.7215	6.00	-6.36	43.400	2.0	33735.200	2.0
296.7223	22.00	-1.90	386.874	4.0	34078.580	3.0
296.7230	72.01	-.14	11856.655	0.0	45558.121	0.0
296.7239	28.01	-2.59	93528.440	3.5	127219.970	3.5
296.7250	75.00	-.43	16534.792	0.0	50236.031	0.0
296.7280	80.00	.47	37425.089	0.0	71125.987	0.0
296.7334	28.01	-2.51	99340.550	3.5	133031.000	4.5
296.7344	23.01	-3.98	13490.840	2.0	47181.170	3.0
296.7400	30.02	-4.90	260613.100	5.0	294302.800	4.0
296.7402	24.00	-2.45	25038.610	5.0	58728.290	4.0
296.7413	25.01	-3.53	67811.750	3.0	101501.300	3.0
296.7440	24.01	-.77	49351.960	2.5	83041.200	3.5
296.7485	28.01	-2.63	99040.750	1.5	132729.480	2.5
296.7499	25.01	-2.01	52373.180	3.0	86061.750	3.0
296.7542	23.01	-1.58	13609.000	4.0	47297.080	5.0
296.7542	25.01	-3.31	67811.750	3.0	101499.840	2.0
296.7550	74.00	-.40	15324.929	0.0	49022.761	0.0
296.7613	25.01	-1.92	67811.750	3.0	101499.030	4.0
296.7621	25.02	-4.89	140776.880	5.5	174464.070	4.5
296.7639	24.00	-.41	8095.210	3.0	41782.190	4.0
296.7649	28.00	-3.03	13521.352	2.0	47208.228	1.0
296.7683	23.01	-2.80	19191.500	6.0	52877.990	5.0
296.7693	26.02	-4.45	179876.710	4.0	213563.080	5.0
296.7716	24.01	-.84	49006.150	1.5	82692.260	.5
296.7745	25.01	-4.04	70150.390	1.0	103836.170	2.0
296.7780	28.01	-4.66	99132.780	5.5	132818.160	4.5
296.7807	26.00	-4.49	20874.482	3.0	54559.560	3.0
296.7825	23.01	-3.35	20242.320	4.0	53927.190	3.0
296.7958	26.01	-3.39	50187.950	3.5	83871.310	4.5
296.8013	26.02	-3.56	88663.870	4.0	122346.610	3.0
296.8014	12.01	-2.81	80650.020	1.5	114332.740	1.5
296.8020	12.01	-1.86	80650.020	1.5	114332.680	2.5
296.8040	75.00	-.33	14115.066	0.0	47807.334	0.0
296.8046	25.01	-1.43	52379.380	2.0	86061.750	3.0
296.8131	26.01	-2.09	45044.210	1.5	78725.610	1.5
296.8149	25.01	-1.47	48435.960	6.0	82117.160	5.0
296.8179	23.01	-2.67	39612.970	5.0	73293.820	5.0
296.8181	24.00	-2.96	20517.400	2.0	54198.230	1.0
296.8189	24.01	-1.71	35707.660	5.5	69388.400	6.5
296.8193	26.01	-3.34	50187.950	3.5	83868.650	2.5
296.8243	22.00	-1.08	0.000	2.0	33680.130	3.0
296.8280	73.01	.10	11695.340	0.0	45384.884	0.0
296.8316	26.01	-2.33	32909.870	5.5	66589.170	4.5
296.8328	25.01	-4.47	67008.930	3.0	100688.100	3.0
296.8331	10.01	-3.23	279137.620	3.5	312816.750	4.5
296.8377	28.01	-2.75	100592.980	3.5	134271.590	4.5
296.8387	23.01	.43	13741.610	3.0	47420.100	4.0
296.8398	26.02	-4.16	84671.870	3.0	118350.240	4.0
296.8400	92.01	-1.26	887.233	0.0	34575.415	0.0
296.8428	25.01	-3.62	52383.720	4.0	86061.750	3.0
296.8450	76.00	-.59	14760.326	0.0	48447.941	0.0
296.8478	26.00	-1.61	19552.474	1.0	53229.940	1.0
296.8480	44.00	-.39	10566.135	0.0	44253.409	0.0
296.8490	77.00	-.93	12098.628	0.0	45785.789	0.0
296.8500	22.01	.18	31207.440	2.5	64884.650	2.5
296.8536	24.02	-1.33	63420.300	3.0	97097.100	4.0
296.8550	22.01	-2.64	31300.920	4.5	64977.570	3.5
296.8580	23.01	-1.75	34228.790	3.0	67905.100	3.0
296.8607	25.01	-1.92	48317.850	4.0	81993.850	4.0
296.8660	45.00	-.95	3226.301	0.0	36911.533	0.0
296.8663	26.01	-3.25	66012.830	4.5	99688.200	3.5
296.8690	90.01	-.66	4436.164	0.0	38121.055	0.0
296.8707	24.01	-.59	33694.470	5.5	67369.330	5.5
296.8713	27.01	-5.17	27585.300	1.0	61260.100	2.0
296.8735	26.01	-2.93	27314.930	3.5	60989.480	4.5
296.8738	22.00	-5.42	11531.760	2.0	45206.270	3.0
296.8773	23.01	-2.31	39234.050	3.0	72908.170	3.0
296.8806	28.01	-1.57	104081.040	4.5	137754.780	5.5
296.8810	72.01	-.30	4839.451	0.0	38522.981	0.0
296.8839	25.01	-3.88	67008.930	3.0	100682.300	4.0
296.8860	23.01	-.57	30613.970	4.0	64287.100	5.0
296.8886	28.01	-1.14	104081.040	4.5	137753.870	4.5
296.8950	44.00	-.53	7985.094	0.0	41667.035	0.0
296.8960	40.01	-.07	3710.246	0.0	37392.074	0.0
296.8970	24.00	-4.06	24286.540	1.0	57958.420	0.0
296.8970	20.00	-1.25	15157.901	0.0	48829.780	1.0
296.8982	29.01	-2.45	117747.450	3.0	151419.200	3.0
296.8999	24.00	-4.27	0.000	3.0	33671.550	3.0
296.9004	28.01	-3.77	67694.640	2.5	101366.140	2.5
296.9043	23.01	-4.37	19132.690	2.0	52803.750	1.0
296.9148	12.01	-2.24	80619.500	.5	114289.360	.5
296.9169	26.01	-3.66	66248.670	.5	99918.300	1.5
296.9173	24.01	-3.70	39742.360	2.5	73411.940	1.5
296.9174	28.01	-2.54	25036.380	2.5	58705.950	1.5
296.9177	25.01	-4.05	55759.270	3.0	89428.800	3.0
296.9189	28.00	-1.92	15734.018	1.0	49403.420	1.0
296.9190	40.00	-.77	564.603	0.0	34243.822	0.0
296.9216	28.01	-2.70	100592.980	3.5	134262.070	3.5
296.9230	27.00	-3.03	17233.680	3.5	50902.610	4.5
296.9259	26.01	-2.00	70314.740	4.5	103983.350	3.5
296.9339	17.02	-3.37	183042.700	2.5	216710.400	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
296.9357	28.01	-3.27	58705.950	1.5	92373.450	2.5
296.9361	26.00	-2.63	888.132	1.0	34555.586	0.0
296.9390	28.01	-2.30	100619.260	4.5	134286.380	4.5
296.9391	10.01	-1.64	279137.620	3.5	312804.730	2.5
296.9393	23.00	-1.16	8578.520	2.5	42245.610	3.5
296.9470	73.00	-.77	3871.561	0.0	37547.604	0.0
296.9476	26.00	-1.59	6928.266	5.0	40594.413	4.0
296.9493	23.01	-2.72	39612.970	5.0	73278.920	4.0
296.9500	69.01	-1.79	0.000	0.0	33675.703	0.0
296.9548	28.01	-3.67	100490.950	1.5	134156.280	1.5
296.9551	25.01	-2.48	71390.140	3.0	105055.430	2.0
296.9609	27.00	-1.26	20500.710	1.5	54165.350	1.5
296.9620	74.00	-.34	13711.778	0.0	47386.120	0.0
296.9630	40.01	-.35	2500.383	0.0	36174.612	0.0
296.9661	24.01	-1.04	34813.060	5.5	68477.110	4.5
296.9723	28.01	-3.45	99154.810	4.5	132818.160	4.5
296.9747	28.01	-2.97	100592.980	3.5	134256.050	2.5
296.9789	27.02	-4.65	138921.000	4.5	172583.600	3.5
296.9789	27.02	-4.65	138921.000	4.5	172583.600	3.5
296.9793	27.00	-3.88	7442.410	3.5	41104.960	2.5
296.9806	28.01	-1.91	100619.260	4.5	134281.660	5.5
296.9820	71.01	-.05	11695.340	0.0	45367.414	0.0
296.9825	26.02	-4.14	166222.200	4.0	199884.390	5.0
296.9850	28.01	-1.01	104081.040	4.5	137742.950	5.5
296.9851	23.01	-1.28	20089.560	1.0	53751.460	1.0
296.9859	23.00	-1.47	8476.200	1.5	42138.000	2.5
296.9900	73.00	-.32	13227.833	0.0	46899.000	0.0
296.9904	22.01	-3.66	1087.210	3.5	34748.500	4.5
296.9923	24.01	-3.18	39824.520	4.5	73485.600	3.5
296.9930	26.01	-.84	30764.460	3.5	64425.460	2.5
296.9948	25.01	-1.95	48333.060	5.0	81993.850	4.0
296.9951	25.01	-3.02	69044.610	2.0	102705.370	3.0
296.9959	22.00	-4.08	0.000	2.0	33660.671	1.0
296.9983	28.01	-4.94	101740.270	3.5	135400.670	3.5
296.9986	26.02	-1.70	83237.860	3.0	116898.220	2.0
296.9996	26.00	-4.22	20641.110	4.0	54301.360	4.0
296.9996	26.00	-4.57	20641.110	4.0	54301.360	4.0
297.0030	28.01	-3.63	100592.980	3.5	134252.850	3.5
297.0046	26.01	-8.57	20830.520	2.5	54490.200	2.5
297.0046	26.01	-8.26	20830.520	2.5	54490.200	3.5
297.0095	24.01	-3.54	33694.470	5.5	67353.600	4.5
297.0101	26.00	-1.39	888.132	1.0	34547.192	2.0
297.0119	26.00	-2.42	704.003	2.0	34362.660	1.0
297.0133	28.02	-4.57	103306.100	3.0	136964.800	3.0
297.0320	58.01	-.80	3952.218	0.0	37618.624	0.0
297.0340	29.01	-3.36	117747.450	3.0	151403.800	2.0
297.0353	14.00	-3.82	6298.850	2.0	39955.053	2.0
297.0360	26.00	-2.36	22249.430	3.0	55905.560	4.0
297.0384	22.00	-.15	0.000	2.0	33655.853	2.0
297.0396	26.01	-3.77	50212.930	2.5	83868.650	2.5
297.0400	41.01	.04	12179.286	0.0	45844.786	0.0
297.0428	28.01	-3.20	100619.260	4.5	134274.620	5.5
297.0444	27.01	-2.22	51512.200	3.0	85167.380	3.0
297.0464	29.01	-4.43	117747.450	3.0	151402.400	3.0
297.0510	23.01	-2.41	19112.930	4.0	52767.360	3.0
297.0513	26.01	-1.74	8680.470	1.5	42334.860	2.5
297.0544	28.01	-4.56	105838.060	3.5	139492.100	2.5
297.0548	27.02	-4.66	91715.100	2.5	125369.100	2.5
297.0550	22.00	-.81	8492.421	1.0	42146.390	1.0
297.0560	70.01	-1.36	0.000	0.0	33663.686	0.0
297.0595	24.00	-2.68	23933.900	4.0	57587.360	4.0
297.0627	25.01	-2.29	67845.930	5.0	101499.030	4.0
297.0672	17.02	-.76	188448.100	1.5	222100.700	1.5
297.0688	26.01	-1.01	30388.550	4.5	64040.960	3.5
297.0690	76.00	-.49	15082.956	0.0	48745.169	0.0
297.0692	24.01	-1.45	33418.110	2.5	67070.480	1.5
297.0695	28.01	-3.57	100619.260	4.5	134271.590	4.5
297.0703	29.01	-2.93	117130.360	2.0	150782.600	2.0
297.0720	11.01	-1.82	299193.750	2.0	332845.800	3.0
297.0720	11.01	-1.82	299193.750	2.0	332845.800	3.0
297.0799	26.00	-3.94	17550.180	3.0	51201.330	2.0
297.0813	27.02	-4.10	140200.100	1.5	173851.100	.5
297.0813	27.02	-4.10	140200.100	1.5	173851.100	.5
297.0813	27.02	-4.91	140200.100	1.5	173851.100	.5
297.0820	29.01	-3.89	85388.770	2.0	119039.680	2.0
297.0828	25.01	-4.42	33278.390	3.0	66929.220	2.0
297.0878	25.01	-2.03	71263.920	1.0	104914.180	0.0
297.0952	25.00	-2.65	17282.000	3.5	50931.420	2.5
297.0964	25.01	-2.45	52653.270	4.0	86302.550	3.0
297.0970	76.00	-.50	4113.534	0.0	37772.575	0.0
297.1110	24.00	-.28	7927.470	2.0	41575.100	3.0
297.1175	27.01	-3.42	52229.600	2.0	85876.500	1.0
297.1232	24.01	-1.78	34659.480	.5	68305.730	1.5
297.1232	24.00	-3.70	24056.110	5.0	57702.360	5.0
297.1272	27.02	-2.20	73861.800	1.5	107507.600	.5
297.1281	26.01	-4.11	45079.910	2.5	78725.610	1.5
297.1338	24.00	-4.43	31106.370	4.0	64751.420	4.0
297.1357	27.00	-4.19	15184.040	2.5	48828.870	2.5
297.1369	25.01	-1.88	49291.310	3.0	82936.010	3.0
297.1480	90.01	-1.09	4032.876	0.0	37686.140	0.0
297.1485	25.01	-2.28	67845.930	5.0	101489.310	5.0
297.1520	14.03	-2.43	293718.990	2.5	327361.970	2.5
297.1520	14.03	-1.13	293718.990	3.5	327361.970	2.5
297.1520	14.03	-1.28	293718.990	2.5	327361.970	1.5
297.1555	24.00	-1.87	23512.000	1.0	57154.590	0.0
297.1565	23.01	-2.61	19161.270	0.0	52803.750	1.0
297.1612	22.00	-7.18	6661.003	3.0	40302.950	3.0
297.1617	26.01	-6.05	27314.930	3.5	60956.820	3.5
297.1638	26.01	-3.09	65931.460	3.5	99573.110	4.5
297.1662	24.01	-2.63	52298.120	3.5	85939.500	4.5
297.1669	17.01	-4.14	153257.000	2.0	186898.300	3.0
297.1670	74.00	-1.56	1613.150	0.0	35264.262	0.0
297.1673	25.00	-3.95	23719.520	1.5	57360.780	1.5
297.1704	28.02	-4.12	121802.800	3.0	155443.700	2.0
297.1784	17.02	-2.83	209182.800	1.5	242822.800	2.5
297.1842	12.01	-1.94	80650.020	1.5	114289.360	.5
297.1847	9.00	-3.34	105056.282	.5	138695.560	1.5
297.1880	24.01	.58	30391.940	6.5	64030.850	6.5
297.1910	42.01	.53	25891.064	0.0	59539.458	0.0
297.1915	9.01	-1.01	264952.690	2.0	298591.200	2.0
297.1917	23.01	-6.35	13542.680	3.0	47181.170	3.0
297.1927	8.01	-4.90	206877.900	2.5	240516.280	1.5
297.1933	26.00	-2.93	17726.985	2.0	51365.300	3.0
297.1977	9.01	-2.62	264952.690	2.0	298590.500	1.0
297.2000	23.01	-2.21	19166.190	1.0	52803.750	1.0
297.2029	26.01	-2.58	45206.490	.5	78843.720	.5
297.2043	25.01	-3.14	70231.070	2.0	103868.140	1.0
297.2152	26.01	-2.47	65696.110	4.5	99331.950	4.5
297.2167	25.01	-3.25	67865.630	4.0	101501.300	3.0
297.2207	28.01	-2.96	104147.290	5.5	137782.500	4.5
297.2220	90.01	-1.56	1451.835	0.0	35096.720	0.0
297.2241	10.01	-2.04	279137.620	3.5	312772.450	2.5
297.2250	76.00	.49	24842.516	0.0	58487.061	0.0
297.2255	23.01	-.05	19132.690	2.0	52767.360	3.0
297.2272	26.00	-3.13	17726.985	2.0	51361.460	3.0
297.2274	27.00	-2.30	16470.600	1.5	50105.050	1.5
297.2279	10.01	-.63	279137.620	3.5	312772.010	3.5
297.2350	28.01	-3.05	100619.260	4.5	134254.850	3.5
297.2367	25.01	-4.69	67865.630	4.0	101499.030	4.0
297.2392	26.00	-4.05	24180.848	3.0	57813.970	3.0
297.2410	9.01	-2.13	264958.290	3.0	298591.200	2.0
297.2449	28.01	-2.05	72375.420	1.5	106007.890	2.5
297.2469	26.00	-4.57	12968.552	2.0	46600.800	1.0
297.2509	21.01	-4.29	29742.120	1.0	63373.910	2.0
297.2570	41.01	1.00	11292.053	0.0	44932.977	0.0
297.2580	58.01	-.33	4839.451	0.0	38480.261	0.0
297.2597	24.01	-1.50	36272.660	4.5	69903.460	3.5
297.2610	42.01	.66	16857.422	0.0	50497.893	0.0
297.2620	25.01	-.99	44315.170	6.0	77945.710	7.0
297.2662	24.01	-2.73	30219.040	4.5	63849.110	5.5
297.2729	23.03	-1.80	258288.800	1.0	291918.100	2.0
297.2740	64.01	-1.42	3064.986	0.0	36703.986	0.0
297.2760	26.01	-2.14	44232.510	4.5	77861.470	4.5
297.2856	10.01	-1.54	279137.620	3.5	312765.490	3.5
297.2893	21.01	-4.63	27443.650	2.0	61071.100	1.0
297.2920	74.00	-.28	12098.628	0.0	45735.591	0.0
297.2928	27.00	-2.91	14399.280	.5	48026.340	.5
297.2949	10.01	-1.74	249695.530	1.5	283322.350	1.5
297.2960	42.00	-.55	11372.710	0.0	45009.220	0.0
297.2976	26.01	-3.34	31483.200	3.5	65109.710	3.5
297.2977	28.02	-4.50	86646.200	2.0	120272.700	1.0
297.2980	25.01	-1.99	49291.310	3.0	82917.780	2.0
297.2996	10.01	-.05	279137.620	3.5	312763.910	4.5
297.3002	28.01	-1.67	104081.040	4.5	137707.260	3.5
297.3027	10.01	-1.76	279218.660	2.5	312844.600	1.5
297.3060	76.00	.29	18309.257	0.0	51944.636	0.0
297.3090	24.01	-1.18	31531.620	1.5	65156.840	2.5
297.3120	27.00	-2.10	18389.570	1.5	52014.450	1.5
297.3134	26.00	-1.17	704.003	2.0	34328.733	3.0
297.3200	28.01	-2.78	23796.180	1.5	57420.160	2.5
297.3211	22.01	-2.23	29544.370	2.5	63168.230	2.5
297.3220	69.00	-.35	0.000	0.0	33633.569	0.0
297.3226	25.01	-1.98	67865.630	4.0	101489.310	5.0
297.3237	26.00	-.88	415.932	3.0	34039.495	4.0
297.3241	9.01	-.35	264952.690	2.0	298576.200	3.0
297.3269	27.02	-3.29	72341.900	1.5	105965.100	2.5
297.3275	24.00	-1.49	23933.900	4.0	57557.030	3.0
297.3309	25.01	-2.58	33278.390	3.0	66901.140	2.0
297.3312	9.01	-1.98	264952.690	2.0	298575.400	2.0
297.3370	72.00	-.75	6533.259	0.0	40165.131	0.0
297.3379	24.00	-1.30	25106.340	3.0	58728.290	4.0
297.3406	25.01	-3.60	67845.930	5.0	101467.580	6.0
297.3418	9.01	-.46	264958.290	3.0	298579.800	4.0
297.3419	17.01	-3.52	127726.900	1.0	161348.400	1.0
297.3500	24.00	-1.71	23512.000	1.0	57132.590	1.0
297.3507	21.01	-3.18	29823.920	2.0	63444.430	3.0
297.3577	20.00	-1.37	15210.063	1.0	48829.780	1.0
297.3577	20.00	-1.06	15210.063	1.0	48829.780	2.0
297.3583	29.01	-3.05	88362.030	2.0	121981.680	2.0
297.3601	7.01	-.36	187437.560	1.0	221057.010	2.0
297.3657	25.00	-1.95	27201.540	2.5	60820.350	2.5
297.3669	29.01	-3.45	88605.160	1.0	122223.840	0.0
297.3711	24.01	-1.84	52321.300	4.5	85939.500	4.5
297.3725	28.00	-2.30	13521.352	2.0	47139.392	2.0
297.3737	9.01	-2.34	264958.290	3.0	298576.200	3.0
297.3774	9.01	-.55	255606.240	1.0	289223.730	1.0
297.3805	23.01	-4.98	13490.840	2.0	47107.980	1.0
297.3808	9.01	-1.87	264958.290	3.0	298575.400	2.0
297.3891	26.02	-4.36	83358.880	2.0	116975.050	2.0
297.3910	39.01	-.16	24519.886	0.0	58145.651	0.0
297.3911	25.01	-1.48	52373.180	3.0	85989.120	2.0
297.3966	28.01	-3.29	100592.980	3.5	134208.300	2.5
297.3983	23.01	-2.04	30613.970	4.0	64229.100	5.0
297.3989	21.00	-.45	0.000	1.5	33615.060	1.5
297.3990	44.00	-.71	9436.930	0.0	43061.791	0.0
297.4010	90.01	-.77	4436.164	0.0	38060.799	0.0
297.4029	9.01	-.94	264952.690	2.0	298567.300	3.0
297.4030	45.00	-.97	10888.765	0.0	44513.174	0.0
297.4072	9.01	-.61	264965.680	4.0	298579.800	4.0
297.4081	9.01	-.77	264965.680	4.0	298579.700	5.0
297.4086	25.00	.15	34138.880	6.5	67752.840	5.5
297.4100	41.01	.85	10808.108	0.0	44431.725	0.0
297.4100	77.00	-2.03	4032.876	0.0	37656.493	0.0
297.4150	26.01	-3.10	64832.000	4.5	98445.240	4.5
297.4212	29.01	-3.34	117130.360	2.0	150742.900	3.0
297.4232	11.01	-.89	299193.750	2.0	332806.060	2.0
297.4232	11.01	-.89	299193.750	2.0	332806.060	2.0
297.4245	26.02	-4.57	179893.560	5.0	213505.730	6.0
297.4340	44.00	-.70	10566.135	0.0	44187.039	0.0
297.4345	23.01	-4.62	13490.840	2.0	47101.880	2.0
297.4384	28.01	-4.39	99559.330	2.5	133169.920	3.5
297.4391	9.01	-1.85	264965.680	4.0	298576.200	3.0
297.4418	9.01	-2.84	264958.290	3.0	298568.500	4.0
297.4449	26.01	-3.86	66078.340	2.5	99688.200	3.5
297.4459	23.01	-1.67	39612.970	5.0	73222.720	4.0
297.4460	25.01	-1.88	52379.380	2.0	85989.120	2.0
297.4520	28.01	-3.73	68131.210	3.5	101740.270	3.5
297.4525	9.01	-1.06	264958.290	3.0	298567.300	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
297.4590	39.00	-.50	0.000	0.0	33618.078	0.0
297.4609	26.01	-4.71	26055.400	2.5	59663.450	1.5
297.4610	58.01	-.64	4758.794	0.0	38376.646	0.0
297.4644	7.01	-.76	187461.560	2.0	221069.220	3.0
297.4659	28.01	-2.24	104147.290	5.5	137754.780	5.5
297.4720	10.00	-2.62	134041.840	2.0	167648.640	2.0
297.4739	28.01	-1.83	104147.290	5.5	137753.870	4.5
297.4805	25.01	-2.32	49465.130	3.0	83070.970	2.0
297.4870	25.01	-3.03	70231.070	2.0	103836.170	2.0
297.4897	20.00	-1.35	15157.901	0.0	48762.700	1.0
297.4920	22.00	-1.20	8602.340	2.0	42206.880	2.0
297.4950	77.00	.29	16454.134	0.0	50068.144	0.0
297.4968	17.01	-4.73	153257.000	2.0	186861.000	2.0
297.4986	11.01	-.67	266285.360	0.0	299889.160	1.0
297.4989	24.00	-4.83	21847.880	2.0	55451.640	3.0
297.5015	22.01	-1.90	31490.820	3.5	65094.290	4.5
297.5020	75.00	-.43	17180.052	0.0	50793.271	0.0
297.5073	9.01	-1.71	264965.680	4.0	298568.500	4.0
297.5118	27.02	-3.05	138774.700	2.5	172377.000	3.5
297.5179	9.01	-1.43	264965.680	4.0	298567.300	3.0
297.5207	24.02	-2.42	63172.200	2.0	96773.500	1.0
297.5241	25.00	-3.72	25265.740	5.5	58866.660	4.5
297.5250	75.00	-.10	19357.805	0.0	52968.426	0.0
297.5400	42.01	.65	29520.652	0.0	63129.579	0.0
297.5409	27.00	-4.72	7442.410	3.5	41041.430	3.5
297.5463	27.00	-2.61	13795.520	2.5	47393.930	2.5
297.5479	28.01	-3.70	68156.570	1.5	101754.800	2.5
297.5481	24.00	-.33	7810.820	1.0	41409.030	2.0
297.5491	26.00	-4.75	19562.435	4.0	53160.530	3.0
297.5494	25.02	-4.93	143097.000	3.5	176695.060	4.5
297.5523	10.00	-3.42	134041.840	2.0	167639.561	1.0
297.5560	73.00	-.68	3871.561	0.0	37478.680	0.0
297.5636	24.00	-2.50	27223.050	2.0	60819.500	3.0
297.5645	26.00	-2.87	20641.110	4.0	54237.460	4.0
297.5652	23.01	-.43	13511.710	1.0	47107.980	1.0
297.5655	9.01	-1.10	264994.260	0.0	298590.500	1.0
297.5665	29.01	-4.56	111218.800	4.0	144814.930	3.0
297.5667	27.01	-7.75	22414.500	3.0	56010.600	2.0
297.5675	9.01	-2.99	264952.690	2.0	298548.700	1.0
297.5706	28.01	-1.19	104147.290	5.5	137742.950	5.5
297.5725	7.01	-1.30	187461.560	2.0	221057.010	2.0
297.5781	23.01	-4.81	20156.640	0.0	53751.460	1.0
297.5838	24.01	-3.52	33418.110	2.5	67012.280	2.5
297.5858	24.01	-.66	49646.250	3.5	83240.200	4.5
297.5861	9.01	-2.89	264952.690	2.0	298546.600	2.0
297.5879	9.01	-.94	264952.690	2.0	298546.400	3.0
297.5880	72.01	-.21	4839.451	0.0	38442.957	0.0
297.5931	26.01	-2.65	8846.760	.5	42439.880	.5
297.5947	7.01	-.50	187461.560	2.0	221054.500	3.0
297.5969	26.00	-4.83	19562.435	4.0	53155.130	4.0
297.6020	90.01	-.70	7259.177	0.0	40861.102	0.0
297.6100	73.00	-.73	9194.957	0.0	42795.978	0.0
297.6116	25.01	-2.53	67910.260	4.0	101501.300	3.0
297.6123	26.00	-.93	18378.187	2.0	51969.140	3.0
297.6138	16.01	-.52	130641.000	1.5	164231.780	2.5
297.6193	23.01	-.20	13511.710	1.0	47101.880	2.0
297.6194	28.00	-4.53	0.000	4.0	33590.159	4.0
297.6260	73.01	.62	12582.573	0.0	46181.788	0.0
297.6290	75.00	-1.83	0.000	0.0	33598.876	0.0
297.6312	22.00	-2.27	7255.369	2.0	40844.190	1.0
297.6312	22.00	-2.98	7255.369	2.0	40844.190	3.0
297.6317	25.01	-1.91	67910.260	4.0	101499.030	4.0
297.6327	24.00	-4.25	23512.000	1.0	57100.660	2.0
297.6357	9.01	-3.11	264958.290	3.0	298546.600	2.0
297.6373	28.01	-3.78	99442.860	4.5	133031.000	4.5
297.6375	9.01	-.94	264958.290	3.0	298546.400	3.0
297.6389	26.01	-1.71	32875.630	6.5	66463.590	5.5
297.6391	28.01	-.69	104147.290	5.5	137735.220	6.5
297.6400	25.01	-.88	39808.140	3.0	73395.970	2.0
297.6410	9.01	-2.21	264952.690	2.0	298540.400	1.0
297.6447	17.01	-4.52	153257.000	2.0	186844.300	1.0
297.6475	25.01	-.14	39808.140	3.0	73395.120	3.0
297.6498	26.00	-4.71	11976.239	4.0	45562.959	3.0
297.6523	23.01	.22	13594.730	2.0	47181.170	3.0
297.6548	23.00	-1.75	8412.940	.5	41999.100	1.5
297.6552	9.01	-4.00	264952.690	2.0	298538.800	3.0
297.6556	10.01	-.82	279218.660	2.5	312804.730	2.5
297.6557	23.01	-3.17	32299.240	1.0	65885.300	2.0
297.6584	25.00	-1.97	25265.740	5.5	58851.490	5.5
297.6588	9.01	-1.47	264952.690	2.0	298538.400	2.0
297.6598	28.02	-2.17	81686.900	6.0	115272.500	5.0
297.6610	40.01	.07	8065.752	0.0	41661.016	0.0
297.6617	10.01	-1.52	279218.660	2.5	312804.040	1.5
297.6650	9.01	-.23	264958.290	3.0	298543.300	4.0
297.6685	24.00	-4.57	23512.000	1.0	57096.620	1.0
297.6715	28.01	-3.64	79823.030	3.5	113407.310	2.5
297.6719	24.01	-.42	30864.610	2.5	64448.840	2.5
297.6723	23.01	-1.83	20343.000	2.0	53927.190	3.0
297.6756	28.01	-3.08	100389.520	2.5	133973.330	2.5
297.6790	74.00	-.31	13727.833	0.0	46821.066	0.0
297.6863	26.02	-4.54	166222.200	4.0	199804.810	4.0
297.6865	25.01	-.38	39813.380	2.0	73395.970	2.0
297.6910	58.01	.19	4194.191	0.0	37786.070	0.0
297.6920	44.00	-.56	1129.205	0.0	34720.971	0.0
297.6935	25.01	-3.59	73385.150	1.0	106966.940	2.0
297.6940	25.01	-1.69	39813.380	2.0	73395.120	3.0
297.6965	7.01	-.31	187491.900	3.0	221073.350	4.0
297.6985	25.00	-2.14	25285.430	4.5	58866.660	4.5
297.7030	9.01	-2.92	264965.680	4.0	298546.400	3.0
297.7049	9.01	-2.75	264958.290	3.0	298538.800	3.0
297.7054	22.01	-.92	34748.500	4.5	68328.950	4.5
297.7066	9.01	-2.33	264965.680	4.0	298546.000	5.0
297.7084	27.00	-3.42	18775.010	.5	52355.120	.5
297.7084	9.01	-2.52	264958.290	3.0	298538.400	2.0
297.7100	74.00	.89	19519.120	0.0	53108.655	0.0
297.7127	11.01	-.91	298169.140	1.0	331748.770	1.0
297.7127	11.01	-.91	298169.140	1.0	331748.770	1.0
297.7129	9.01	-2.61	264958.290	3.0	298537.900	4.0
297.7146	25.01	-2.05	52373.180	3.0	85952.600	3.0
297.7178	25.01	-1.60	67910.260	4.0	101489.310	5.0
297.7190	25.00	-1.77	25287.740	3.5	58866.660	4.5
297.7210	26.02	-1.99	83358.880	2.0	116937.570	1.0
297.7213	27.00	-4.28	14399.280	.5	47977.940	.5
297.7270	42.00	-.01	20003.065	0.0	53590.882	0.0
297.7300	75.00	-.55	16534.792	0.0	50122.271	0.0
297.7303	25.00	-1.46	25265.740	5.5	58843.390	6.5
297.7305	9.01	-1.01	264965.680	4.0	298543.300	4.0
297.7324	25.01	-3.44	73385.150	1.0	106962.560	1.0
297.7332	7.01	-1.62	187491.900	3.0	221069.220	3.0
297.7343	24.00	-1.22	25177.390	4.0	58754.580	5.0
297.7430	26.00	-4.92	12560.933	3.0	46137.140	3.0
297.7458	27.00	-2.93	14036.280	1.5	47612.180	1.5
297.7460	58.01	-.05	5726.684	0.0	39312.358	0.0
297.7475	24.00	-2.66	23512.000	1.0	57087.700	2.0
297.7487	26.00	-1.43	26351.049	5.0	59926.620	5.0
297.7512	28.00	-2.43	15609.861	2.0	49185.146	2.0
297.7536	23.00	-1.35	553.020	4.5	34128.040	3.5
297.7569	26.02	-2.01	84671.870	3.0	118246.520	3.0
297.7600	72.01	-.32	12824.546	0.0	46408.641	0.0
297.7640	76.00	-.17	8630.355	0.0	42213.998	0.0
297.7680	41.01	.64	10566.135	0.0	44149.327	0.0
297.7680	45.00	-.82	5565.369	0.0	39148.561	0.0
297.7695	25.01	-1.81	52379.380	2.0	85952.600	3.0
297.7702	24.01	-1.96	31351.150	2.5	64924.300	3.5
297.7704	9.01	-4.53	264965.680	4.0	298538.800	3.0
297.7709	9.02	-4.43	431967.930	.5	465541.000	1.5
297.7771	25.01	-3.93	70231.070	2.0	103803.440	3.0
297.7773	25.00	-1.72	27248.000	1.5	60820.350	2.5
297.7784	9.01	-3.45	264965.680	4.0	298537.900	4.0
297.7789	23.01	-3.52	13609.000	4.0	47181.170	3.0
297.7820	25.01	-3.09	73395.120	3.0	106966.940	2.0
297.7824	25.01	-.93	39813.380	2.0	73385.150	1.0
297.7837	9.01	-.03	264965.680	4.0	298537.300	5.0
297.7868	25.01	-3.75	73385.150	1.0	106956.420	0.0
297.7873	28.01	-2.80	99442.860	4.5	133014.080	5.5
297.7895	25.01	-2.89	73395.970	2.0	106966.940	2.0
297.7946	27.02	-2.02	73726.600	2.5	107297.000	1.5
297.8009	27.00	-3.85	15184.040	2.5	48753.720	1.5
297.8034	25.01	-1.19	39826.570	1.0	73395.970	2.0
297.8050	40.01	-.13	3226.301	0.0	36805.321	0.0
297.8080	25.01	-1.60	52383.720	4.0	85952.600	3.0
297.8101	25.00	-.03	34250.520	5.5	67819.170	4.5
297.8116	25.01	-3.25	48317.850	4.0	81886.330	5.0
297.8142	9.02	-.36	357479.350	1.5	391047.540	.5
297.8150	75.00	-.08	16212.162	0.0	49790.054	0.0
297.8176	17.02	-4.28	205938.500	1.5	239506.300	1.5
297.8180	73.01	1.20	18470.572	0.0	52048.126	0.0
297.8185	27.02	-4.38	139627.200	1.5	173194.900	2.5
297.8185	27.02	-4.38	139627.200	1.5	173194.900	2.5
297.8210	76.00	-.79	8630.355	0.0	42207.571	0.0
297.8217	23.01	-1.54	19132.690	2.0	52700.030	2.0
297.8236	26.00	-4.78	18378.187	2.0	51945.310	2.0
297.8280	42.00	-.16	11775.998	0.0	45392.425	0.0
297.8284	25.01	-4.82	73395.970	2.0	106962.560	1.0
297.8295	22.00	-3.88	11639.804	3.0	45206.270	3.0
297.8295	29.00	-.92	43474.403	0.0	77050.661	0.0
297.8331	25.00	-1.54	25285.430	4.5	58851.490	5.5
297.8415	7.01	-3.30	187491.900	3.0	221057.010	2.0
297.8420	69.01	-1.70	0.000	0.0	33574.848	0.0
297.8530	76.00	.31	21212.928	0.0	54786.536	0.0
297.8542	25.01	-3.86	44521.520	4.0	78085.200	5.0
297.8564	25.00	-1.72	17451.520	2.5	51014.950	3.5
297.8602	15.04	-.52	414684.400	4.5	448247.400	4.5
297.8602	15.04	1.22	414684.400	4.5	448247.400	5.5
297.8602	15.04	1.13	414684.400	3.5	448247.400	4.5
297.8638	7.01	-2.33	187491.900	3.0	221054.500	3.0
297.8747	26.00	-2.59	21038.987	2.0	54600.350	3.0
297.8775	23.01	-4.98	13490.840	2.0	47051.890	3.0
297.8843	26.01	-1.96	30388.550	4.5	63948.840	4.5
297.8844	26.01	-1.81	66012.830	4.5	99573.110	4.5
297.8851	22.00	-6.47	6742.757	4.0	40302.950	3.0
297.8860	24.01	-2.33	35610.500	4.5	69170.600	5.5
297.8907	22.01	-4.06	983.800	2.5	34543.360	3.5
297.8915	23.00	-1.44	8578.520	2.5	42138.000	2.5
297.8922	17.02	-4.40	205946.900	2.5	239506.300	1.5
297.8928	25.00	-3.02	27201.540	2.5	60760.870	1.5
297.8928	24.00	-1.99	23163.270	0.0	56722.600	1.0
297.8939	23.01	-4.91	13542.680	3.0	47101.880	2.0
297.8940	41.01	.77	17180.052	0.0	50749.040	0.0
297.8958	24.01	-4.07	39877.280	3.5	73436.270	2.5
297.8994	25.01	-.58	39826.570	1.0	73385.150	1.0
297.8999	24.00	-3.39	20519.600	6.0	54078.130	5.0
297.9050	18.01	-.99	139258.250	.5	172816.210	.5
297.9076	26.01	-1.11	44929.590	2.5	78487.250	1.5
297.9113	23.01	-1.80	16340.970	3.0	49898.220	2.0
297.9115	26.01	-2.03	31999.120	3.5	65556.340	4.5
297.9180	40.01	-.32	2823.013	0.0	36389.296	0.0
297.9205	22.01	-1.02	31756.500	1.5	65312.710	2.5
297.9228	24.00	-4.00	31280.350	5.0	64836.300	6.0
297.9275	20.02	-3.55	336749.110	1.0	370304.540	2.0
297.9280	72.00	-.72	5565.369	0.0	39130.526	0.0
297.9296	23.01	-3.08	39234.050	3.0	72789.230	3.0
297.9302	25.01	-2.21	73395.120	3.0	106950.240	3.0
297.9350	26.01	-2.11	8846.760	.5	42401.330	1.5
297.9363	9.01	-2.32	264994.260	0.0	298548.700	1.0
297.9377	25.01	-2.45	73395.970	2.0	106950.240	3.0
297.9380	29.00	-.99	43474.403	0.0	77038.433	0.0
297.9383	28.02	-3.20	98238.200	4.0	131792.400	4.0
297.9384	24.00	-4.66	20523.940	5.0	54078.130	5.0
297.9412	26.01	-4.40	45289.840	1.5	78843.720	.5
297.9419	10.01	-.89	279218.660	2.5	312772.450	2.5
297.9426	26.01	-3.77	32909.870	5.5	66463.590	5.5
297.9430	76.00	-.38	12663.231	0.0	46226.698	0.0
297.9458	10.01	-.44	279218.660	2.5	312772.010	3.5
297.9466	25.01	-1.74	48333.060	5.0	81886.330	5.0
297.9467	26.02	-4.73	179904.560	6.0	213457.820	7.0
297.9514	28.01	-2.55	67694.640	2.5	101247.370	2.5
297.9522	20.00	-1.48	15210.063	1.0	48762.700	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
297.9522	20.00	-1.17	15210.063	1.0	48762.700	2.0
297.9645	29.01	-3.97	95565.650	4.0	129116.900	3.0
297.9654	11.01	.39	297639.340	2.0	331190.490	3.0
297.9654	11.01	.39	297639.340	2.0	331190.490	3.0
297.9676	24.00	-4.53	25177.390	4.0	58728.290	4.0
297.9712	21.01	-.11	30815.650	1.0	64366.150	2.0
297.9720	44.00	.23	14921.641	0.0	48481.841	0.0
297.9726	24.01	.49	30298.770	5.5	63849.110	5.5
297.9757	21.01	-3.66	29823.920	2.0	63373.910	2.0
297.9785	24.01	-3.89	30156.940	3.5	63706.620	4.5
297.9806	23.01	-2.35	30267.460	2.0	63816.900	3.0
297.9810	10.00	-2.92	134041.840	2.0	167591.233	2.0
297.9880	41.01	.96	21374.243	0.0	54932.641	0.0
297.9982	25.00	-.12	34343.900	4.5	67891.360	3.5
298.0002	23.01	-2.64	39403.770	4.0	72951.000	4.0
298.0038	10.01	-.74	279218.660	2.5	312765.490	3.5
298.0099	9.01	-1.08	264994.260	0.0	298540.400	1.0
298.0113	10.01	-4.60	280173.010	4.5	313718.990	3.5
298.0150	64.01	-.45	564.603	0.0	34119.961	0.0
298.0201	25.01	-3.28	48317.850	4.0	81862.840	4.0
298.0238	23.01	-3.21	19112.930	4.0	52657.510	4.0
298.0250	26.00	-1.60	26627.612	4.0	60172.060	4.0
298.0285	22.00	-2.04	8602.340	2.0	42146.390	1.0
298.0312	28.01	-3.75	100309.290	5.5	133853.040	4.5
298.0320	9.02	-2.22	355981.900	1.5	389525.550	1.5
298.0320	90.01	-.75	9356.272	0.0	42909.716	0.0
298.0446	25.01	-2.48	37847.900	2.0	71390.140	3.0
298.0449	17.01	-1.61	126032.000	2.0	159574.200	2.0
298.0457	24.00	-5.09	0.000	3.0	33542.110	2.0
298.0475	25.00	-4.38	23818.870	.5	57360.780	1.5
298.0503	25.00	-.21	34423.270	3.5	67964.870	2.5
298.0525	14.02	-3.07	142945.840	2.0	176487.190	1.0
298.0530	26.00	-1.68	22249.430	3.0	55790.720	3.0
298.0550	39.01	.17	28230.132	0.0	61780.987	0.0
298.0565	24.02	-1.77	65172.200	2.0	96713.100	3.0
298.0615	11.01	-1.02	297252.520	3.0	330792.850	2.0
298.0615	11.01	-1.02	297252.520	3.0	330792.850	2.0
298.0630	48.00	-.41	31617.748	0.0	65167.702	0.0
298.0645	10.00	-2.94	134818.640	0.0	168358.630	1.0
298.0650	77.00	-.62	5726.684	0.0	39276.413	0.0
298.0695	25.01	-1.09	49291.310	3.0	82830.750	4.0
298.0703	26.02	-2.27	83358.880	2.0	116898.220	2.0
298.0720	41.01	.47	12179.286	0.0	45728.227	0.0
298.0735	25.01	-1.53	37851.150	3.0	71390.140	3.0
298.0739	14.02	-3.55	142948.250	1.0	176487.190	1.0
298.0742	21.00	-.33	168.340	2.5	33707.250	2.5
298.0788	24.00	-.58	7750.780	0.0	41289.170	1.0
298.0810	72.00	-.56	0.000	0.0	33547.928	0.0
298.0820	75.00	-.56	11534.025	0.0	45081.841	0.0
298.0833	25.00	-2.26	27201.540	2.5	60739.420	3.5
298.0911	17.01	-1.43	146330.000	1.0	179867.000	1.0
298.0916	26.01	-1.64	65556.340	4.5	99093.290	5.5
298.0923	10.00	-3.26	134818.640	0.0	168355.510	1.0
298.0955	26.01	-2.09	27620.390	2.5	61156.900	3.5
298.0985	8.01	-1.47	232462.830	2.5	265999.000	3.5
298.0994	26.01	-4.66	32875.630	6.5	66411.700	6.5
298.0995	29.01	-3.77	117883.140	4.0	151419.200	3.0
298.1010	75.00	-.35	19599.777	0.0	53145.454	0.0
298.1020	40.01	-.27	4436.164	0.0	37981.729	0.0
298.1040	28.01	-2.43	103653.030	3.5	137188.580	4.5
298.1057	25.02	-3.72	143148.400	1.5	176683.760	2.5
298.1190	73.00	-.84	9598.245	0.0	43141.897	0.0
298.1192	23.01	-.61	19166.190	1.0	52700.030	2.0
298.1202	23.00	-1.19	8476.200	1.5	42009.930	2.5
298.1249	17.01	-2.46	146333.800	2.0	179867.000	1.0
298.1274	22.01	-2.93	1215.580	4.5	34748.500	4.5
298.1330	90.01	-.70	6129.972	0.0	39672.049	0.0
298.1352	22.00	-3.88	11531.760	2.0	45063.800	2.0
298.1423	24.00	-1.06	24056.110	5.0	57587.360	4.0
298.1446	26.00	-2.11	415.932	3.0	33946.920	2.0
298.1468	22.00	-1.09	170.132	3.0	33700.874	4.0
298.1520	42.00	-.33	11775.998	0.0	45315.937	0.0
298.1544	23.00	-.38	8715.720	3.5	42245.610	3.5
298.1553	25.01	-2.31	48333.060	5.0	81862.840	4.0
298.1592	24.01	-.83	49351.960	2.5	82881.300	2.5
298.1640	41.00	-.76	2742.356	0.0	36280.946	0.0
298.1644	28.00	-.89	879.813	2.0	34408.574	1.0
298.1657	28.01	-4.58	99340.550	3.5	132869.160	3.5
298.1744	23.00	-3.30	0.000	1.5	33527.640	2.5
298.1761	29.01	-3.22	108014.660	3.0	141542.100	2.0
298.1808	25.01	-2.11	44315.170	6.0	77842.090	6.0
298.1845	26.00	-3.34	17550.180	3.0	51076.680	4.0
298.1850	26.00	-2.13	21999.132	4.0	55525.580	5.0
298.1891	24.00	-1.38	27597.220	3.0	61123.200	4.0
298.1910	58.01	-.47	4274.849	0.0	37810.402	0.0
298.1922	23.01	-1.07	20343.000	2.0	53868.630	2.0
298.1940	44.00	-1.37	2661.698	0.0	36196.913	0.0
298.1961	27.01	-6.75	13261.100	2.0	46786.300	1.0
298.1963	8.01	-2.18	232462.830	2.5	265988.000	2.5
298.2056	26.01	-.52	36126.410	1.5	69650.540	2.5
298.2110	41.01	-.33	2984.328	0.0	36517.632	0.0
298.2159	28.01	-1.73	103025.580	2.5	136548.550	2.5
298.2165	23.00	-2.43	8476.200	1.5	41999.100	1.5
298.2224	26.00	-1.40	24118.815	4.0	57641.060	3.0
298.2230	8.01	-2.20	232462.830	2.5	265985.000	3.5
298.2247	26.01	-1.72	30764.460	3.5	64286.440	3.5
298.2259	27.00	-2.36	8460.810	2.5	41982.660	1.5
298.2269	24.00	-4.35	31280.350	5.0	64802.080	5.0
298.2285	28.01	-1.52	103025.580	2.5	136547.130	3.5
298.2316	23.01	-1.95	20622.990	3.0	54144.200	4.0
298.2372	26.00	-3.39	21038.987	2.0	54559.560	3.0
298.2449	10.01	-1.60	279324.890	1.5	312844.600	1.5
298.2489	29.01	-3.45	117883.140	4.0	151402.400	3.0
298.2490	70.01	-.52	32908.268	0.0	66437.299	0.0
298.2502	26.01	-2.94	45206.490	.5	78725.610	1.5
298.2511	20.00	-1.41	15157.901	0.0	48676.920	1.0
298.2538	10.01	-1.53	279324.890	1.5	312843.600	.5
298.2610	74.00	.34	19115.832	0.0	52643.514	0.0
298.2660	70.01	-.83	32182.351	0.0	65709.471	0.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
298.2671	10.00	-2.30	134041.840	2.0	167559.060	3.0
298.2694	23.01	-3.77	32299.240	1.0	65816.200	1.0
298.2702	23.01	-3.08	30613.970	4.0	64130.840	4.0
298.2713	26.00	-3.93	24180.848	3.0	57697.590	4.0
298.2717	28.01	-1.75	103025.580	2.5	136542.280	3.5
298.2720	72.00	.03	10485.478	0.0	44011.924	0.0
298.2764	23.01	-.81	13511.710	1.0	47027.880	0.0
298.2821	23.00	-.93	8412.940	.5	41928.470	.5
298.2875	24.00	-2.16	27163.200	0.0	60678.120	1.0
298.2900	76.00	.21	11292.053	0.0	44816.476	0.0
298.2943	28.01	-.80	105588.890	4.5	139103.050	5.5
298.2972	20.00	-2.55	15315.943	2.0	48829.780	1.0
298.2972	20.00	-1.54	15315.943	2.0	48829.780	2.0
298.2972	20.00	-.62	15315.943	2.0	48829.780	3.0
298.2989	23.01	-1.76	13542.680	3.0	47056.320	4.0
298.3024	23.01	-1.34	13594.730	2.0	47107.980	1.0
298.3028	26.01	-.29	65580.090	5.5	99093.290	5.5
298.3040	42.00	-.03	19841.750	0.0	53364.599	0.0
298.3058	25.00	-2.15	27248.000	1.5	60760.870	1.5
298.3130	69.01	-.94	8872.327	0.0	42394.165	0.0
298.3140	41.00	-1.18	1129.205	0.0	34650.930	0.0
298.3144	27.02	-3.99	91715.100	2.5	125227.000	3.5
298.3197	28.01	-1.38	104503.220	2.5	138014.530	2.5
298.3211	26.02	-2.99	118246.520	3.0	151757.670	2.0
298.3269	23.01	-2.38	30306.400	3.0	63816.900	3.0
298.3269	28.02	-4.23	84604.800	1.0	118115.300	2.0
298.3314	22.00	-.03	170.132	3.0	33680.130	3.0
298.3384	23.01	-7.84	13542.680	3.0	47051.890	3.0
298.3401	23.01	-3.75	34228.790	3.0	67737.800	2.0
298.3419	26.00	-2.47	19390.165	6.0	52898.980	5.0
298.3421	28.00	-1.60	13521.352	2.0	47030.148	3.0
298.3422	25.00	-4.02	23719.520	1.5	57228.300	.5
298.3430	25.01	-3.23	49427.320	4.0	82936.010	3.0
298.3434	25.02	-3.66	145643.450	2.5	179152.090	3.5
298.3484	27.00	-3.46	8460.810	2.5	41968.890	2.5
298.3541	28.01	-2.10	66571.340	2.5	100078.780	1.5
298.3551	22.00	-2.59	8436.618	0.0	41943.950	1.0
298.3562	23.03	-2.74	258288.800	1.0	291796.000	1.0
298.3567	23.01	-.36	13594.730	2.0	47101.880	2.0
298.3571	26.00	-.58	0.000	4.0	33507.102	3.0
298.3616	28.02	-3.80	103306.100	3.0	136812.700	2.0
298.3643	27.02	-4.24	139627.200	1.5	173133.500	1.5
298.3671	28.01	-3.59	99340.550	3.5	132846.530	3.5
298.3683	8.02	-1.98	290956.620	1.0	324462.460	2.0
298.3698	28.01	-2.45	103025.580	2.5	136531.260	1.5
298.3700	70.01	-.70	32908.268	0.0	66423.702	0.0
298.3771	26.00	-1.84	22249.430	3.0	55754.290	2.0
298.3771	29.01	-2.38	114511.440	1.0	148016.300	1.0
298.3782	8.02	.20	273080.070	1.0	306584.800	2.0
298.3810	42.00	.12	20245.038	0.0	53759.236	0.0
298.3812	23.01	-4.01	39403.770	4.0	72908.170	3.0
298.3852	25.02	-4.50	109841.120	3.5	143345.070	3.5
298.3980	70.01	.11	30085.255	0.0	63597.544	0.0
298.3997	25.00	-1.08	34250.520	5.5	67752.840	5.5
298.4014	24.00	-1.11	24200.230	6.0	57702.360	5.0
298.4035	24.00	-2.43	27176.220	1.0	60678.120	1.0
298.4050	72.00	-.77	8872.327	0.0	42383.830	0.0
298.4070	25.00	-3.82	34463.370	1.5	67964.870	2.5
298.4106	24.02	-2.97	63420.300	3.0	96921.400	2.0
298.4128	28.00	-1.23	0.000	4.0	33500.854	3.0
298.4140	74.00	-1.19	6129.972	0.0	39640.464	0.0
298.4163	11.01	-1.17	265693.290	1.0	299193.750	2.0
298.4180	11.01	.31	298169.140	1.0	331669.400	2.0
298.4180	11.01	.31	298169.140	1.0	331669.400	2.0
298.4200	24.01	-3.56	32855.090	2.5	66355.130	1.5
298.4209	10.02	-1.36	357930.000	2.0	391429.940	3.0
298.4260	39.00	-.26	483.945	0.0	33993.090	0.0
298.4265	26.01	-3.66	33501.320	3.5	67000.630	2.5
298.4287	28.01	-4.15	66579.710	1.5	100078.780	1.5
298.4349	22.01	-7.27	8710.470	1.5	42208.840	2.5
298.4358	23.01	-3.49	30318.630	4.0	63816.900	3.0
298.4360	73.00	-.90	9194.957	0.0	42702.979	0.0
298.4367	8.01	-2.96	232462.830	2.5	265961.000	2.5
298.4378	24.01	-2.27	31531.620	1.5	65029.670	.5
298.4426	28.01	-4.06	100475.820	3.5	133973.330	2.5
298.4471	9.02	-.09	357479.350	1.5	390976.350	1.5
298.4560	58.01	-.92	2581.041	0.0	36086.817	0.0
298.4594	25.01	-1.97	33147.390	5.0	66643.010	4.0
298.4610	92.01	-.61	2258.411	0.0	35763.626	0.0
298.4666	24.01	-1.13	30307.600	1.5	63802.410	.5
298.4750	75.00	-.37	19357.805	0.0	52861.449	0.0
298.4758	22.02	.14	41703.650	2.0	75197.430	2.0
298.4772	26.00	-2.81	6928.266	5.0	40421.890	4.0
298.4775	25.01	-2.66	70342.580	3.0	103836.170	2.0
298.4819	24.00	-3.90	7593.160	2.0	41086.260	3.0
298.4824	26.01	-.60	13474.430	2.5	46967.470	2.5
298.4886	26.01	-2.20	27314.930	3.5	60807.280	4.5
298.4944	26.02	-3.00	84671.870	3.0	118163.560	2.0
298.4969	26.01	-.30	67000.630	2.5	100492.040	3.5
298.5001	24.01	-1.38	33521.230	3.5	67014.280	2.5
298.5026	25.01	-1.52	73395.120	3.0	106885.900	4.0
298.5050	41.01	.33	12985.861	0.0	46486.137	0.0
298.5080	69.01	-2.04	0.000	0.0	33499.940	0.0
298.5080	70.01	-.17	34844.049	0.0	68343.989	0.0
298.5131	25.01	-1.27	52718.800	0.0	86208.400	1.0
298.5160	42.00	-.68	12259.943	0.0	45758.985	0.0
298.5170	29.01	-2.81	117883.140	4.0	151372.300	5.0
298.5173	23.01	-.61	30641.710	3.0	64130.840	4.0
298.5240	90.01	-.96	4032.876	0.0	37531.020	0.0
298.5288	26.01	-3.04	30388.550	4.5	63876.380	5.5
298.5311	24.01	.39	30219.040	4.5	63706.620	4.5
298.5385	22.01	.35	31490.820	3.5	64977.570	3.5
298.5390	40.00	-.02	0.000	0.0	33496.461	0.0
298.5477	22.00	-1.06	170.132	3.0	33655.853	2.0
298.5487	27.01	-6.97	27902.500	4.0	61388.100	4.0
298.5545	26.01	-1.03	13904.870	.5	47389.820	1.5
298.5606	28.01	-1.28	104298.230	4.5	137784.500	4.5
298.5610	76.00	.05	15324.929	0.0	48818.922	0.0
298.5628	10.02	-2.57	357930.000	2.0	391414.020	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
298.5655	26.01	-2.24	44753.820	3.5	78237.540	3.5
298.5744	10.01	-2.53	249839.630	.5	283322.350	1.5
298.5800	77.00	-1.02	6291.287	0.0	39783.148	0.0
298.5820	58.01	-.42	4274.849	0.0	37766.486	0.0
298.5840	42.00	.19	25407.119	0.0	58898.532	0.0
298.5848	24.00	-.37	7927.470	2.0	41409.030	2.0
298.5870	70.01	-.60	32827.611	0.0	66318.687	0.0
298.5892	26.01	-3.49	45044.210	1.5	78525.270	2.5
298.5892	24.00	-2.01	27597.220	3.0	61078.280	3.0
298.5924	27.01	-3.95	18031.500	2.0	51512.200	3.0
298.5955	9.02	-3.94	432060.640	1.5	465541.000	.5
298.5955	9.02	-3.93	432060.640	1.5	465541.000	1.5
298.5996	25.00	-1.56	17451.520	2.5	50931.420	2.5
298.5996	24.00	.06	8095.210	3.0	41575.100	3.0
298.5998	16.02	-.36	173191.730	2.0	206671.610	2.0
298.6001	10.01	-1.30	279324.890	1.5	312804.730	2.5
298.6063	10.01	-.83	279324.890	1.5	312804.040	1.5
298.6074	25.00	-2.33	27281.850	.5	60760.870	1.5
298.6085	27.02	-2.58	73286.000	4.5	106764.900	4.5
298.6096	27.00	-1.66	17233.680	3.5	50712.450	2.5
298.6134	24.00	-1.06	7810.820	1.0	41289.170	1.0
298.6137	28.01	-2.56	104298.230	4.5	137776.550	3.5
298.6200	28.01	-4.44	99340.550	3.5	132818.160	4.5
298.6200	45.00	-.67	3226.301	0.0	36713.676	0.0
298.6210	19.02	-.15	208687.800	1.5	242165.300	1.5
298.6269	22.00	-7.54	6842.964	5.0	40319.800	6.0
298.6283	22.01	-1.80	29968.080	4.5	63444.760	3.5
298.6320	29.01	-1.66	114511.440	1.0	147987.700	2.0
298.6353	26.01	-.53	67273.860	1.5	100749.750	2.5
298.6404	29.01	-3.47	117928.480	1.0	151403.800	2.0
298.6409	25.00	-1.10	34343.900	4.5	67819.170	4.5
298.6410	25.01	-3.26	37847.900	2.0	71323.150	2.0
298.6457	26.00	-3.78	888.132	1.0	34362.860	1.0
298.6467	24.00	.37	8307.570	4.0	41782.190	4.0
298.6491	26.00	-4.46	17726.985	2.0	51201.330	2.0
298.6500	26.02	-2.01	186268.790	2.0	219743.040	1.0
298.6509	23.00	-5.03	8476.200	1.5	41950.350	2.5
298.6525	25.02	-3.74	143209.800	2.5	176683.760	2.5
298.6607	26.01	-2.07	27620.390	2.5	61093.440	2.5
298.6655	26.00	-2.58	19621.004	5.0	53093.517	6.0
298.6670	58.01	-1.32	1855.123	0.0	35337.228	0.0
298.6700	25.01	-4.08	37851.150	3.0	71323.150	2.0
298.6752	23.01	-3.24	19132.690	2.0	52604.110	1.0
298.6770	90.01	-.91	6936.547	0.0	40417.531	0.0
298.6800	25.01	-4.50	49465.130	3.0	82936.010	3.0
298.6810	73.01	-.49	2581.041	0.0	36061.577	0.0
298.6866	24.01	-.64	44307.440	.5	77777.580	.5
298.6910	26.01	-3.39	31364.470	1.5	64834.120	1.5
298.6922	25.01	-2.70	48333.060	5.0	81802.580	6.0
298.6990	45.00	-1.09	5565.369	0.0	39043.888	0.0
298.7049	25.00	-1.26	34423.270	3.5	67891.360	3.5
298.7124	26.00	-4.37	24506.902	2.0	57974.160	2.0
298.7143	22.00	-3.47	8492.421	1.0	41959.460	0.0
298.7158	27.00	-1.33	0.000	4.5	33466.870	3.5
298.7160	20.00	-1.53	15210.063	1.0	48676.920	1.0
298.7160	20.00	-1.22	15210.063	1.0	48676.920	2.0
298.7265	26.01	-3.57	31368.450	.5	64834.120	1.5
298.7290	41.00	-.34	5242.739	0.0	38717.895	0.0
298.7292	26.00	-1.38	7376.762	4.0	40842.130	3.0
298.7310	8.01	-3.20	232462.830	2.5	265928.000	1.5
298.7364	22.01	-2.87	8744.270	2.5	42208.840	2.5
298.7426	24.00	-2.67	24093.160	2.0	57557.030	3.0
298.7450	45.00	-.77	10243.505	0.0	43716.869	0.0
298.7509	24.01	-1.37	35707.660	5.5	69170.600	5.5
298.7517	25.01	-3.47	48317.850	4.0	81780.700	3.0
298.7539	26.01	-1.21	64832.000	4.5	98294.600	5.5
298.7636	28.01	-4.42	98467.250	3.5	131928.770	4.5
298.7643	14.00	-2.18	6298.850	2.0	39760.285	1.0
298.7680	90.00	-.89	3629.588	0.0	37100.375	0.0
298.7695	25.01	-2.84	70342.580	3.0	103803.440	3.0
298.7732	20.01	-2.26	56839.250	1.5	90299.690	2.5
298.7736	25.02	-4.62	115774.000	3.5	149234.400	2.5
298.7778	28.01	-3.14	67031.020	.5	100490.950	1.5
298.7800	40.01	-.45	9678.902	0.0	43148.344	0.0
298.7800	92.01	-1.36	241.973	0.0	33711.415	0.0
298.7806	26.01	-.13	70523.730	3.5	103983.350	3.5
298.7814	24.01	-4.75	53051.550	1.5	86511.080	1.5
298.7857	26.01	-2.92	65109.710	3.5	98568.750	3.5
298.7882	24.00	-4.93	24833.860	3.0	58292.620	4.0
298.7920	42.00	.35	20003.065	0.0	53471.163	0.0
298.7950	17.01	-2.47	119799.000	2.0	153257.000	2.0
298.7977	29.02	-4.02	89045.900	3.5	122503.600	3.5
298.7986	27.00	-3.49	8460.810	2.5	41918.410	3.5
298.7986	9.01	-4.17	230998.600	3.0	264456.190	3.0
298.7994	24.00	-1.46	27703.840	4.0	61161.350	5.0
298.8007	9.01	-3.14	230998.600	3.0	264455.960	4.0
298.8024	24.01	-.82	30391.940	6.5	63849.110	5.5
298.8025	23.01	-.33	13594.730	2.0	47051.890	3.0
298.8036	10.01	-4.69	280262.330	3.5	313719.370	2.5
298.8055	28.01	-1.99	25036.380	2.5	58493.210	2.5
298.8080	28.01	-.86	104298.230	4.5	137754.780	5.5
298.8092	9.01	-4.27	230999.780	2.0	264456.190	2.0
298.8092	9.01	-3.39	230999.780	2.0	264456.190	3.0
298.8115	22.01	-3.75	1087.210	3.5	34543.360	3.5
298.8129	27.02	-4.99	138921.000	4.5	172377.000	3.5
298.8161	28.01	-1.87	104298.230	4.5	137753.870	4.5
298.8182	9.01	-3.95	231000.790	1.0	264456.190	2.0
298.8212	24.00	-1.05	27223.050	2.0	60678.120	1.0
298.8230	42.00	.21	20164.380	0.0	53629.006	0.0
298.8230	90.01	-.55	4436.164	0.0	37900.790	0.0
298.8260	76.00	-.30	14760.326	0.0	48224.616	0.0
298.8339	24.00	-2.36	27176.220	1.0	60629.870	2.0
298.8357	9.01	-1.92	230997.660	4.0	264451.100	3.0
298.8366	9.01	-.74	230997.660	4.0	264451.000	4.0
298.8366	9.01	.12	230997.660	4.0	264451.000	5.0
298.8418	26.01	-2.76	44784.780	2.5	78237.540	3.5
298.8428	25.01	-2.39	49465.130	3.0	82917.780	2.0
298.8441	9.01	-1.62	230998.600	3.0	264451.100	2.0
298.8441	9.01	-.60	230998.600	3.0	264451.100	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
298.8450	9.01	-.05	230998.600	3.0	264451.000	4.0
298.8455	25.01	-3.61	37811.570	1.0	71263.920	1.0
298.8462	23.00	-3.25	8476.200	1.5	41928.470	.5
298.8470	75.00	-.25	14115.066	0.0	47577.005	0.0
298.8473	26.00	-2.57	11976.239	4.0	45428.385	4.0
298.8491	8.01	-1.63	232536.060	1.5	265988.000	2.5
298.8528	22.00	-2.73	8492.421	1.0	41943.950	1.0
298.8531	27.02	-2.64	139743.400	2.5	173194.900	2.5
298.8531	27.02	-2.64	139743.400	2.5	173194.900	2.5
298.8531	27.02	-4.65	139743.400	2.5	173194.900	2.5
298.8547	9.01	-1.62	230999.780	2.0	264451.100	1.0
298.8547	9.01	-.62	230999.780	2.0	264451.100	2.0
298.8547	9.01	-.24	230999.780	2.0	264451.100	3.0
298.8564	28.00	-4.39	15734.018	1.0	49185.146	2.0
298.8580	73.00	-.23	10566.135	0.0	44026.842	0.0
298.8627	20.02	.05	243930.440	1.0	277380.860	2.0
298.8628	10.01	-2.75	280268.960	2.5	313719.370	2.5
298.8632	25.01	-1.90	48435.960	6.0	81886.330	5.0
298.8637	9.01	-.77	231000.790	1.0	264451.100	1.0
298.8637	9.01	-.47	231000.790	1.0	264451.100	2.0
298.8648	24.00	-.11	7593.160	2.0	41043.350	3.0
298.8662	10.01	-1.87	280268.960	2.5	313718.990	3.5
298.8680	9.01	-.77	231001.270	0.0	264451.100	1.0
298.8680	42.00	.52	20245.038	0.0	53704.626	0.0
298.8690	41.00	.05	9356.272	0.0	42815.748	0.0
298.8882	26.00	-2.53	18378.187	2.0	51825.758	3.0
298.8883	10.01	-.66	279324.890	1.5	312772.450	2.5
298.8904	23.01	-3.00	13609.000	4.0	47056.320	4.0
298.8924	17.01	-3.36	119809.900	3.0	153257.000	2.0
298.8939	26.00	-2.71	21999.132	4.0	55446.060	4.0
298.8942	21.01	.44	26081.320	2.0	59528.220	3.0
298.8949	29.01	-4.17	117928.480	1.0	151375.300	2.0
298.8950	44.00	-.32	0.000	0.0	33456.565	0.0
298.8954	20.00	-2.65	15315.943	2.0	48762.700	1.0
298.8954	20.00	-1.65	15315.943	2.0	48762.700	2.0
298.8954	20.00	-.73	15315.943	2.0	48762.700	3.0
298.8958	21.00	-1.37	168.340	2.5	33615.060	1.5
298.8962	26.01	-3.07	66377.370	3.5	99824.040	2.5
298.9010	26.01	-3.68	31387.980	2.5	64834.120	1.5
298.9030	83.00	.36	11292.053	0.0	44747.723	0.0
298.9079	26.01	-2.69	45079.910	2.5	78525.270	2.5
298.9130	76.00	.29	19761.092	0.0	53215.642	0.0
298.9137	28.01	-2.22	104298.230	4.5	137742.950	5.5
298.9178	24.01	.29	30156.940	3.5	63601.200	3.5
298.9203	25.01	-2.96	49291.310	3.0	82735.290	2.0
298.9253	23.01	-4.30	30613.970	4.0	64057.390	3.0
298.9270	71.00	-.85	0.000	0.0	33452.984	0.0
298.9300	23.01	-3.46	13609.000	4.0	47051.890	3.0
298.9305	23.01	-.74	19161.270	0.0	52604.110	1.0
298.9343	23.00	-5.93	8578.520	2.5	42020.930	3.5
298.9375	26.01	-3.29	31364.470	1.5	64806.520	.5
298.9396	26.00	-4.87	12968.552	2.0	46410.366	1.0
298.9449	20.01	-2.11	56858.460	2.5	90299.690	3.5
298.9449	20.01	-3.41	56858.460	2.5	90299.690	2.5
298.9500	73.00	-.80	5968.656	0.0	39419.066	0.0
298.9538	23.01	-3.83	39234.050	3.0	72674.280	2.0
298.9584	27.00	-1.37	0.000	4.5	33439.720	4.5
298.9598	23.01	-.38	13741.610	3.0	47181.170	3.0
298.9660	44.00	-.91	7985.094	0.0	41433.714	0.0
298.9706	28.01	-3.81	100845.410	.5	134283.760	.5
298.9726	25.01	-2.01	33248.320	4.0	66686.450	3.0
298.9731	26.01	-3.07	31368.450	.5	64806.520	.5
298.9745	23.01	-1.45	19166.190	1.0	52604.110	1.0
298.9800	42.00	.59	20003.065	0.0	53450.118	0.0
298.9907	22.00	-2.80	8492.421	1.0	41928.528	2.0
298.9922	26.02	-4.92	167002.000	2.0	200437.940	2.0
298.9937	26.01	-3.38	45289.840	1.5	78725.610	1.5
298.9988	28.00	-4.90	25753.578	4.0	59188.780	3.0
298.9988	27.02	-2.64	73861.800	1.5	107297.000	1.5
299.0039	22.00	-3.14	11531.760	2.0	44966.390	1.0
299.0099	28.01	-3.03	106022.790	.5	139456.750	1.5
299.0115	22.01	-1.81	29734.450	3.5	63168.230	2.5
299.0133	25.00	-1.38	30411.740	.5	63845.320	1.5
299.0171	22.01	-1.32	32025.500	2.5	65458.650	3.5
299.0260	41.01	.91	11292.053	0.0	44733.961	0.0
299.0317	27.00	-2.28	15184.040	2.5	48615.560	2.5
299.0327	23.00	-.55	8578.520	2.5	42009.930	2.5
299.0346	28.02	-4.23	78482.900	1.0	111914.100	2.0
299.0360	70.01	-.50	34844.049	0.0	68284.839	0.0
299.0385	26.00	-.35	21999.132	4.0	55429.890	5.0
299.0412	28.01	-2.69	66579.710	1.5	100010.170	.5
299.0490	27.00	-2.59	13795.520	2.5	47225.110	3.5
299.0501	22.00	-2.83	11776.806	4.0	45206.270	3.0
299.0510	74.00	-1.17	4758.794	0.0	38197.906	0.0
299.0540	69.01	-1.05	161.315	0.0	33600.092	0.0
299.0620	77.00	-.25	11775.998	0.0	45213.880	0.0
299.0710	74.00	-1.50	6129.972	0.0	39566.848	0.0
299.0732	26.00	-4.41	20874.482	3.0	54301.360	4.0
299.0732	26.00	-3.31	20874.482	3.0	54301.360	4.0
299.0837	25.00	-2.53	30419.610	2.5	63845.320	1.5
299.0842	18.01	-2.81	172829.580	1.5	206255.230	2.5
299.0870	58.01	-.26	2339.068	0.0	35774.155	0.0
299.0905	23.00	-.95	9544.540	.5	42969.490	1.5
299.0906	8.01	-1.81	232536.060	1.5	265961.000	2.5
299.0990	22.00	-2.97	11639.804	3.0	45063.800	2.0
299.0990	33.00	-.90	18067.285	0.0	51501.031	0.0
299.1063	28.01	-3.48	99559.330	2.5	132982.510	1.5
299.1104	28.00	-1.07	15609.861	2.0	49032.589	2.0
299.1112	28.00	-3.12	2216.519	2.0	35639.148	3.0
299.1144	23.00	-.42	8715.720	3.5	42138.000	2.5
299.1195	10.01	-1.97	279422.890	.5	312844.600	1.5
299.1223	26.01	-2.54	27620.390	2.5	61041.780	2.5
299.1237	25.01	-3.87	49291.310	3.0	82712.550	3.0
299.1250	73.00	-1.06	5968.656	0.0	39399.496	0.0
299.1285	10.01	-1.45	279422.890	.5	312843.600	.5
299.1296	23.00	-.54	8578.520	2.5	41999.100	1.5
299.1330	63.01	-1.46	0.000	0.0	33429.946	0.0
299.1346	24.00	-1.77	24282.340	4.0	57702.360	5.0
299.1383	25.00	-2.16	30425.710	1.5	63845.320	1.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
299.1405	24.00	-1.64	27703.840	4.0	61123.200	4.0
299.1410	40.01	-1.34	0.000	0.0	33429.052	0.0
299.1520	64.01	-1.25	3387.616	0.0	36815.439	0.0
299.1581	22.00	-6.83	8436.618	0.0	41854.010	1.0
299.1704	25.01	-3.09	37847.900	2.0	71263.920	1.0
299.1734	23.01	-2.31	30641.710	3.0	64057.390	3.0
299.1759	28.00	-2.35	28542.113	5.0	61957.517	6.0
299.1775	22.00	-4.49	7255.369	2.0	40670.600	2.0
299.1804	17.01	-4.08	119842.100	1.0	153257.000	2.0
299.1813	17.02	-.06	188448.100	1.5	221862.900	.5
299.1833	26.01	-1.57	44446.890	3.5	77861.470	4.5
299.1840	27.02	-1.88	73540.200	3.5	106954.700	2.5
299.1870	70.01	-.34	32827.611	0.0	66251.523	0.0
299.1877	22.00	-5.44	8492.421	1.0	41906.510	2.0
299.1887	24.00	-.61	7810.820	1.0	41224.800	0.0
299.1950	41.01	.20	10566.135	0.0	43989.153	0.0
299.1976	20.00	-1.46	15157.901	0.0	48570.880	1.0
299.1983	25.01	-3.98	35004.430	3.0	68417.340	2.0
299.2008	23.01	-2.84	30613.970	4.0	64026.600	4.0
299.2071	8.02	-1.70	293865.260	1.0	327277.180	2.0
299.2077	24.01	-3.84	32844.920	1.5	66256.770	.5
299.2106	25.00	-2.37	17451.520	2.5	50863.050	1.5
299.2110	24.01	-.54	49351.960	2.5	82763.450	1.5
299.2110	76.00	-.08	13308.491	0.0	46729.722	0.0
299.2118	19.00	-3.71	0.000	.5	33411.390	1.5
299.2181	25.00	-2.71	30354.210	3.5	63764.900	2.5
299.2222	19.00	-4.01	0.000	.5	33410.230	.5
299.2294	25.00	-4.96	23818.870	.5	57228.300	.5
299.2315	27.02	-2.98	140200.100	1.5	173609.300	1.5
299.2315	27.02	-2.98	140200.100	1.5	173609.300	1.5
299.2315	27.02	-4.64	140200.100	1.5	173609.300	1.5
299.2330	28.01	-1.73	104298.230	4.5	137707.260	3.5
299.2338	25.00	-3.27	34343.900	4.5	67752.840	5.5
299.2360	75.00	-1.08	0.000	0.0	33418.439	0.0
299.2379	25.01	-1.41	52653.270	4.0	86061.750	3.0
299.2381	23.01	-2.19	20343.000	2.0	53751.460	1.0
299.2403	15.01	-1.53	106001.990	1.0	139410.200	2.0
299.2417	25.01	-2.67	33278.390	3.0	66686.450	3.0
299.2422	19.02	.22	207421.900	2.5	240829.900	3.5
299.2432	10.00	-3.31	134459.287	1.0	167867.178	0.0
299.2436	24.01	-.70	30298.770	5.5	63706.620	4.5
299.2456	10.00	-2.75	134041.840	2.0	167449.464	1.0
299.2528	24.00	-2.48	27223.050	2.0	60629.870	2.0
299.2541	6.01	-.18	145549.270	1.5	178955.940	2.5
299.2582	24.01	-.90	44307.440	.5	77713.660	1.5
299.2590	28.00	-1.25	204.786	3.0	33610.916	2.0
299.2669	6.01	-.03	145550.700	2.5	178955.940	3.5
299.2669	6.01	-1.33	145550.700	2.5	178955.940	2.5
299.2750	24.01	-2.87	36101.820	3.5	69506.160	3.5
299.2780	26.00	-5.27	12560.933	3.0	45964.944	2.0
299.2806	9.01	-.57	236169.930	1.0	269573.640	1.0
299.2810	28.01	-4.44	99442.860	4.5	132846.530	3.5
299.2812	24.00	-3.51	20523.940	5.0	53927.590	4.0
299.2832	25.01	-3.56	49427.320	4.0	82830.750	4.0
299.2840	42.01	.25	17099.394	0.0	50512.473	0.0
299.2915	27.02	-4.96	139731.000	.5	173133.500	1.5
299.2980	24.01	.06	49838.430	4.5	83240.200	4.5
299.2998	24.00	-2.48	23933.900	4.0	57335.470	4.0
299.3040	64.01	-.89	3387.616	0.0	36798.462	0.0
299.3047	9.01	-1.07	236172.610	2.0	269573.640	1.0
299.3049	22.00	-3.80	11639.804	3.0	45040.810	4.0
299.3095	26.01	-3.86	65931.460	3.5	99331.950	4.5
299.3134	25.01	-4.80	55696.500	4.0	89096.560	4.0
299.3149	25.00	-.85	34938.700	4.5	68338.590	3.5
299.3260	69.01	-1.59	0.000	0.0	33408.391	0.0
299.3270	44.00	-.43	7985.094	0.0	41393.373	0.0
299.3276	29.01	-3.35	108335.430	2.0	141733.900	2.0
299.3303	25.01	-2.32	33278.390	3.0	66676.560	2.0
299.3340	83.00	-.25	11292.053	0.0	44699.551	0.0
299.3345	27.02	-3.54	140211.600	2.5	173609.300	1.5
299.3345	27.02	-3.54	140211.600	2.5	173609.300	1.5
299.3345	27.02	-3.79	140211.600	2.5	173609.300	1.5
299.3356	26.01	-2.19	36252.960	2.5	69650.540	2.5
299.3392	26.01	-4.03	65696.110	4.5	99093.290	5.5
299.3457	24.01	-2.08	36101.820	3.5	69498.270	4.5
299.3457	9.01	-1.39	253312.480	1.0	286708.930	0.0
299.3483	23.01	-3.82	32420.040	0.0	65816.200	1.0
299.3499	26.01	-2.79	66522.320	2.5	99918.300	1.5
299.3507	25.00	-3.18	34423.270	3.5	67819.170	4.5
299.3520	42.01	-.08	16696.107	0.0	50101.596	0.0
299.3570	76.00	-.30	12663.231	0.0	46068.162	0.0
299.3581	24.00	-3.81	24897.550	4.0	58292.620	4.0
299.3592	24.01	-.27	49646.250	3.5	83041.200	3.5
299.3599	25.01	-2.41	33147.390	5.0	66542.260	5.0
299.3610	74.00	-.58	6129.972	0.0	39534.457	0.0
299.3615	25.01	-2.85	33248.320	4.0	66643.010	4.0
299.3677	9.01	-1.05	236169.930	1.0	269563.930	2.0
299.3692	22.01	-1.16	31490.820	3.5	64884.650	2.5
299.3707	9.01	-.91	253312.480	1.0	286706.140	1.0
299.3785	24.00	-1.74	27223.050	2.0	60615.840	3.0
299.3820	90.01	-.71	6129.972	0.0	39532.114	0.0
299.3862	8.01	-1.85	232536.060	1.5	265928.000	1.5
299.3900	69.01	-1.81	0.000	0.0	33401.249	0.0
299.3917	9.01	-.38	236172.610	2.0	269563.930	2.0
299.3930	70.01	-.67	34844.049	0.0	68244.964	0.0
299.3949	22.00	-3.80	11531.760	2.0	44922.730	3.0
299.4004	23.01	-4.22	16340.970	3.0	49731.320	2.0
299.4012	23.00	-3.71	137.380	2.5	33527.640	2.5
299.4023	10.01	-.30	305398.620	1.5	338788.760	.5
299.4027	27.02	-4.86	139743.400	2.5	173133.500	1.5
299.4053	24.00	-.17	7593.160	2.0	40982.970	2.0
299.4059	23.01	-2.93	30267.460	2.0	63657.200	2.0
299.4060	23.01	-1.20	22273.540	1.0	55663.270	1.0
299.4116	23.01	-5.05	13490.840	2.0	46879.940	2.0
299.4143	9.01	-.69	253312.480	1.0	286701.280	2.0
299.4251	13.01	-1.58	105424.300	0.0	138811.900	1.0
299.4326	26.02	-2.69	186268.790	2.0	219655.550	2.0
299.4383	25.01	-1.62	52373.180	3.0	85759.300	4.0
299.4385	28.00	-2.17	16017.317	0.0	49403.420	1.0
299.4409	23.00	-1.35	16728.750	4.5	50114.590	5.5
299.4420	58.01	-.38	4194.191	0.0	37589.640	0.0
299.4427	28.01	-3.81	106620.530	3.5	140006.170	4.5
299.4428	26.00	-.48	415.932	3.0	33801.555	2.0
299.4443	23.01	-3.95	39403.770	4.0	72789.230	3.0
299.4450	28.00	-.93	204.786	3.0	33590.159	4.0
299.4488	24.01	-1.87	35607.600	3.5	68992.550	4.5
299.4494	23.01	-1.56	30641.710	3.0	64026.600	4.0
299.4503	26.00	-2.54	978.076	0.0	34362.860	1.0
299.4551	23.01	-.61	30673.140	2.0	64057.390	3.0
299.4580	26.00	-3.12	18378.187	2.0	51762.120	2.0
299.4619	22.00	-4.91	8602.340	2.0	41985.830	3.0
299.4689	23.01	-1.83	16340.970	3.0	49723.680	4.0
299.4728	26.02	-3.82	167002.000	2.0	200384.280	3.0
299.4730	41.01	.17	4113.534	0.0	37505.526	0.0
299.4739	24.01	-.82	30219.040	4.5	63601.200	3.5
299.4749	24.01	-1.41	35610.500	4.5	68992.550	4.5
299.4780	27.01	-5.62	13404.600	1.0	46786.300	1.0
299.4800	70.01	.05	30407.885	0.0	63799.096	0.0
299.4830	10.01	-.95	279422.890	.5	312804.040	1.5
299.4901	28.01	-3.83	100592.980	3.5	133973.330	2.5
299.4910	10.01	-.60	305408.510	.5	338788.760	.5
299.4958	20.00	-1.03	15157.901	0.0	48537.623	1.0
299.4960	44.00	-.54	2016.438	0.0	35405.866	0.0
299.5100	24.00	-4.24	7593.160	2.0	40971.290	2.0
299.5153	27.00	-1.09	17233.680	3.5	50611.220	3.5
299.5175	15.04	-2.63	414684.400	3.5	448061.700	3.5
299.5175	15.04	-1.09	414684.400	4.5	448061.700	3.5
299.5175	15.04	-1.20	414684.400	3.5	448061.700	2.5
299.5220	63.01	-2.20	1613.150	0.0	34999.679	0.0
299.5245	29.01	-4.36	88605.160	1.0	121981.680	2.0
299.5248	27.00	-1.99	16470.600	1.5	49847.080	2.5
299.5260	9.01	-1.03	236172.610	2.0	269548.970	3.0
299.5260	39.00	-1.29	483.945	0.0	33870.028	0.0
299.5260	74.00	-.98	4758.794	0.0	38144.877	0.0
299.5270	24.01	-1.90	36101.820	3.5	69478.060	2.5
299.5270	90.01	-1.03	9678.902	0.0	43064.874	0.0
299.5273	27.02	-3.20	139818.700	3.5	173194.900	2.5
299.5273	27.02	-3.20	139818.700	3.5	173194.900	2.5
299.5273	27.02	-4.56	139818.700	3.5	173194.900	2.5
299.5329	25.01	-1.38	52383.720	4.0	85759.300	4.0
299.5354	28.01	-3.86	99442.860	4.5	132818.160	4.5
299.5400	75.00	.38	30407.885	0.0	63792.408	0.0
299.5403	24.00	-1.58	27816.880	5.0	61191.640	6.0
299.5431	24.00	-2.76	27703.840	4.0	61078.280	3.0
299.5475	25.01	-3.63	34910.430	4.0	68284.380	3.0
299.5515	13.01	-1.70	105438.400	1.0	138811.900	1.0
299.5515	13.01	-1.22	105438.400	1.0	138811.900	2.0
299.5561	26.00	-3.97	24335.764	2.0	57708.760	2.0
299.5590	26.00	-4.03	20641.110	4.0	54013.780	5.0
299.5590	26.00	-3.28	20641.110	4.0	54013.780	5.0
299.5640	58.01	.22	5404.054	0.0	38785.902	0.0
299.5666	23.00	-4.02	8578.520	2.5	41950.350	2.5
299.5831	26.00	-1.59	24338.766	3.0	57708.760	2.0
299.5860	70.01	-.70	32827.611	0.0	66207.008	0.0
299.5938	9.01	-1.07	236195.140	3.0	269563.930	2.0
299.5939	24.00	-2.44	24833.860	3.0	58202.650	3.0
299.5952	28.01	-3.60	99559.330	2.5	132927.970	1.5
299.5989	23.01	-1.31	13511.710	1.0	46879.940	2.0
299.6009	28.01	-1.55	104646.520	3.5	138014.530	2.5
299.6018	17.01	-4.86	128621.900	1.0	161989.800	1.0
299.6037	28.01	-4.45	98467.250	3.5	131834.940	2.5
299.6080	77.00	-1.00	4032.876	0.0	37409.822	0.0
299.6124	25.01	-2.77	55759.270	3.0	89126.000	3.0
299.6134	25.01	-2.46	48435.960	6.0	81802.580	6.0
299.6151	27.01	-3.18	52229.600	2.0	85596.030	2.0
299.6180	25.01	-4.07	55696.500	4.0	89062.600	5.0
299.6187	25.00	-1.48	34138.880	6.5	67504.900	5.5
299.6213	24.01	-2.94	31083.110	1.5	64448.840	2.5
299.6223	25.01	-1.61	49465.130	3.0	82830.750	4.0
299.6261	28.02	-4.21	82826.900	4.0	116192.100	4.0
299.6313	25.01	-1.62	33278.390	3.0	66643.010	4.0
299.6386	26.00	-1.01	19552.474	1.0	52916.278	2.0
299.6395	26.00	-2.65	20641.110	4.0	54004.820	3.0
299.6426	24.00	-2.59	27597.220	3.0	60960.580	4.0
299.6461	26.00	-3.69	20874.482	3.0	54237.460	4.0
299.6464	25.00	-2.02	17568.480	1.5	50931.420	2.5
299.6487	8.02	-.65	293865.260	1.0	327227.940	1.0
299.6516	26.02	-4.30	84159.550	4.0	117521.910	4.0
299.6546	27.00	-1.37	15184.040	2.5	48546.070	1.5
299.6575	24.00	-.38	7927.470	2.0	41289.170	1.0
299.6585	22.00	-5.63	8492.421	1.0	41854.010	1.0
299.6599	25.01	-1.90	52373.180	3.0	85734.620	3.0
299.6640	20.00	-2.71	15315.943	2.0	48676.920	1.0
299.6640	20.00	-1.70	15315.943	2.0	48676.920	2.0
299.6640	20.00	-.78	15315.943	2.0	48676.920	3.0
299.6655	20.00	-1.58	15210.063	1.0	48570.880	1.0
299.6655	20.00	-1.27	15210.063	1.0	48570.880	2.0
299.6704	23.01	-1.77	13741.610	3.0	47101.880	2.0
299.6743	23.00	-1.32	16572.540	3.5	49932.370	4.5
299.6755	27.00	-2.62	17233.680	3.5	50593.380	4.5
299.6874	22.01	-4.55	8710.470	1.5	42066.850	1.5
299.6900	44.00	-.61	8952.985	0.0	42320.798	0.0
299.6939	27.00	-4.22	14036.280	1.5	47393.930	2.5
299.6940	39.00	-1.06	0.000	0.0	33367.368	0.0
299.6963	22.00	-6.07	14105.680	3.0	47463.060	4.0
299.6990	90.01	-.51	8952.985	0.0	42319.796	0.0
299.7050	26.02	-3.58	167299.600	5.0	200656.020	6.0
299.7077	23.00	-.46	16361.450	1.5	49717.570	2.5
299.7155	9.02	.02	357479.350	1.5	390834.600	2.5
299.7156	25.01	-1.23	52379.380	2.0	85734.620	3.0
299.7159	17.01	-1.36	126219.000	3.0	159574.200	2.0
299.7190	90.01	-2.22	0.000	0.0	33364.585	0.0
299.7190	77.00	-.70	11775.998	0.0	45140.583	0.0
299.7204	16.01	-4.05	110268.330	2.5	143623.030	1.5
299.7215	28.01	-2.41	79823.030	3.5	113177.610	3.5
299.7282	9.01	-.13	236195.140	3.0	269548.970	3.0
299.7296	26.01	-.70	36252.960	2.5	69606.640	3.5
299.7312	9.02	-4.72	432060.640	1.5	465414.140	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
299.7316	20.00	-.93	15210.063	1.0	48563.522	2.0
299.7364	29.00	-2.00	13227.833	0.0	46590.481	0.0
299.7373	28.01	-2.52	99559.330	2.5	132912.150	2.5
299.7398	26.00	-3.42	12560.933	3.0	45913.480	3.0
299.7410	77.00	-.24	12098.628	0.0	45460.764	0.0
299.7430	44.00	-.72	10566.135	0.0	43928.048	0.0
299.7437	26.02	-1.89	186303.440	3.0	219655.550	2.0
299.7546	25.01	-2.99	52383.720	4.0	85734.620	3.0
299.7555	23.01	-3.52	30306.400	3.0	63657.200	2.0
299.7585	24.00	-4.09	21856.940	3.0	55207.400	4.0
299.7628	25.02	-4.66	143345.070	3.5	176695.060	4.5
299.7650	76.00	-.25	10082.190	0.0	43441.655	0.0
299.7690	8.02	-2.12	294001.600	2.0	327350.900	3.0
299.7735	26.01	-3.80	31483.200	3.5	64832.000	4.5
299.7790	74.00	-1.26	3306.958	0.0	36664.865	0.0
299.7830	25.00	-.10	34938.700	4.5	68286.440	4.5
299.7867	23.00	-.35	16449.850	2.5	49797.180	3.5
299.7869	24.02	-2.42	63038.600	1.0	96385.900	2.0
299.7884	16.02	-1.62	173191.730	2.0	206538.870	1.0
299.7942	23.01	-1.08	20522.140	1.0	53868.630	2.0
299.7970	78.00	-.52	725.918	0.0	34081.822	0.0
299.8018	28.01	-4.85	101754.800	2.5	135100.450	3.5
299.8024	25.01	-4.97	38901.800	4.0	72247.380	3.0
299.8050	25.00	-3.11	30419.610	2.5	63764.900	2.5
299.8071	26.00	-6.18	12968.552	2.0	46313.610	2.0
299.8072	27.00	-3.96	17233.680	3.5	50578.730	3.5
299.8124	24.00	-1.27	27816.880	5.0	61161.350	5.0
299.8148	13.01	-2.88	105467.700	2.0	138811.900	1.0
299.8148	13.01	-1.70	105467.700	2.0	138811.900	2.0
299.8148	13.01	-.95	105467.700	2.0	138811.900	3.0
299.8160	23.00	-3.75	137.380	2.5	33481.450	3.5
299.8297	28.01	-3.62	98969.440	5.5	132311.980	4.5
299.8299	24.00	-1.02	23933.900	4.0	57276.420	3.0
299.8365	24.00	-4.35	21810.840	1.0	55152.630	2.0
299.8377	25.01	-4.11	48317.850	4.0	81659.500	3.0
299.8381	22.00	-3.04	8602.340	2.0	41943.950	1.0
299.8384	29.00	-3.84	11211.395	0.0	44562.694	0.0
299.8544	26.02	-4.53	87901.870	3.0	121241.670	4.0
299.8571	24.00	-2.44	28637.000	3.0	61976.500	4.0
299.8587	23.00	-1.38	16449.850	2.5	49789.170	3.5
299.8599	25.00	-1.49	30425.710	1.5	63764.900	2.5
299.8630	23.00	-2.25	8412.940	.5	41751.780	.5
299.8630	23.00	-1.21	8412.940	.5	41751.780	1.5
299.8644	25.02	-2.32	143345.070	3.5	176683.760	2.5
299.8679	27.01	-6.57	27902.500	4.0	61240.800	3.0
299.8770	25.01	-.77	55759.270	3.0	89096.560	4.0
299.8770	58.01	-.71	4436.164	0.0	37783.170	0.0
299.8772	23.01	-4.74	13542.680	3.0	46879.940	2.0
299.8782	24.00	-.30	7593.160	2.0	40930.310	1.0
299.8847	26.01	-2.52	27620.390	2.5	60956.820	3.5
299.8928	26.01	-1.42	65109.710	3.5	98445.240	4.5
299.9000	24.01	-.84	49706.470	2.5	83041.200	3.5
299.9037	28.00	-2.39	29481.020	4.0	62815.340	5.0
299.9040	64.01	-.19	241.973	0.0	33585.976	0.0
299.9063	24.00	-1.37	24833.860	3.0	58167.890	4.0
299.9107	18.01	-3.46	163299.470	2.5	196633.020	2.5
299.9116	27.00	-3.86	13795.520	2.5	47128.960	2.5
299.9198	23.00	-.61	9636.960	1.5	42969.490	1.5
299.9313	24.01	-1.50	31117.590	2.5	64448.840	2.5
299.9323	11.01	-1.57	298169.140	1.0	331500.290	2.0
299.9370	73.01	.70	14357.039	0.0	47697.374	0.0
299.9374	22.00	-6.16	8492.421	1.0	41822.990	0.0
299.9413	26.00	-3.13	18378.187	2.0	51708.330	2.0
299.9430	58.01	-.88	3548.931	0.0	36888.599	0.0
299.9449	10.01	-.71	305364.030	4.5	338693.780	4.5
299.9457	10.01	-2.35	305364.030	4.5	338693.680	3.5
299.9488	8.01	-3.37	232526.700	1.5	265856.000	2.5
299.9499	26.02	-2.13	83138.230	5.0	116467.410	4.0
299.9512	26.00	-.53	6928.266	5.0	40257.300	5.0
299.9517	24.00	-4.01	24833.860	3.0	58162.840	2.0
299.9547	10.01	-2.37	305365.130	3.5	338693.780	4.5
299.9556	10.01	-.81	305365.130	3.5	338693.680	3.5
299.9599	26.02	-4.60	83646.980	1.0	116975.050	2.0
299.9600	69.01	-1.76	161.315	0.0	33499.093	0.0
299.9600	75.00	.84	11695.340	0.0	45033.118	0.0
299.9625	22.01	-4.63	1215.580	4.5	34543.360	3.5
299.9645	20.00	-1.15	15210.063	1.0	48537.623	1.0
299.9668	17.01	-4.22	128662.500	2.0	161989.800	1.0
299.9704	12.02	-2.45	530962.900	0.0	564289.800	1.0
299.9705	27.00	-1.38	16778.160	2.5	50105.050	1.5
299.9757	25.00	-1.94	34250.520	5.5	67576.840	4.5
299.9761	22.00	-4.95	11531.760	2.0	44858.030	1.0
299.9769	22.00	-5.93	8602.340	2.0	41928.528	2.0
299.9836	8.01	-1.18	232602.570	.5	265928.000	1.5
299.9913	22.01	-3.39	8744.270	2.5	42068.850	1.5
299.9947	24.01	-.74	32355.940	3.5	65680.150	4.5
299.9951	9.01	-1.75	265255.640	5.0	298579.800	4.0
299.9960	9.01	-.84	265255.640	5.0	298579.700	5.0
300.0052	26.01	-.95	30764.460	3.5	64087.500	2.5
300.0061	8.01	-2.45	232536.060	1.5	265859.000	.5
300.0070	58.01	-.73	2823.013	0.0	36155.569	0.0
300.0100	72.01	-1.18	2984.328	0.0	36316.550	0.0
300.0108	18.01	-1.87	163299.470	2.5	196621.880	3.5
300.0230	42.00	-.02	20003.065	0.0	53333.843	0.0
300.0240	74.00	-.12	19438.462	0.0	52769.129	0.0
300.0247	28.01	-4.17	100609.010	2.5	133929.880	3.5
300.0292	25.02	-2.48	109841.120	3.5	143161.500	4.5
300.0359	25.01	-3.86	55759.270	3.0	89078.900	2.0
300.0405	26.01	-1.71	66012.830	4.5	99331.950	4.5
300.0443	18.01	-.77	159393.310	1.5	192712.000	1.5
300.0453	26.00	-1.24	11976.239	4.0	45294.830	5.0
300.0543	27.00	-2.58	816.000	3.5	34133.590	3.5
300.0618	23.00	-3.42	323.420	3.5	33640.180	4.5
300.0627	23.01	-1.35	39234.050	3.0	72550.710	4.0
300.0632	25.02	-2.46	109780.400	2.5	143097.000	3.5
300.0641	24.01	-.67	49564.800	1.5	82881.300	2.5
300.0667	28.01	-3.76	23108.280	2.5	56424.490	1.5
300.0670	18.01	-3.56	185624.730	3.5	218940.900	4.5
300.0799	26.02	-2.32	118442.920	3.0	151757.670	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
300.0802	23.01	-7.72	13741.610	3.0	47056.320	4.0
300.0817	10.01	-1.88	305364.030	4.5	338678.570	3.5
300.0863	20.00	-1.03	15210.063	1.0	48524.093	0.0
300.0866	22.00	.10	386.874	4.0	33700.874	4.0
300.0868	25.01	-3.91	49291.310	3.0	82605.290	4.0
300.0870	26.02	-2.89	83161.480	4.0	116475.440	3.0
300.0875	24.00	-4.56	24833.860	3.0	58147.760	3.0
300.0882	24.00	-.35	8095.210	3.0	41409.030	2.0
300.0916	10.01	-3.45	305365.130	3.5	338678.570	3.5
300.0929	24.00	-5.21	7593.160	2.0	40906.460	1.0
300.0941	25.01	-2.04	49517.580	5.0	82830.750	4.0
300.0949	26.00	-.54	704.003	2.0	34017.084	1.0
300.0969	9.01	-2.39	265255.640	5.0	298568.500	4.0
300.1007	9.01	-1.57	265267.370	4.0	298579.800	4.0
300.1016	9.01	-.07	265267.370	4.0	298579.700	5.0
300.1068	28.01	-4.92	102742.740	1.5	136054.500	1.5
300.1140	75.00	-.01	14518.354	0.0	47839.025	0.0
300.1152	26.01	-1.71	66377.370	3.5	99688.200	3.5
300.1201	23.01	.25	13741.610	3.0	47051.890	3.0
300.1214	23.01	-1.11	20617.050	2.0	53927.190	3.0
300.1242	28.01	-2.22	99559.330	2.5	132869.160	3.5
300.1270	90.01	-.48	8307.725	0.0	41626.953	0.0
300.1332	9.01	-2.83	265267.370	4.0	298576.200	3.0
300.1426	28.01	-4.75	102742.740	1.5	136050.530	2.5
300.1432	28.01	-3.90	103653.030	3.5	136960.750	2.5
300.1491	26.00	-4.50	24506.902	2.0	57813.970	3.0
300.1512	28.01	-4.76	103653.030	3.5	136959.860	2.5
300.1514	26.02	-3.69	166498.000	3.0	199804.810	4.0
300.1540	73.00	-.53	12743.888	0.0	46060.119	0.0
300.1558	24.00	-2.15	27816.880	5.0	61123.200	4.0
300.1587	25.01	-2.91	70497.440	4.0	103803.440	3.0
300.1593	26.02	-1.36	83161.480	4.0	116467.410	4.0
300.1627	26.01	-1.85	66612.740	1.5	99918.300	1.5
300.1640	44.00	-.68	8469.040	0.0	41784.161	0.0
300.1644	26.00	-2.50	19552.474	1.0	52857.840	1.0
300.1650	26.00	-4.03	24335.764	2.0	57641.060	3.0
300.1658	23.00	-4.12	8715.720	3.5	42020.930	3.5
300.1668	24.00	-2.95	24897.550	4.0	58202.650	3.0
300.1668	10.01	-.32	219648.440	1.5	252953.540	1.5
300.1675	24.00	-2.22	24282.340	4.0	57587.360	4.0
300.1700	24.00	-4.62	21847.880	2.0	55152.630	2.0
300.1747	24.00	-1.68	27703.840	4.0	61008.070	5.0
300.1749	23.01	-.18	20622.990	3.0	53927.190	3.0
300.1752	22.00	-5.26	8602.340	2.0	41906.510	2.0
300.1895	23.00	-.24	16572.540	3.5	49875.120	4.5
300.1918	9.01	-2.07	265288.870	3.0	298591.200	2.0
300.1921	26.00	-2.25	24338.766	3.0	57641.060	3.0
300.1932	23.01	-1.17	16421.510	4.0	49723.660	4.0
300.1973	26.01	-1.66	66522.320	2.5	99824.040	2.5
300.1980	74.00	-.36	13711.778	0.0	47023.126	0.0
300.2023	28.00	-2.84	28542.113	5.0	61843.280	5.0
300.2026	9.01	-1.10	265267.370	4.0	298568.500	4.0
300.2065	22.00	-2.52	7255.369	2.0	40556.070	1.0
300.2079	25.01	-1.02	52373.180	3.0	85673.720	4.0
300.2113	8.01	-2.06	232462.830	2.5	265763.000	3.5
300.2134	9.01	-2.01	265267.370	4.0	298567.300	3.0
300.2140	58.01	-.31	3548.931	0.0	36858.504	0.0
300.2188	25.01	-2.12	52653.270	4.0	85952.600	3.0
300.2203	8.01	-2.55	232462.830	2.5	265762.000	1.5
300.2210	41.01	.20	11292.053	0.0	44600.849	0.0
300.2210	42.00	-1.60	0.000	0.0	33308.796	0.0
300.2217	26.00	-3.00	26627.612	4.0	59926.620	5.0
300.2250	77.00	-.44	9759.560	0.0	43067.912	0.0
300.2257	28.00	-2.09	15734.018	1.0	49032.589	2.0
300.2270	78.00	-1.43	806.575	0.0	34114.705	0.0
300.2323	26.01	-1.79	31811.870	2.5	65109.710	3.5
300.2347	15.01	-2.47	105224.830	0.0	138522.400	1.0
300.2372	26.02	-4.10	186268.790	2.0	219566.080	3.0
300.2376	23.02	-1.53	56160.420	2.5	89457.670	2.5
300.2378	25.00	-.72	35041.370	3.5	68338.590	3.5
300.2390	90.01	-1.19	1774.465	0.0	35081.264	0.0
300.2409	10.01	-4.87	280173.010	4.5	313469.890	3.5
300.2482	28.00	-.04	204.786	3.0	33500.854	3.0
300.2489	26.02	-4.09	114339.950	4.0	147635.950	3.0
300.2610	70.01	-.69	41457.965	0.0	74762.324	0.0
300.2617	25.00	-1.73	17568.480	1.5	50863.050	1.5
300.2618	28.01	-4.82	76727.360	5.5	110021.920	4.5
300.2645	26.01	-1.03	13673.210	1.5	46967.470	2.5
300.2650	23.00	-.73	8715.720	3.5	42009.930	2.5
300.2650	46.00	-1.06	6533.259	0.0	39837.174	0.0
300.2661	28.01	-4.24	70358.940	4.5	103653.030	3.5
300.2662	26.01	-.03	70314.740	4.5	103608.820	4.5
300.2674	25.01	-3.35	33248.320	4.0	66542.260	5.0
300.2736	22.00	-1.06	386.874	4.0	33680.130	3.0
300.2750	58.01	-.14	4436.164	0.0	37738.970	0.0
300.2759	9.03	-2.49	677467.000	2.0	710760.000	3.0
300.2777	24.02	-2.05	63420.300	3.0	96713.100	3.0
300.2816	22.00	-2.90	11531.760	2.0	44824.130	2.0
300.2820	74.00	-.11	19680.435	0.0	52982.464	0.0
300.2858	23.00	-1.54	16917.150	5.5	50209.050	6.5
300.2914	26.02	-2.17	118246.520	3.0	151537.800	4.0
300.2946	9.01	-1.14	265288.870	3.0	298579.800	4.0
300.2961	18.01	-1.84	172829.580	1.5	206120.350	2.5
300.2976	26.02	-2.16	83646.980	1.0	116937.570	1.0
300.2980	9.01	.19	265255.640	5.0	298546.200	6.0
300.2980	73.01	.29	13469.806	0.0	46770.061	0.0
300.2985	24.00	-4.21	23512.000	1.0	56862.500	0.0
300.2997	28.00	-3.78	28542.113	5.0	61832.470	4.0
300.2998	9.01	-2.63	265255.640	5.0	298546.000	5.0
300.3000	25.01	-1.98	85895.270	2.0	119185.600	3.0
300.3030	25.01	-1.63	52383.720	4.0	85673.720	4.0
300.3032	26.00	-1.35	7728.058	3.0	41018.029	2.0
300.3119	25.00	-3.03	17052.290	4.5	50341.300	4.5
300.3148	28.01	-4.87	102742.740	1.5	136031.430	2.5
300.3176	26.02	-3.50	118246.520	3.0	151534.900	2.0
300.3192	27.02	-4.41	91715.100	2.5	125003.300	2.5
300.3241	9.01	-2.66	265255.640	5.0	298543.300	4.0
300.3245	26.02	-2.83	118246.520	3.0	151534.130	3.0
300.3271	9.01	-1.03	265288.870	3.0	298576.200	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
300.3281	22.01	-1.87	32025.500	2.5	65312.710	2.5
300.3282	28.01	-2.74	99559.330	2.5	132846.530	3.5
300.3341	26.00	-2.77	23783.617	5.0	57070.171	6.0
300.3343	9.01	-2.36	265288.870	3.0	298575.400	2.0
300.3366	22.01	-5.96	8710.470	1.5	41996.740	.5
300.3409	17.01	-4.54	128621.900	1.0	161907.700	2.0
300.3413	26.02	-3.57	88663.870	4.0	121949.620	5.0
300.3460	25.01	-4.54	49427.320	4.0	82712.550	3.0
300.3462	23.01	-.25	13594.730	2.0	46879.940	2.0
300.3480	76.00	-.29	11292.053	0.0	44586.764	0.0
300.3491	24.01	-2.25	35707.660	5.5	68992.550	4.5
300.3560	58.01	-.54	2581.041	0.0	30874.866	0.0
300.3568	26.02	-4.06	114351.920	3.0	147635.950	3.0
300.3580	64.01	-1.03	3387.616	0.0	36681.219	0.0
300.3618	28.00	-.29	879.813	2.0	34163.294	2.0
300.3623	24.00	-1.30	24303.940	3.0	57587.360	4.0
300.3630	77.00	-.34	7017.204	0.0	40310.253	0.0
300.3668	22.00	-2.78	11639.804	3.0	44922.730	3.0
300.3728	9.01	-4.85	265255.640	5.0	298537.900	4.0
300.3740	40.01	-.01	4436.164	0.0	37727.994	0.0
300.3760	66.01	-1.44	0.000	0.0	33291.608	0.0
300.3782	9.01	-.93	265255.640	5.0	298537.300	5.0
300.3828	24.00	-3.97	20523.690	4.0	53804.840	3.0
300.3838	23.01	-3.30	30267.460	2.0	63548.500	1.0
300.3927	24.01	-.69	31168.780	3.5	64448.840	2.5
300.3937	25.01	-4.41	35004.430	3.0	68284.380	3.0
300.3965	9.01	-.04	265288.870	3.0	298568.500	4.0
300.3990	24.00	-1.23	24056.110	5.0	57335.470	4.0
300.4019	9.01	-2.70	265267.370	4.0	298546.400	3.0
300.4021	23.01	-4.00	19112.930	4.0	52391.940	3.0
300.4055	9.01	-.75	265267.370	4.0	298546.000	5.0
300.4073	9.01	-1.18	265288.870	3.0	298567.300	3.0
300.4115	26.00	-1.27	19621.004	5.0	52898.980	5.0
300.4121	9.03	-2.71	423606.400	1.0	456884.300	1.0
300.4140	75.00	-.22	14518.354	0.0	47805.751	0.0
300.4150	73.00	-.80	9598.245	0.0	42885.531	0.0
300.4154	11.01	-3.51	299889.160	1.0	333166.700	1.0
300.4154	11.01	-3.51	299889.160	1.0	333166.700	1.0
300.4157	22.01	-1.52	34543.360	3.5	67820.870	4.5
300.4165	26.02	-2.87	88663.870	4.0	121941.290	4.0
300.4248	26.01	-1.63	30764.460	3.5	64040.960	3.5
300.4254	23.01	-1.13	39403.770	4.0	72680.200	5.0
300.4258	20.00	-2.42	15157.901	0.0	48434.290	1.0
300.4299	9.01	-1.36	265267.370	4.0	298543.300	4.0
300.4331	23.00	-.81	8476.200	1.5	41751.780	.5
300.4331	23.00	-.67	8476.200	1.5	41751.780	1.5
300.4331	8.02	-.41	294001.600	2.0	327277.180	2.0
300.4340	75.00	-.82	13711.778	0.0	46996.959	0.0
300.4356	24.01	-1.89	52298.120	3.5	85573.420	3.5
300.4460	42.01	.29	26294.352	0.0	59578.203	0.0
300.4460	45.00	-.56	9114.300	0.0	42398.151	0.0
300.4478	26.00	-3.54	17927.378	1.0	51201.330	2.0
300.4485	18.01	-3.01	172829.580	1.5	206103.450	1.5
300.4517	25.02	-3.07	146066.070	1.5	179339.590	2.5
300.4519	26.02	-4.33	90423.680	2.0	123697.180	2.0
300.4527	24.00	-1.93	27597.220	3.0	60870.630	4.0
300.4534	28.01	-1.74	104503.220	2.5	137776.550	3.5
300.4627	26.00	-2.30	12560.933	3.0	45833.240	4.0
300.4706	9.01	-2.53	265267.370	4.0	298538.800	3.0
300.4787	9.01	-1.33	265267.370	4.0	298537.900	4.0
300.4794	24.01	-.82	49493.000	.5	82763.450	1.5
300.4802	24.00	-4.77	27223.050	2.0	60493.420	3.0
300.4804	24.00	-2.39	24897.550	4.0	58167.890	4.0
300.4821	25.01	-2.88	49465.130	3.0	82735.290	2.0
300.4829	9.01	-1.67	265309.740	4.0	298579.800	4.0
300.4838	9.01	-.84	265309.740	4.0	298579.700	5.0
300.4841	9.01	-.60	265267.370	4.0	298537.300	5.0
300.4920	73.01	.16	9598.245	0.0	42877.001	0.0
300.5041	23.00	-1.13	16449.850	2.5	49717.570	2.5
300.5058	24.00	-.52	8307.570	4.0	41575.100	3.0
300.5094	25.01	-3.69	73683.110	4.0	106950.240	3.0
300.5124	26.02	-3.30	90483.590	3.0	123750.390	3.0
300.5140	41.00	-1.23	1532.493	0.0	34808.813	0.0
300.5141	25.01	-3.25	37811.570	1.0	71078.180	1.0
300.5155	9.01	-3.89	265309.740	4.0	298576.200	3.0
300.5210	77.00	-.37	13873.093	0.0	47148.638	0.0
300.5260	39.00	-1.37	0.000	0.0	33274.991	0.0
300.5304	26.00	-1.92	19390.165	6.0	52654.971	7.0
300.5323	23.03	-.82	254468.800	2.0	287733.400	2.0
300.5370	40.00	-.43	4113.534	0.0	37387.307	0.0
300.5377	22.00	-2.64	11776.806	4.0	45040.810	4.0
300.5400	23.01	-4.09	13490.840	2.0	46754.590	1.0
300.5456	28.01	-3.31	23108.280	2.5	56371.410	3.5
300.5492	26.02	-4.57	114351.920	3.0	147614.650	2.0
300.5500	26.02	-2.49	186303.440	3.0	219566.080	3.0
300.5500	40.00	.25	7985.094	0.0	41257.428	0.0
300.5549	28.02	-2.98	98238.200	4.0	131500.300	5.0
300.5554	24.00	-1.49	24940.610	2.0	58202.650	3.0
300.5560	72.00	.58	10485.478	0.0	43757.148	0.0
300.5760	70.01	.33	31456.433	0.0	64725.889	0.0
300.5764	27.00	-.92	15184.040	2.5	48443.760	2.5
300.5770	41.01	.71	17180.052	0.0	50449.397	0.0
300.5781	26.00	-3.68	22838.320	2.0	56097.850	3.0
300.5805	10.01	-4.86	280173.010	4.5	313432.280	3.5
300.5806	23.01	-.58	19132.690	2.0	52391.940	3.0
300.5844	24.00	-4.69	20523.940	5.0	53782.770	4.0
300.5851	9.01	-1.54	265309.740	4.0	298568.500	4.0
300.5876	10.01	-3.22	280173.010	4.5	313431.490	4.5
300.5933	28.01	-4.84	100592.980	3.5	133850.830	3.5
300.5944	9.01	-3.34	265288.870	3.0	298546.600	2.0
300.5959	9.01	-2.24	265309.740	4.0	298567.300	3.0
300.5962	9.01	-3.04	265288.870	3.0	298546.400	3.0
300.5997	24.00	-1.60	24299.890	2.0	57557.030	3.0
300.6000	90.01	-1.41	6613.917	0.0	39880.717	0.0
300.6002	23.02	-1.49	56160.420	2.5	89417.500	3.5
300.6010	29.01	-3.82	113302.800	4.0	146559.800	4.0
300.6033	24.00	-1.92	27703.840	4.0	60960.580	4.0
300.6061	8.01	-1.70	232602.570	.5	265859.000	.5
300.6111	25.02	-3.81	109841.120	3.5	143097.000	3.5
300.6112	26.02	-2.15	88663.870	4.0	121919.740	3.0
300.6127	29.01	-2.53	118163.500	2.0	151419.200	3.0
300.6195	26.02	-3.21	88694.670	5.0	121949.620	5.0
300.6196	20.00	-2.76	15315.943	2.0	48570.880	1.0
300.6196	20.00	-1.75	15315.943	2.0	48570.880	2.0
300.6196	20.00	-.83	15315.943	2.0	48570.880	3.0
300.6242	9.01	-3.41	265288.870	3.0	298543.300	4.0
300.6243	28.00	-3.83	28578.046	3.0	61832.470	4.0
300.6244	23.00	-.14	16728.750	4.5	49983.160	5.5
300.6246	25.00	-3.08	34250.520	5.5	67504.900	5.5
300.6260	63.01	-2.15	1613.150	0.0	34877.073	0.0
300.6282	24.00	-4.35	21847.880	2.0	55101.870	3.0
300.6332	22.00	-6.49	14028.470	2.0	47281.900	3.0
300.6360	69.01	-2.10	161.315	0.0	33424.131	0.0
300.6363	24.00	-2.31	24303.940	3.0	57557.030	3.0
300.6420	75.00	-.16	15647.559	0.0	48909.711	0.0
300.6451	24.01	-3.44	52321.300	4.5	85573.420	3.5
300.6491	22.00	-5.95	8602.340	2.0	41854.010	1.0
300.6500	23.01	-.84	20617.050	2.0	53868.630	2.0
300.6508	8.01	-.80	232747.510	2.5	265999.000	3.5
300.6518	27.00	-1.28	15774.040	1.5	49025.420	1.5
300.6530	26.02	-2.66	83646.980	1.0	116898.220	2.0
300.6569	25.01	-4.01	49820.160	2.0	83070.970	2.0
300.6590	44.00	-.49	2661.698	0.0	35921.970	0.0
300.6624	24.00	-4.48	24897.550	4.0	58147.760	3.0
300.6628	25.00	-2.39	17568.480	1.5	50818.640	.5
300.6633	15.01	-3.14	105303.190	1.0	138553.300	2.0
300.6649	9.01	-2.97	265288.870	3.0	298538.800	3.0
300.6685	9.01	-3.44	265288.870	3.0	298538.400	2.0
300.6720	23.01	-5.28	13490.840	2.0	46739.980	2.0
300.6726	28.01	-2.37	79923.880	4.5	113172.960	4.5
300.6731	9.01	-2.22	265288.870	3.0	298537.900	4.0
300.6739	14.00	-4.77	77.115	1.0	33326.053	2.0
300.6821	10.02	-1.67	319444.900	1.0	352692.930	2.0
300.6830	7.01	-.66	164610.760	1.0	197858.690	1.0
300.6835	24.00	-4.40	28682.180	2.0	61930.050	3.0
300.6862	20.00	-.45	15315.943	2.0	48563.522	2.0
300.6904	23.00	-.04	16917.150	5.5	50164.260	6.5
300.6948	26.02	-2.13	88694.670	5.0	121941.290	4.0
300.7024	10.01	-1.29	280473.580	1.5	313719.370	2.5
300.7037	23.01	-1.44	20622.990	3.0	53868.630	2.0
300.7061	26.02	.76	151534.130	3.0	184779.500	4.0
300.7077	17.01	-3.64	128662.500	2.0	161907.700	2.0
300.7082	8.01	-1.00	232753.860	3.5	265999.000	3.5
300.7082	8.01	-.83	232753.860	3.5	265999.000	4.5
300.7088	25.00	-.86	35041.370	3.5	68286.440	4.5
300.7136	24.01	-4.03	34631.140	4.5	67875.680	3.5
300.7147	26.00	-1.37	11976.239	4.0	45220.662	3.0
300.7152	26.02	.21	151534.130	3.0	184778.500	3.0
300.7221	26.02	.57	151534.900	2.0	184778.500	3.0
300.7233	26.02	-.81	151534.130	3.0	184777.600	2.0
300.7276	26.02	.93	151537.800	4.0	184780.800	5.0
300.7276	11.02	-3.71	373633.000	1.5	406876.000	.5
300.7283	26.00	-2.56	704.003	2.0	33946.920	2.0
300.7286	23.01	-.61	13511.710	1.0	46754.590	1.0
300.7303	26.02	.19	151534.900	2.0	184777.600	2.0
300.7330	26.02	-.81	151534.900	2.0	184777.300	1.0
300.7351	8.01	-1.24	232462.830	2.5	265705.000	2.5
300.7365	8.01	-1.39	232745.980	1.5	265988.000	2.5
300.7393	26.02	.06	151537.800	4.0	184779.500	4.0
300.7444	11.01	-1.28	264928.000	2.0	298169.140	1.0
300.7464	26.02	.34	151536.680	1.0	184777.600	2.0
300.7467	28.01	-4.67	77332.470	2.5	110573.360	2.5
300.7484	26.02	-1.11	151537.800	4.0	184778.500	3.0
300.7491	26.02	.03	151536.680	1.0	184777.300	1.0
300.7502	8.01	-1.83	232747.510	2.5	265988.000	2.5
300.7507	26.02	-3.66	167085.120	3.0	200325.560	4.0
300.7520	29.01	-3.08	118163.500	2.0	151403.800	2.0
300.7546	24.01	-4.75	53271.070	2.5	86511.080	1.5
300.7598	27.00	-2.87	18775.010	.5	52014.450	1.5
300.7602	26.02	.03	151537.910	0.0	184777.300	1.0
300.7647	29.01	-2.67	118163.500	2.0	151402.400	3.0
300.7650	25.00	-.28	25281.040	2.5	58519.900	3.5
300.7753	26.00	-3.88	20874.482	3.0	54112.203	2.0
300.7766	26.02	-1.50	83237.860	3.0	116475.440	3.0
300.7774	8.01	-.42	232747.510	2.5	265985.000	3.5
300.7832	10.01	-1.58	305364.030	4.5	338600.880	4.5
300.7834	10.01	.16	305364.030	4.5	338600.860	5.5
300.7849	9.01	-3.19	265309.740	4.0	298546.400	3.0
300.7855	27.01	-4.61	28111.900	2.0	61348.500	1.0
300.7881	24.01	-4.46	53271.070	2.5	86507.380	2.5
300.7885	9.01	.05	265309.740	4.0	298546.000	5.0
300.7892	28.01	-4.31	101144.630	3.5	134380.820	3.5
300.7900	76.00	.23	18793.202	0.0	52038.988	0.0
300.7917	24.01	.17	35607.600	3.5	68843.510	3.5
300.7931	10.01	.07	305365.130	3.5	338600.880	4.5
300.7961	26.01	-3.97	45289.840	1.5	78525.270	2.5
300.7995	24.01	-.38	49646.250	3.5	82881.300	2.5
300.8033	23.00	-6.21	8715.720	3.5	41950.350	2.5
300.8048	25.00	-1.85	25285.430	4.5	58519.900	3.5
300.8077	8.01	-2.66	232753.860	3.5	265988.000	2.5
300.8110	28.01	-4.32	100619.260	4.5	133853.040	4.5
300.8130	9.01	-1.88	265309.740	4.0	298543.300	4.0
300.8130	58.01	-.21	6533.259	0.0	39776.503	0.0
300.8135	24.01	-3.95	36272.660	4.5	69506.160	3.5
300.8136	26.00	-.79	888.132	1.0	34121.623	0.0
300.8180	24.01	-1.83	35610.500	4.5	68843.510	3.5
300.8186	25.00	-3.51	34343.900	4.5	67576.840	4.5
300.8257	25.00	-.69	25287.740	3.5	58519.900	3.5
300.8260	26.00	-4.51	21038.987	2.0	54271.110	1.0
300.8260	44.00	-.78	9114.300	0.0	42356.108	0.0
300.8270	90.01	-.74	9598.245	0.0	42839.942	0.0
300.8307	24.01	-1.91	33418.110	2.5	66649.710	1.5
300.8310	22.01	-1.81	12676.990	4.5	45908.560	5.5
300.8349	8.01	-1.33	232753.860	3.5	265985.000	3.5
300.8427	25.01	-4.60	37847.900	2.0	71078.180	1.0
300.8458	24.00	-4.80	24833.860	3.0	58063.800	2.0
300.8493	26.02	-2.14	83237.860	3.0	116467.410	4.0
300.8500	90.01	-.75	6129.972	0.0	39369.128	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
300.8514	23.01	-.68	20522.140	1.0	53751.460	1.0
300.8537	9.01	-2.05	265309.740	4.0	298538.800	3.0
300.8609	23.01	-.26	13511.710	1.0	46739.980	2.0
300.8618	8.01	-1.31	232462.830	2.5	265691.000	3.5
300.8619	9.01	-.88	265309.740	4.0	298537.900	4.0
300.8624	27.02	-2.58	73726.600	2.5	106954.700	2.5
300.8673	9.01	-1.62	265309.740	4.0	298537.300	5.0
300.8676	28.01	-4.84	103653.030	3.5	136880.560	4.5
300.8680	23.01	-2.46	16340.970	3.0	49568.450	3.0
300.8689	24.01	-1.23	35356.060	1.5	68583.440	2.5
300.8783	8.02	-1.19	294001.600	2.0	327227.940	1.0
300.8790	58.01	-.05	2500.383	0.0	35736.335	0.0
300.8800	44.00	-.61	9033.642	0.0	42269.484	0.0
300.8815	28.01	-3.26	68131.210	3.5	101357.200	4.5
300.8820	8.01	-1.13	232536.060	1.5	265762.000	1.5
300.8823	25.00	-2.37	17637.150	.5	50863.050	1.5
300.8850	24.01	-2.26	36272.660	4.5	69498.270	4.5
300.8888	25.01	-1.83	85960.410	3.0	119185.600	3.0
300.8932	27.02	-3.52	73540.200	3.5	106764.900	4.5
300.8938	23.00	-.94	16572.540	3.5	49797.180	3.5
300.8975	20.00	-2.54	15210.063	1.0	48434.290	1.0
300.8975	20.00	-2.23	15210.063	1.0	48434.290	2.0
300.8993	23.01	-1.19	39612.970	5.0	72837.000	6.0
300.9025	28.01	-3.48	101754.800	2.5	134978.470	2.5
300.9031	25.00	-1.37	35114.980	2.5	68338.590	3.5
300.9080	74.00	-1.09	4758.794	0.0	37991.543	0.0
300.9092	23.00	-2.88	137.380	2.5	33360.310	3.5
300.9095	26.00	-1.08	19390.165	6.0	52613.072	5.0
300.9135	26.01	-1.95	44915.070	3.5	78137.530	3.5
300.9137	11.01	-.94	299889.160	1.0	333111.600	1.0
300.9140	50.00	-.28	1613.150	0.0	34845.236	0.0
300.9151	24.00	-1.98	27597.220	3.0	60819.500	3.0
300.9156	24.00	-2.87	24940.610	2.0	58162.840	2.0
300.9206	20.00	-.93	15315.943	2.0	48537.623	1.0
300.9370	64.01	-1.04	3387.616	0.0	36617.162	0.0
300.9378	25.00	-1.85	25265.740	5.5	58485.520	4.5
300.9390	70.01	-.16	31779.063	0.0	65008.389	0.0
300.9429	15.01	-2.65	105303.190	1.0	138522.400	1.0
300.9437	23.01	-2.73	36425.070	4.0	69644.200	3.0
300.9476	23.03	-1.28	223033.000	3.0	256251.700	4.0
300.9571	26.00	-.70	7376.762	4.0	40594.413	4.0
300.9616	10.02	-2.23	319444.900	1.0	352662.050	1.0
300.9637	25.01	-4.00	68284.380	3.0	101501.300	3.0
300.9650	64.01	-1.16	4758.794	0.0	37985.249	0.0
300.9663	23.00	-.91	16572.540	3.5	49789.170	3.5
300.9693	8.01	-1.10	232711.700	.5	265928.000	1.5
300.9760	90.01	-1.93	0.000	0.0	33225.241	0.0
300.9780	46.00	-.61	24923.174	0.0	58148.194	0.0
300.9809	8.01	-1.04	232745.980	1.5	265961.000	2.5
300.9843	25.01	-3.27	68284.380	3.0	101499.030	4.0
300.9900	77.00	-.43	16454.134	0.0	49677.829	0.0
300.9910	23.01	-2.47	39234.050	3.0	72447.960	3.0
300.9929	24.02	-2.18	63172.200	2.0	96385.900	2.0
300.9939	26.02	-2.66	90483.590	3.0	123697.180	2.0
300.9948	8.01	-1.17	232747.510	2.5	265961.000	2.5
301.0001	27.00	-4.28	14399.280	.5	47612.180	1.5
301.0019	18.02	-.90	210212.260	3.0	243424.970	3.0
301.0042	29.01	-4.56	95565.650	4.0	128778.100	4.0
301.0069	25.01	-4.77	66688.450	3.0	99898.600	4.0
301.0098	28.01	-3.87	68154.310	1.5	101366.140	2.5
301.0101	29.01	-2.85	118163.500	2.0	151375.300	2.0
301.0118	22.00	-2.63	7255.369	2.0	40466.979	2.0
301.0130	64.01	.02	0.000	0.0	33221.157	0.0
301.0146	26.01	-3.74	66612.740	1.5	99824.040	2.5
301.0160	22.01	-4.93	8997.690	3.5	42208.840	2.5
301.0172	24.01	-2.39	34659.480	.5	67870.500	1.5
301.0210	24.00	-2.16	23512.000	1.0	56722.600	1.0
301.0228	26.01	-1.68	46967.470	2.5	80177.870	1.5
301.0260	42.00	-.70	12759.943	0.0	45479.665	0.0
301.0360	28.01	-4.24	106283.160	2.5	139492.100	2.5
301.0380	41.01	.40	15808.874	0.0	49027.272	0.0
301.0414	25.01	-4.88	66686.450	3.0	99894.800	3.0
301.0418	22.00	-3.25	15156.787	4.0	48365.090	3.0
301.0437	10.01	-3.90	280262.330	3.5	313470.420	2.5
301.0451	26.01	-3.65	44929.590	2.5	78137.530	3.5
301.0469	28.00	-2.26	15609.861	2.0	48817.600	1.0
301.0485	10.01	-2.25	280262.330	3.5	313469.890	3.5
301.0524	8.01	-3.39	232753.860	3.5	265961.000	2.5
301.0566	29.01	-2.47	108335.430	2.0	141542.100	2.0
301.0620	70.01	-.35	32182.351	0.0	65398.101	0.0
301.0627	15.04	-1.29	427157.000	.5	460363.000	1.5
301.0627	15.04	-1.59	427157.000	.5	460363.000	.5
301.0633	24.01	-3.25	33521.230	3.5	66727.160	2.5
301.0637	26.01	-3.30	33466.500	4.5	66672.390	3.5
301.0646	22.00	-6.91	13981.750	1.0	47187.540	2.0
301.0690	41.01	.51	17180.052	0.0	50395.029	0.0
301.0788	23.00	-3.33	323.420	3.5	33527.640	2.5
301.0804	28.01	-2.87	104503.220	2.5	137707.260	3.5
301.0838	29.00	-1.95	11211.395	0.0	44424.740	0.0
301.0840	73.01	-.18	5242.739	0.0	38456.062	0.0
301.0842	23.00	-.76	16728.750	4.5	49932.370	4.5
301.0854	28.01	-4.51	104503.220	2.5	137706.710	2.5
301.0881	27.02	-1.73	73286.000	4.5	106489.200	3.5
301.0897	16.01	-3.15	131028.760	1.5	164231.780	2.5
301.0900	64.01	-.97	3387.616	0.0	36600.277	0.0
301.0918	25.01	-1.84	73683.110	4.0	106885.900	4.0
301.0920	24.01	-.52	49838.430	4.5	83041.200	3.5
301.0924	8.01	-2.22	232796.270	2.5	265999.000	3.5
301.0974	8.01	-2.65	232462.830	2.5	265665.000	2.5
301.1039	10.01	-1.74	280268.960	2.5	313470.420	2.5
301.1051	26.02	-2.90	89697.520	3.0	122898.840	2.0
301.1087	23.02	-3.94	56256.750	1.5	89457.670	2.5
301.1087	10.01	-2.74	280268.960	2.5	313469.890	3.5
301.1120	73.00	.13	13227.833	0.0	46438.067	0.0
301.1132	24.01	-2.64	34659.480	.5	67859.910	.5
301.1163	25.00	-.52	25285.430	4.5	58485.520	4.5
301.1208	23.01	-4.44	13490.840	2.0	46690.430	1.0
301.1235	8.02	-3.47	370326.700	0.0	403526.000	1.0
301.1238	24.01	-1.35	49493.000	.5	82692.260	.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
301.1240	72.01	.15	17583.339	0.0	50792.250	0.0
301.1287	24.00	-4.58	27176.220	1.0	60374.940	2.0
301.1293	24.01	-2.71	49564.800	1.5	82763.450	1.5
301.1372	25.00	-.23	25287.740	3.5	58485.520	4.5
301.1403	23.00	-.61	16917.150	5.5	50114.590	5.5
301.1416	23.01	-3.41	13542.680	3.0	46739.980	2.0
301.1424	24.01	-1.41	30864.610	2.5	64061.820	1.5
301.1476	26.00	-.33	22249.430	3.0	55446.060	4.0
301.1540	28.01	-4.02	100332.090	4.5	133528.020	3.5
301.1557	26.01	-2.81	66377.370	3.5	99573.110	4.5
301.1590	90.01	-1.21	6613.917	0.0	39818.968	0.0
301.1690	77.00	-.57	9759.560	0.0	42963.509	0.0
301.1690	25.00	-3.20	30354.210	3.5	63548.490	4.5
301.1706	25.00	-2.71	27201.540	2.5	60395.640	1.5
301.1728	15.01	-2.24	105550.450	2.0	138744.300	3.0
301.1750	40.00	.03	564.603	0.0	33767.890	0.0
301.1770	29.01	-4.50	113302.800	4.0	146496.200	3.0
301.1824	27.01	-5.67	13593.500	0.0	46786.300	1.0
301.1880	58.01	-.72	4436.164	0.0	37638.018	0.0
301.1880	73.00	-.77	5565.369	0.0	38767.223	0.0
301.1885	26.00	-1.69	20037.815	0.0	53229.940	1.0
301.1888	25.00	-2.46	30354.210	3.5	63546.300	3.5
301.1897	27.01	-3.28	52684.500	1.0	85876.500	1.0
301.1920	75.00	-.75	11695.340	0.0	44896.753	0.0
301.1921	8.01	-1.75	232796.270	2.5	265988.000	2.5
301.1942	27.01	-6.78	13261.100	2.0	46452.600	2.0
301.1966	25.01	-1.37	53017.160	1.0	86208.400	1.0
301.1970	24.00	-2.43	27816.880	5.0	61008.070	5.0
301.1987	9.04	.09	811075.000	2.5	844266.000	3.5
301.1989	24.01	-1.48	35569.020	2.5	68760.000	3.5
301.1998	28.00	-.10	3409.925	2.0	36600.805	2.0
301.2005	29.00	-1.11	40086.787	0.0	73287.263	0.0
301.2016	23.01	-.46	16533.000	5.0	49723.680	4.0
301.2129	29.01	-3.81	108014.660	3.0	141204.100	3.0
301.2136	10.00	-3.30	134459.287	1.0	167648.640	2.0
301.2189	28.01	-3.33	71457.740	3.5	104646.520	3.5
301.2190	64.01	-.60	4758.794	0.0	37957.231	0.0
301.2193	8.01	-1.96	232796.270	2.5	265985.000	3.5
301.2257	26.02	-3.83	167207.300	4.0	200395.330	5.0
301.2338	26.02	-1.79	186378.940	4.0	219566.080	3.0
301.2339	24.01	-2.18	32355.940	3.5	65543.060	3.5
301.2416	24.00	-4.64	25106.340	3.0	58292.620	4.0
301.2429	25.01	-4.56	73780.810	3.0	106966.940	2.0
301.2450	92.01	-1.62	241.973	0.0	33437.545	0.0
301.2540	73.01	1.05	5242.739	0.0	38437.319	0.0
301.2588	26.01	-4.88	30764.460	3.5	63948.840	4.5
301.2593	22.00	-3.80	11639.804	3.0	44824.130	2.0
301.2700	90.01	-1.09	6129.972	0.0	39322.789	0.0
301.2709	25.00	-.37	33825.490	2.5	67006.540	2.5
301.2777	13.01	-2.71	110087.500	2.0	143269.800	3.0
301.2796	24.00	-4.29	21810.840	1.0	54992.930	2.0
301.2802	8.01	-1.14	232745.980	1.5	265928.000	1.5
301.2832	26.01	-2.84	73785.250	2.0	106966.940	2.0
301.2847	26.02	-4.98	83237.860	3.0	116419.390	2.0
301.2851	25.00	-2.01	17637.150	.5	50818.640	.5
301.2883	16.01	-2.13	125485.320	.5	158666.450	1.5
301.2885	25.01	-1.86	49889.860	3.0	83070.970	2.0
301.2900	72.01	-.77	0.000	0.0	33190.614	0.0
301.2920	44.00	-.69	8469.040	0.0	41659.433	0.0
301.2941	8.01	-2.01	232747.510	2.5	265928.000	1.5
301.2961	10.00	-3.02	134459.287	1.0	167639.561	1.0
301.2996	23.00	-1.86	8578.520	2.5	41758.410	3.5
301.3029	24.00	-.94	7750.780	0.0	40930.310	1.0
301.3059	28.01	-3.87	99132.780	5.5	132311.980	4.5
301.3070	76.00	-1.03	2661.698	0.0	35850.439	0.0
301.3102	23.01	-.54	13511.710	1.0	46690.430	1.0
301.3122	23.00	-2.16	8476.200	1.5	41654.700	2.5
301.3131	26.02	-1.11	83138.230	5.0	116316.630	5.0
301.3140	75.00	-.33	13711.778	0.0	46899.748	0.0
301.3170	25.01	-4.10	49427.320	4.0	82605.290	4.0
301.3177	17.01	-3.41	128729.800	3.0	161907.700	2.0
301.3302	24.01	-3.58	54418.080	.5	87594.600	1.5
301.3318	8.01	-.37	232753.860	3.5	265930.200	4.5
301.3320	40.01	-.51	4436.164	0.0	37622.152	0.0
301.3329	22.00	-6.61	14105.680	3.0	47281.900	3.0
301.3334	8.01	-.21	232462.830	2.5	265639.000	3.5
301.3360	44.00	-.75	7985.094	0.0	41170.641	0.0
301.3390	42.00	.29	18147.942	0.0	51333.159	0.0
301.3395	27.02	-3.41	139627.200	1.5	172802.700	2.5
301.3423	23.01	-2.93	30641.710	3.0	63816.900	3.0
301.3455	24.01	-1.46	49706.470	2.5	82881.300	2.5
301.3459	23.01	-4.35	17910.980	4.0	51085.770	3.0
301.3568	28.01	-2.56	106283.160	2.5	139456.750	1.5
301.3575	25.02	-3.58	145643.450	2.5	178816.960	2.5
301.3589	27.00	-1.73	0.000	4.5	33173.360	3.5
301.3598	23.00	-1.12	8578.520	2.5	41751.780	1.5
301.3599	25.02	-4.83	143097.000	3.5	176270.250	2.5
301.3620	25.01	-1.08	53017.160	1.0	86190.180	2.0
301.3699	24.00	-1.78	7810.820	1.0	40982.970	2.0
301.3703	25.00	-3.09	30411.740	.5	63583.840	1.5
301.3722	23.01	-2.77	16421.510	4.0	49593.410	5.0
301.3790	74.00	-.83	4758.794	0.0	37939.606	0.0
301.3797	26.01	-4.68	33501.320	3.5	66672.390	3.5
301.3881	28.01	-3.15	99559.330	2.5	132729.480	2.5
301.3899	10.01	-2.37	280262.330	3.5	313432.280	3.5
301.3930	25.00	-2.13	30354.210	3.5	63523.820	2.5
301.3946	25.01	-2.09	73780.810	3.0	106950.240	3.0
301.3971	10.01	-1.17	280262.330	3.5	313431.490	4.5
301.3991	8.01	-.50	232536.060	1.5	265705.000	2.5
301.4023	26.00	-5.83	12968.552	2.0	46137.140	3.0
301.4028	26.02	-3.94	186303.440	3.0	219471.970	4.0
301.4175	26.00	-3.02	7728.058	3.0	40894.972	2.0
301.4186	24.00	-4.40	27703.840	4.0	60870.630	4.0
301.4231	24.01	-3.56	54499.700	1.5	87666.000	2.5
301.4251	28.01	-4.75	94729.250	2.5	127895.330	3.5
301.4269	26.01	-4.51	66522.320	2.5	99688.200	3.5
301.4331	23.00	.05	17136.440	6.5	50301.630	7.5
301.4350	25.01	-3.45	73785.250	2.0	106950.240	3.0
301.4373	8.01	-1.76	232796.270	2.5	265961.000	2.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
301.4419	25.00	-2.09	30419.610	2.5	63583.840	1.5
301.4430	70.01	-.42	30407.885	0.0	63581.653	0.0
301.4440	40.00	-1.16	0.000	0.0	33173.657	0.0
301.4483	18.01	-1.50	159393.310	1.5	192556.840	2.5
301.4502	10.01	-.61	280268.960	2.5	313432.280	3.5
301.4563	29.01	-2.81	88362.030	2.0	121524.670	3.0
301.4565	25.02	-4.44	146066.070	1.5	179228.690	1.5
301.4581	26.01	-3.48	50142.930	2.5	83305.370	3.5
301.4650	69.01	-1.24	161.315	0.0	33332.662	0.0
301.4661	25.00	-.54	25265.740	5.5	58427.300	5.5
301.4712	25.00	-2.36	34343.900	4.5	67504.900	5.5
301.4760	24.00	.16	7810.820	1.0	40971.290	2.0
301.4816	23.01	-.17	13594.730	2.0	46754.590	1.0
301.4848	25.01	-1.07	52383.720	4.0	85543.230	5.0
301.4848	29.00	-1.49	41135.335	0.0	74304.503	0.0
301.4855	8.01	-.79	232602.570	.5	265762.000	1.5
301.4874	28.01	-4.19	102742.740	1.5	135901.960	2.5
301.4874	22.01	-2.63	32025.500	2.5	65184.720	3.5
301.4896	23.00	-4.94	2220.130	2.5	35379.110	3.5
301.4913	24.00	.39	7927.470	2.0	41086.260	3.0
301.4920	90.01	-1.05	8952.985	0.0	42121.361	0.0
301.4931	14.01	-1.27	124325.400	1.5	157484.000	.5
301.4973	25.00	-2.68	30425.710	1.5	63583.840	1.5
301.4982	23.00	-3.72	323.420	3.5	33481.450	3.5
301.5007	10.01	-3.84	280262.330	3.5	313420.090	2.5
301.5019	26.01	-4.05	45079.910	2.5	78237.540	3.5
301.5184	25.00	-.27	33825.490	2.5	66981.300	3.5
301.5196	24.00	-.14	7750.780	0.0	40906.460	1.0
301.5236	28.01	-2.77	104081.040	4.5	137236.280	3.5
301.5244	26.02	-2.31	83161.480	4.0	116316.630	5.0
301.5300	69.01	-.71	161.315	0.0	33325.511	0.0
301.5317	24.00	-3.35	23933.900	4.0	57088.250	5.0
301.5348	21.00	.08	0.000	1.5	33154.010	2.5
301.5374	9.02	-1.69	356371.820	2.5	389525.550	1.5
301.5388	25.00	-2.37	34423.270	3.5	67576.840	4.5
301.5394	11.01	-2.03	297639.340	2.0	330792.850	2.0
301.5394	11.01	-2.03	297639.340	2.0	330792.850	2.0
301.5403	21.01	-3.62	27917.690	1.0	61071.100	1.0
301.5494	24.01	-2.52	35607.600	3.5	68760.000	3.5
301.5541	24.00	-4.92	27223.050	2.0	60374.940	2.0
301.5548	25.01	-4.07	40759.500	0.0	73911.310	1.0
301.5563	26.01	-3.10	66672.390	3.5	99824.040	2.5
301.5609	10.01	-3.00	280268.960	2.5	313420.090	2.5
301.5650	76.00	-.17	13308.491	0.0	46468.838	0.0
301.5683	27.00	-1.45	15184.040	2.5	48334.370	1.5
301.5705	10.01	-3.30	280268.960	2.5	313419.040	1.5
301.5709	10.01	-3.30	219648.440	1.5	252798.480	.5
301.5726	16.01	-3.65	131186.860	2.5	164336.710	3.5
301.5758	24.01	-2.53	35610.500	4.5	68760.000	3.5
301.5854	25.01	-3.33	34761.810	5.0	67910.260	4.0
301.5876	27.01	-3.25	28111.900	2.0	61260.100	2.0
301.5915	26.00	-1.16	19621.004	5.0	52768.780	4.0
301.5916	26.01	-4.96	50157.610	4.5	83305.370	3.5
301.5927	25.00	-1.62	27248.000	1.5	60395.640	1.5
301.5941	28.01	-1.43	72985.650	1.5	106133.140	1.5
301.5958	8.01	-.79	232711.700	.5	265859.000	.5
301.5963	22.00	-4.56	15877.180	2.0	49024.430	3.0
301.5991	23.01	-.49	16421.510	4.0	49568.450	3.0
301.5991	23.01	-2.22	39403.770	4.0	72550.710	4.0
301.6020	75.00	-.17	11695.340	0.0	44851.619	0.0
301.6022	14.01	-1.27	124337.400	.5	157484.000	.5
301.6043	23.00	-.89	16728.750	4.5	49875.120	4.5
301.6084	22.00	-3.81	11776.806	4.0	44922.730	3.0
301.6145	23.01	-3.86	13594.730	2.0	46739.980	2.0
301.6163	24.00	-4.49	21847.880	2.0	54992.930	2.0
301.6165	23.00	-2.35	16572.540	3.5	49717.570	2.5
301.6176	23.00	-.44	9824.580	2.5	42969.490	1.5
301.6182	26.00	-1.49	7985.783	2.0	41130.620	1.0
301.6184	23.00	-1.49	8715.720	3.5	41860.540	4.5
301.6210	18.03	-2.77	256093.290	.5	289237.820	1.5
301.6231	14.01	-1.13	124317.000	2.5	157461.300	1.5
301.6257	23.01	-2.04	40001.660	2.0	73145.680	3.0
301.6280	23.01	-3.39	30673.140	2.0	63816.900	3.0
301.6286	24.00	-.61	27816.880	5.0	60960.580	4.0
301.6370	73.00	-.57	11130.738	0.0	44283.170	0.0
301.6413	27.01	-5.94	17771.500	3.0	50913.800	2.0
301.6413	23.00	-3.12	553.020	4.5	33695.320	5.5
301.6430	77.00	-.31	12824.546	0.0	45976.318	0.0
301.6453	25.00	-.14	25285.430	4.5	58427.300	5.5
301.6463	28.01	-4.64	101144.630	3.5	134286.380	4.5
301.6470	74.00	-.49	6129.972	0.0	39281.305	0.0
301.6490	75.00	-.09	14115.066	0.0	47266.179	0.0
301.6734	25.02	-3.45	143127.000	.5	176265.780	1.5
301.6775	23.01	-.32	13741.610	3.0	46879.940	2.0
301.6780	42.00	.25	21051.613	0.0	54199.539	0.0
301.6780	72.00	-.90	0.000	0.0	33147.926	0.0
301.6896	9.03	-.16	556051.000	1.0	589188.000	2.0
301.6940	72.01	-.77	0.000	0.0	33146.168	0.0
301.6945	28.01	-2.50	100309.290	5.5	133445.750	4.5
301.6960	92.01	-.97	1693.808	0.0	34839.756	0.0
301.6970	75.00	-1.29	11534.025	0.0	44679.863	0.0
301.6988	24.00	-4.84	21856.940	3.0	54992.930	2.0
301.6989	28.01	-1.16	104646.520	3.5	137782.500	4.5
301.6996	14.01	-1.07	124325.400	1.5	157461.300	1.5
301.7001	28.01	-2.88	105439.850	1.5	138575.690	2.5
301.7032	23.02	-.74	61578.740	.5	94714.250	.5
301.7064	26.02	-4.24	86847.110	2.0	119982.260	1.0
301.7130	90.01	-.55	10566.135	0.0	43710.216	0.0
301.7132	23.01	-2.06	20617.050	2.0	53751.460	1.0
301.7169	17.01	-3.34	128662.500	2.0	161796.500	3.0
301.7192	22.01	-.26	12774.810	5.5	45908.560	5.5
301.7200	58.01	.30	5646.026	0.0	38789.338	0.0
301.7219	28.01	-3.87	101247.370	2.5	134380.820	3.5
301.7240	44.00	-.58	3064.986	0.0	36207.858	0.0
301.7248	27.00	-1.16	15184.040	2.5	48317.170	3.5
301.7249	24.01	-3.86	54625.760	2.5	87758.880	3.5
301.7250	76.00	-.05	8630.355	0.0	41773.117	0.0
301.7310	77.00	.05	12985.861	0.0	46127.964	0.0
301.7311	10.01	-.74	246192.450	2.5	279324.890	1.5

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
301.7348	26.02	-4.64	89697.520	3.0	122829.550	3.0
301.7356	10.00	-2.86	134459.287	1.0	167591.233	2.0
301.7370	72.00	-1.39	6533.259	0.0	39674.703	0.0
301.7376	8.01	-3.88	232796.270	2.5	265928.000	1.5
301.7440	74.00	-.73	2903.671	0.0	36044.347	0.0
301.7492	26.00	-2.68	19552.474	1.0	52682.930	2.0
301.7531	28.01	-1.24	104646.520	3.5	137776.550	3.5
301.7542	27.00	-1.24	816.000	3.5	33945.900	2.5
301.7550	70.01	.07	34844.049	0.0	67983.516	0.0
301.7572	24.00	.57	8095.210	3.0	41224.780	4.0
301.7599	24.00	-1.50	25038.610	5.0	58167.890	4.0
301.7600	22.00	-6.33	6556.828	1.0	39686.100	2.0
301.7600	26.02	-3.74	90423.680	2.0	123552.950	1.0
301.7602	8.02	-.20	294221.650	3.0	327350.900	3.0
301.7605	22.00	-2.81	7255.369	2.0	40384.580	1.0
301.7629	26.00	-1.52	888.132	1.0	34017.084	1.0
301.7630	8.01	-1.89	232536.060	1.5	265665.000	2.5
301.7634	27.01	-4.98	28111.900	2.0	61240.800	3.0
301.7654	25.01	-1.62	37811.570	1.0	70940.240	2.0
301.7697	25.01	-1.72	86057.400	4.0	119185.600	3.0
301.7700	25.01	-4.74	49291.310	3.0	82419.480	3.0
301.7702	22.01	-.12	31756.500	1.5	64884.650	2.5
301.7730	24.00	-4.77	27163.200	0.0	60291.040	1.0
301.7760	24.00	-4.13	24093.160	2.0	57220.670	2.0
301.7762	24.01	-.97	35610.500	4.5	68737.990	5.5
301.7765	24.01	-.89	49564.800	1.5	82692.260	.5
301.7810	28.01	-4.24	101144.630	3.5	134271.590	4.5
301.7835	25.00	-3.97	30419.610	2.5	63546.300	3.5
301.7875	28.01	-4.86	100609.010	2.5	133735.260	2.5
301.7880	78.00	-.75	13389.148	0.0	46524.992	0.0
301.7948	28.00	-4.44	15609.861	2.0	48735.308	2.0
301.8040	76.00	-.24	0.000	0.0	33134.087	0.0
301.8076	24.01	-3.52	54418.080	.5	87542.120	.5
301.8089	14.01	-1.27	124337.400	.5	157461.300	1.5
301.8136	26.00	-.99	19390.165	6.0	52513.546	6.0
301.8189	28.01	-4.28	106369.300	1.5	139492.100	2.5
301.8201	26.01	-3.43	33466.500	4.5	66589.170	4.5
301.8247	26.00	-3.44	20641.110	4.0	53763.280	3.0
301.8303	28.01	-1.93	105981.500	4.5	139103.050	5.5
301.8310	72.00	-.64	0.000	0.0	33131.123	0.0
301.8390	29.01	-4.53	113302.800	4.0	146423.400	4.0
301.8490	90.01	-.10	13147.176	0.0	46276.323	0.0
301.8491	24.00	-.44	7810.820	1.0	40930.310	1.0
301.8536	28.00	-3.23	25753.578	4.0	58872.570	4.0
301.8546	9.01	-2.21	265472.310	3.0	298591.200	2.0
301.8550	25.01	-2.09	49820.160	2.0	82939.000	1.0
301.8595	20.00	-3.72	15315.943	2.0	48434.290	1.0
301.8595	20.00	-2.71	15315.943	2.0	48434.290	2.0
301.8595	20.00	-1.79	15315.943	2.0	48434.290	3.0
301.8603	26.02	-4.43	167207.300	4.0	200325.560	4.0
301.8678	28.01	-4.24	101144.630	3.5	134262.070	3.5
301.8680	26.01	-3.94	50187.950	3.5	83305.370	3.5
301.8683	25.02	-2.84	143148.400	1.5	176265.780	1.5
301.8713	24.00	-4.68	20523.690	4.0	53640.740	3.0
301.8746	22.00	-6.57	6598.749	2.0	39715.437	3.0
301.8758	26.02	-2.15	83358.880	2.0	116475.440	3.0
301.8820	24.00	-2.43	7927.470	2.0	41043.350	3.0
301.8823	25.01	-4.54	49820.160	2.0	82936.010	3.0
301.8840	24.00	-.80	27703.840	4.0	60819.500	3.0
301.8879	24.00	-3.44	25177.390	4.0	58292.620	4.0
301.8950	39.00	-.21	10404.820	0.0	43528.919	0.0
301.8954	22.00	-3.46	0.000	2.0	33114.412	2.0
301.8985	26.00	-.90	7728.058	3.0	40842.130	3.0
301.9011	25.00	-1.99	27281.850	.5	60395.640	1.5
301.9022	28.01	-3.98	100332.090	4.5	133445.750	4.5
301.9081	8.01	-1.32	232745.980	1.5	265859.000	.5
301.9083	23.01	-1.87	19132.690	2.0	52245.680	2.0
301.9140	28.00	-1.38	0.000	4.0	33112.368	3.0
301.9227	28.01	-4.53	101144.630	3.5	134256.050	2.5
301.9230	77.00	.57	26133.037	0.0	59254.065	0.0
301.9289	26.00	-2.26	19788.248	4.0	52898.980	5.0
301.9329	21.00	.26	168.340	2.5	33278.640	3.5
301.9365	24.02	-2.70	63038.600	1.0	96148.500	1.0
301.9370	44.00	-1.14	8711.012	0.0	41830.504	0.0
301.9380	76.00	-.49	5726.684	0.0	38846.066	0.0
301.9400	26.01	-3.46	66463.590	5.5	99573.110	4.5
301.9410	90.01	-.71	8307.725	0.0	41426.778	0.0
301.9518	28.01	-4.66	101144.630	3.5	134252.850	3.5
301.9540	45.00	-.80	10243.505	0.0	43361.132	0.0
301.9570	26.01	-3.93	44753.820	3.5	77861.470	4.5
301.9580	28.01	-2.53	104081.040	4.5	137188.580	4.5
301.9585	9.01	-.46	265472.310	3.0	298579.800	4.0
301.9598	28.01	-2.30	104646.520	3.5	137753.870	4.5
301.9670	73.00	-.63	11130.738	0.0	44246.939	0.0
301.9718	25.01	-.38	52653.270	4.0	85759.300	4.0
301.9760	68.00	-1.24	0.000	0.0	33115.214	0.0
301.9783	22.00	-5.74	6556.828	1.0	39662.150	1.0
301.9804	25.01	-4.11	73780.810	3.0	106885.900	4.0
301.9840	40.01	-.82	241.973	0.0	33356.310	0.0
301.9884	25.00	-3.48	30419.610	2.5	63523.820	2.5
301.9913	9.01	-.89	265472.310	3.0	298576.200	3.0
301.9920	25.01	-.05	34761.810	5.0	67865.630	4.0
301.9931	28.01	-4.80	68154.310	1.5	101258.010	1.5
301.9986	9.01	-1.11	265472.310	3.0	298575.400	2.0
301.9998	26.01	-3.89	32909.870	5.5	66012.830	4.5
302.0004	14.00	-4.32	223.157	2.0	33326.053	2.0
302.0010	77.00	.35	26133.037	0.0	59245.510	0.0
302.0232	20.00	-2.31	15157.901	0.0	48258.300	1.0
302.0259	29.01	-3.23	113302.800	4.0	146402.900	5.0
302.0296	24.00	-1.88	23933.900	4.0	57033.600	4.0
302.0357	26.01	-3.34	66589.170	4.5	99688.200	3.5
302.0441	25.00	-4.27	30425.710	1.5	63523.820	2.5
302.0470	40.01	-.01	4194.191	0.0	37301.621	0.0
302.0479	24.01	-2.67	31351.150	2.5	64448.840	2.5
302.0486	25.01	-1.36	49820.160	2.0	82917.780	2.0
302.0492	26.00	-.82	704.003	2.0	33801.555	2.0
302.0530	72.00	-.28	2339.068	0.0	35445.841	0.0
302.0539	28.01	-3.10	103025.580	2.5	136122.610	2.5
302.0540	71.01	.08	12340.601	0.0	45447.264	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
302.0605	24.00	-1.70	25106.340	3.0	58202.650	3.0
302.0613	25.01	-1.22	49291.310	3.0	82387.530	3.0
302.0616	9.01	-1.65	265472.310	3.0	298568.500	4.0
302.0641	26.00	-.00	0.000	4.0	33095.922	4.0
302.0658	26.02	-4.31	167299.600	5.0	200395.330	5.0
302.0661	23.01	-.67	13594.730	2.0	46690.430	1.0
302.0666	24.00	-.17	7810.820	1.0	40906.460	1.0
302.0670	41.00	-.58	5242.739	0.0	38347.977	0.0
302.0717	26.00	-2.96	21715.735	5.0	54810.820	4.0
302.0725	24.03	-2.49	127218.000	3.5	160313.000	2.5
302.0725	9.01	-.63	265472.310	3.0	298567.300	3.0
302.0734	24.01	-3.57	54499.700	1.5	87594.600	1.5
302.0736	26.02	-1.51	118442.920	3.0	151537.800	4.0
302.0779	14.01	-.73	124317.000	2.5	157411.400	2.5
302.0867	24.00	-4.33	24093.160	2.0	57186.600	3.0
302.0880	44.00	-.66	2661.698	0.0	35764.635	0.0
302.0880	58.01	-.40	5646.026	0.0	38748.963	0.0
302.0902	28.01	-2.00	68154.310	1.5	101247.370	2.5
302.0904	26.02	-2.25	186378.940	4.0	219471.970	4.0
302.0907	9.03	-.93	677667.000	3.0	710760.000	3.0
302.0916	27.02	-3.83	73861.800	1.5	106954.700	2.5
302.0926	9.01	-1.16	265498.410	2.0	298591.200	2.0
302.0936	27.00	-3.44	14036.280	1.5	47128.960	2.5
302.0967	25.01	-2.25	37847.900	2.0	70940.240	2.0
302.0990	9.01	-2.00	265498.410	2.0	298590.500	1.0
302.1000	26.02	-3.04	118442.920	3.0	151534.900	2.0
302.1012	28.01	-1.53	68154.310	1.5	101246.160	.5
302.1040	58.01	-.61	5404.054	0.0	38505.238	0.0
302.1069	25.00	-4.89	17282.000	3.5	50373.230	2.5
302.1071	26.02	-2.09	118442.920	3.0	151534.130	3.0
302.1074	26.00	-.36	415.932	3.0	33507.102	3.0
302.1082	25.01	-2.22	70745.080	3.0	103836.170	2.0
302.1136	22.00	-4.71	0.000	2.0	33090.492	1.0
302.1145	25.00	-2.95	30354.210	3.5	63444.610	4.5
302.1181	9.03	.11	556316.000	2.0	589406.000	3.0
302.1264	25.01	-4.96	37851.150	3.0	70940.240	2.0
302.1375	22.00	-4.16	12118.394	4.0	45206.270	3.0
302.1377	26.01	-3.26	33501.320	3.5	66589.170	4.5
302.1390	25.01	-2.24	49517.580	5.0	82605.290	4.0
302.1414	28.01	-2.76	106369.300	1.5	139456.750	1.5
302.1414	26.01	-2.26	27314.930	3.5	60402.380	2.5
302.1423	22.00	-5.65	6598.749	2.0	39686.100	2.0
302.1440	23.00	-7.25	553.020	4.5	33640.180	4.5
302.1500	80.00	-.27	43797.033	0.0	76893.177	0.0
302.1542	18.01	-4.61	186074.350	2.5	219160.400	2.5
302.1544	29.00	-.97	40893.363	0.0	73989.025	0.0
302.1546	14.01	-1.12	124325.400	1.5	157411.400	2.5
302.1556	24.00	.72	8307.570	4.0	41393.470	5.0
302.1630	26.01	-2.12	70523.730	3.5	103608.820	4.5
302.1718	25.01	-1.20	34761.810	5.0	67845.930	5.0
302.1730	39.00	-1.04	483.945	0.0	33577.570	0.0
302.1733	25.01	-4.05	68417.340	2.0	101501.300	3.0
302.1767	28.00	-3.21	15734.018	1.0	48817.600	1.0
302.1784	23.01	-1.59	40195.520	3.0	73278.920	4.0
302.1823	14.03	-1.83	299676.950	.5	332759.920	1.5
302.1866	25.01	-4.45	68417.340	2.0	101499.840	2.0
302.1866	13.01	-2.62	110087.500	2.0	143170.000	1.0
302.1880	75.00	-.45	14518.354	0.0	47610.336	0.0
302.1925	22.00	-7.80	14105.680	3.0	47187.540	2.0
302.1950	26.01	-2.43	65363.660	5.5	98445.240	4.5
302.1971	25.01	-1.55	52653.270	4.0	85734.620	3.0
302.2022	26.02	-2.86	114325.350	5.0	147406.140	5.0
302.2052	26.01	-3.19	66012.830	4.5	99093.290	5.5
302.2090	90.01	-.84	7259.177	0.0	40348.860	0.0
302.2105	24.00	-1.43	23512.000	1.0	56591.880	2.0
302.2141	23.01	-.52	19166.190	1.0	52245.680	2.0
302.2259	28.02	-3.67	82194.300	5.0	115272.500	5.0
302.2280	39.00	-1.22	483.945	0.0	33571.548	0.0
302.2297	9.01	-2.93	265498.410	2.0	298576.200	3.0
302.2343	25.00	-3.93	17282.000	3.5	50359.280	3.5
302.2345	11.01	-2.90	299889.160	1.0	332966.420	2.0
302.2345	11.01	-2.90	299889.160	1.0	332966.420	2.0
302.2348	27.00	-2.08	13795.520	2.5	46872.740	3.5
302.2370	9.01	-1.07	265498.410	2.0	298575.400	2.0
302.2401	28.01	-2.44	105499.050	3.5	138575.690	2.5
302.2410	77.00	.35	26133.037	0.0	59219.217	0.0
302.2433	29.01	-2.45	117666.600	4.0	150742.900	3.0
302.2443	23.00	-1.69	8578.520	2.5	41654.700	2.5
302.2559	27.01	-1.07	51512.200	3.0	84587.120	4.0
302.2577	23.01	-.85	13511.710	1.0	46586.430	0.0
302.2585	9.01	-.62	265516.570	1.0	298591.200	2.0
302.2608	29.00	-1.16	39038.240	0.0	72122.252	0.0
302.2616	9.01	-4.26	265472.310	3.0	298546.600	2.0
302.2635	9.01	-1.60	265472.310	3.0	298546.400	3.0
302.2649	9.01	-3.56	265516.570	1.0	298590.500	1.0
302.2714	26.00	-3.60	21038.987	2.0	54112.203	2.0
302.2740	41.01	.72	17341.367	0.0	50423.934	0.0
302.2741	25.00	-.00	25265.740	5.5	58338.670	6.5
302.2770	23.00	-.46	17136.440	6.5	50209.050	6.5
302.2789	13.01	-2.01	105424.300	0.0	138496.700	1.0
302.2792	22.01	.18	34748.500	4.5	67820.870	4.5
302.2840	23.00	-5.17	2153.200	1.5	35225.040	2.5
302.2918	9.01	-.49	265472.310	3.0	298543.300	4.0
302.2954	17.01	-.23	145468.500	1.0	178539.100	2.0
302.2990	75.00	-.52	17180.052	0.0	50259.884	0.0
302.3107	27.00	-3.35	16778.160	2.5	49847.080	2.5
302.3110	9.01	-.93	265498.410	2.0	298567.300	3.0
302.3152	23.00	-2.20	16728.750	4.5	49797.180	3.5
302.3192	24.00	-4.99	27223.050	2.0	60291.040	1.0
302.3215	23.00	-4.29	2311.370	3.5	35379.110	3.5
302.3262	23.01	-2.42	39612.970	5.0	72680.200	5.0
302.3276	24.00	-1.37	33113.270	4.0	66180.340	5.0
302.3279	8.02	-2.21	365515.760	0.0	398582.800	1.0
302.3290	14.03	-2.14	299676.950	.5	332743.870	.5
302.3310	17.01	-2.48	128729.800	3.0	161796.500	3.0
302.3330	9.01	-4.52	265472.310	3.0	298538.800	3.0
302.3337	26.00	-4.86	24574.655	4.0	57641.060	3.0
302.3357	26.02	-4.41	114339.950	4.0	147406.140	5.0
302.3366	9.01	-3.99	265472.310	3.0	298538.400	2.0
302.3373	23.00	-.93	16917.150	5.5	49983.160	5.5
302.3375	10.03	-4.74	609118.000	2.5	642184.000	1.5
302.3392	24.01	-1.40	47354.630	2.5	80420.430	2.5
302.3429	19.02	-.22	209461.300	.5	242526.700	.5
302.3430	58.01	-.63	4436.164	0.0	37511.181	0.0
302.3440	24.00	-4.94	27176.220	1.0	60241.500	0.0
302.3448	8.02	-.38	267375.650	1.0	300440.850	2.0
302.3497	28.01	-4.42	105499.050	3.5	138563.710	3.5
302.3559	25.01	-3.37	52383.720	4.0	85447.700	5.0
302.3586	27.00	-3.57	15774.040	1.5	48837.720	.5
302.3587	28.01	-3.67	101144.630	3.5	134208.300	2.5
302.3612	22.00	-7.24	6598.749	2.0	39662.150	1.0
302.3668	7.01	-1.04	178273.380	0.0	211336.160	1.0
302.3736	28.00	-3.22	15609.861	2.0	48671.900	3.0
302.3781	24.00	-1.07	25106.340	3.0	58167.890	4.0
302.3813	23.01	-3.92	19191.500	6.0	52252.700	6.0
302.3832	26.01	-2.72	31364.470	1.5	64425.460	2.5
302.3846	22.01	.09	34543.360	3.5	67604.200	3.5
302.3855	28.01	-2.38	104646.520	3.5	137707.260	3.5
302.3876	26.02	-1.84	83358.880	2.0	116419.390	2.0
302.3884	23.00	-1.32	16728.750	4.5	49789.170	3.5
302.3885	23.01	-.68	16533.000	5.0	49593.410	5.0
302.3910	45.00	-.97	5565.369	0.0	38635.136	0.0
302.3987	25.00	-3.72	17282.000	3.5	50341.300	4.5
302.4015	11.01	-3.76	300107.710	2.0	333166.700	1.0
302.4015	11.01	-3.76	300107.710	2.0	333166.700	1.0
302.4029	9.01	-2.12	265516.570	1.0	298575.400	2.0
302.4034	26.00	-2.18	888.132	1.0	33946.920	2.0
302.4053	18.02	.18	207233.090	2.0	240291.660	2.0
302.4056	25.02	-4.06	100001.300	2.5	133059.840	3.5
302.4073	25.01	-4.08	70745.080	3.0	103803.440	3.0
302.4078	13.01	-1.53	105438.400	1.0	138496.700	1.0
302.4090	73.00	-1.14	5565.369	0.0	38633.168	0.0
302.4105	9.03	-.64	556051.000	1.0	589109.000	1.0
302.4199	24.01	-.96	49706.470	2.5	82763.450	1.5
302.4243	24.00	-2.07	25106.340	3.0	58162.840	2.0
302.4270	24.01	-2.37	51669.750	2.5	84725.960	3.5
302.4291	25.02	-2.41	143209.800	2.5	176265.780	1.5
302.4323	25.01	-2.67	73911.310	1.0	106966.940	2.0
302.4331	8.02	-1.22	294221.650	3.0	327277.180	2.0
302.4334	24.00	-.66	7927.470	2.0	40982.970	2.0
302.4393	27.00	-3.34	14036.280	1.5	47091.140	.5
302.4396	27.00	-1.76	15774.040	1.5	48828.870	2.5
302.4432	22.00	-5.75	6661.003	3.0	39715.437	3.0
302.4485	25.01	-1.69	49882.150	4.0	82936.010	3.0
302.4495	24.00	-3.75	27816.880	5.0	60870.630	4.0
302.4500	74.01	.43	11211.395	0.0	44274.711	0.0
302.4551	24.00	-2.72	24282.340	4.0	57335.470	4.0
302.4561	8.02	-.45	267257.290	0.0	300310.310	1.0
302.4600	72.00	-.63	8872.327	0.0	41934.550	0.0
302.4640	83.00	.72	15324.929	0.0	48386.715	0.0
302.4676	24.00	-.53	23933.900	4.0	56985.670	3.0
302.4680	90.01	-1.06	8952.985	0.0	42014.334	0.0
302.4723	25.01	-2.59	73911.310	1.0	106962.560	1.0
302.4740	41.01	.34	10727.450	0.0	43788.143	0.0
302.4760	72.01	.12	17260.709	0.0	50321.183	0.0
302.4810	8.01	-1.63	232711.700	.5	265762.000	1.5
302.4811	9.01	-1.71	265498.410	2.0	298548.700	1.0
302.4848	21.01	-3.56	28021.210	2.0	61071.100	1.0
302.4920	74.00	-1.45	1613.150	0.0	34671.876	0.0
302.4937	20.00	-1.97	15210.063	1.0	48258.980	2.0
302.4944	22.00	-3.10	15975.590	3.0	49024.430	3.0
302.4976	23.01	-.49	19132.690	2.0	52181.180	1.0
302.4999	20.00	-2.44	15210.063	1.0	48258.300	1.0
302.5000	42.00	.60	18228.600	0.0	51286.451	0.0
302.5003	9.01	-2.02	265498.410	2.0	298546.600	2.0
302.5021	27.01	-6.19	13404.600	1.0	46452.600	2.0
302.5022	9.01	-.35	265498.410	2.0	298546.400	3.0
302.5043	28.01	-3.44	67031.020	.5	100078.780	1.5
302.5050	24.01	-1.33	47372.750	1.5	80420.430	2.5
302.5056	28.01	-2.16	101247.370	2.5	134294.990	2.5
302.5059	22.00	-1.07	7255.369	2.0	40302.950	3.0
302.5160	73.00	-.34	9598.245	0.0	42654.348	0.0
302.5190	25.01	-1.43	49889.860	3.0	82936.010	3.0
302.5208	26.02	-2.59	89783.590	4.0	122829.550	3.0
302.5252	28.01	-4.16	71457.740	3.5	104503.220	2.5
302.5266	24.00	-3.87	24282.340	4.0	57327.660	5.0
302.5284	26.00	-3.41	7376.762	4.0	40421.890	4.0
302.5285	25.01	-2.93	73911.310	1.0	106956.420	0.0
302.5290	72.01	-.63	8307.725	0.0	41362.407	0.0
302.5303	16.01	-1.54	131186.860	2.5	164231.780	2.5
302.5370	23.01	-3.91	39403.770	4.0	72447.960	3.0
302.5404	24.00	-.04	7927.470	2.0	40971.290	2.0
302.5507	23.00	-1.66	8715.720	3.5	41758.410	3.5
302.5531	26.01	-4.74	60445.280	2.5	93487.710	3.5
302.5532	24.01	-2.97	54499.700	1.5	87542.120	.5
302.5571	9.01	-2.13	265498.410	2.0	298540.400	1.0
302.5623	24.00	-4.25	25106.340	3.0	58147.760	3.0
302.5634	26.00	-.01	19390.165	6.0	52431.470	6.0
302.5635	28.01	-2.24	104147.290	5.5	137188.580	4.5
302.5640	25.00	-4.57	30354.210	3.5	63395.450	3.5
302.5697	23.01	-2.54	19112.930	4.0	52153.550	5.0
302.5718	9.01	-2.22	265498.410	2.0	298538.800	3.0
302.5731	24.01	-3.19	54625.760	2.5	87666.000	2.5
302.5754	9.01	-1.26	265498.410	2.0	298538.400	2.0
302.5777	8.01	-1.99	232959.260	3.5	265999.000	3.5
302.5777	8.01	-.32	232959.260	3.5	265999.000	4.5
302.5781	17.02	-.90	222100.700	1.5	255140.400	2.5
302.5806	24.00	-1.83	24093.160	2.0	57132.590	1.0
302.5820	77.00	-.26	13873.093	0.0	46921.986	0.0
302.5844	26.00	-.80	978.076	0.0	34017.084	1.0
302.5871	24.00	-1.26	28637.000	3.0	61675.720	2.0
302.5947	22.00	-3.08	15877.180	2.0	48915.070	2.0
302.5984	26.01	-3.01	31387.980	2.5	64425.460	2.5
302.6028	9.04	-.06	811075.000	1.5	844112.000	2.5
302.6028	9.04	-1.21	811075.000	2.5	844112.000	2.5
302.6030	28.01	-3.96	101258.010	1.5	134294.990	2.5
302.6038	23.00	-5.10	323.420	3.5	33360.310	3.5
302.6058	26.00	-4.52	17550.180	3.0	50586.857	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
302.6092	26.02	-3.74	89907.850	4.0	122944.150	4.0
302.6092	26.02	-2.88	89907.850	5.0	122944.150	4.0
302.6113	26.02	-2.41	118721.600	2.0	151757.670	2.0
302.6365	24.00	-1.22	33060.740	3.0	66094.060	4.0
302.6369	27.00	-.25	15184.040	2.5	48217.320	3.5
302.6390	23.02	-2.58	56160.420	2.5	89193.470	1.5
302.6403	24.01	-1.12	39684.000	3.5	72716.910	4.5
302.6427	24.00	-2.93	27597.220	3.0	60629.870	2.0
302.6432	18.03	-3.47	256093.290	.5	289125.880	.5
302.6438	9.01	-2.89	265516.570	1.0	298549.100	0.0
302.6464	26.00	-1.08	7985.783	2.0	41018.029	2.0
302.6468	8.02	-1.86	365550.600	1.0	398582.800	1.0
302.6473	24.00	-1.75	24056.110	5.0	57088.250	5.0
302.6474	9.01	-2.50	265516.570	1.0	298548.700	1.0
302.6490	39.01	.06	25971.721	0.0	59013.297	0.0
302.6529	24.00	-3.84	24303.940	3.0	57335.470	4.0
302.6576	26.02	-3.69	186712.020	1.0	219743.040	1.0
302.6620	58.01	-.89	4113.534	0.0	37153.691	0.0
302.6639	24.01	.29	35707.660	5.5	68737.990	5.5
302.6667	9.01	-1.41	265516.570	1.0	298546.600	2.0
302.6670	70.01	.06	32908.268	0.0	65947.879	0.0
302.6680	74.00	.69	19680.435	0.0	52719.937	0.0
302.6746	18.01	-.51	172213.800	1.5	205242.970	.5
302.6759	25.00	-4.21	17052.290	4.5	50081.310	5.5
302.6761	13.01	-1.31	105467.700	2.0	138496.700	1.0
302.6785	8.01	-4.11	232959.260	3.5	265988.000	2.5
302.6844	24.01	-1.14	32355.940	3.5	65384.040	4.5
302.6849	28.01	-3.73	70635.460	2.5	103663.500	1.5
302.6860	25.01	-2.13	49889.860	3.0	82917.780	2.0
302.6869	23.00	-1.12	17136.440	6.5	50164.260	6.5
302.6905	15.01	-.24	107923.570	2.0	140951.000	3.0
302.6926	23.01	-2.52	40195.520	3.0	73222.720	4.0
302.6986	26.02	-1.89	88923.070	6.0	121949.620	5.0
302.7017	10.01	.04	246192.450	2.5	279218.660	2.5
302.7059	28.01	-3.79	101258.010	1.5	134283.760	.5
302.7060	8.01	-1.11	232959.260	3.5	265985.000	3.5
302.7104	24.00	-1.73	25177.390	4.0	58202.650	3.0
302.7119	23.01	-1.76	40001.660	2.0	73026.760	2.0
302.7119	22.00	-7.71	6661.003	3.0	39686.100	2.0
302.7174	18.02	-.40	207233.090	2.0	240257.590	1.0
302.7235	9.01	-.97	265516.570	1.0	298540.400	1.0
302.7238	28.02	-3.23	86646.200	2.0	119670.000	2.0
302.7254	28.01	-2.41	101357.200	4.5	134380.820	3.5
302.7290	71.01	-1.32	12340.601	0.0	45373.446	0.0
302.7380	26.01	-4.34	31811.870	2.5	64834.120	1.5
302.7381	28.01	-1.12	72985.650	1.5	106007.890	2.5
302.7419	9.01	-1.02	265516.570	1.0	298538.400	2.0
302.7477	26.02	-3.09	83358.880	2.0	116380.070	1.0
302.7494	26.01	-3.49	33501.320	3.5	66522.420	2.5
302.7510	73.00	.16	12179.286	0.0	45209.730	0.0
302.7545	25.01	-2.47	52653.270	4.0	85673.720	4.0
302.7556	24.00	-4.93	20520.920	3.0	53541.250	2.0
302.7557	25.00	-2.49	30354.210	3.5	63374.530	4.5
302.7584	26.00	-2.63	20641.110	4.0	53661.130	3.0
302.7594	23.01	-.84	19161.270	0.0	52181.180	1.0
302.7600	64.01	.10	1129.205	0.0	34158.667	0.0
302.7630	58.01	-1.06	4274.849	0.0	37303.984	0.0
302.7660	92.00	-.31	564.603	0.0	33593.411	0.0
302.7713	24.00	-3.14	27597.220	3.0	60615.840	3.0
302.7741	29.01	-3.57	117231.690	1.0	150250.000	2.0
302.7742	25.00	-4.75	33825.490	2.5	66843.790	1.5
302.7749	10.01	-4.23	280700.770	3.5	313718.990	3.5
302.7770	42.01	.23	17099.394	0.0	50127.002	0.0
302.7854	26.02	-1.51	186454.890	5.0	219471.970	4.0
302.7856	26.00	-3.13	20874.482	3.0	53891.540	3.0
302.7910	46.00	-.56	7662.464	0.0	40688.545	0.0
302.7939	27.00	-3.54	16467.900	4.5	49484.050	3.5
302.7951	8.01	-.98	232745.980	1.5	265762.000	1.5
302.7970	26.01	-1.90	66672.390	3.5	99688.200	3.5
302.7999	8.01	-1.83	232747.510	2.5	265763.000	3.5
302.8000	23.01	-4.94	30641.710	3.0	63657.200	2.0
302.8024	23.00	-1.36	16917.150	5.5	49932.370	4.5
302.8040	40.01	.58	7743.122	0.0	40767.785	0.0
302.8046	23.01	-.45	19166.190	1.0	52181.180	1.0
302.8072	28.01	-3.31	101247.370	2.5	134262.070	3.5
302.8091	8.01	-1.55	232747.510	2.5	265762.000	1.5
302.8098	24.01	-.01	35569.020	2.5	68583.440	2.5
302.8282	26.01	-2.73	65556.340	4.5	98568.750	3.5
302.8306	25.00	-3.17	33825.490	2.5	66837.640	2.5
302.8430	45.00	-1.37	5565.369	0.0	38585.779	0.0
302.8440	41.01	-.16	3468.273	0.0	36488.574	0.0
302.8570	90.01	-.87	6613.917	0.0	39632.800	0.0
302.8582	8.01	-3.11	232753.860	3.5	265763.000	3.5
302.8583	20.02	-.57	245611.880	0.0	278621.010	1.0
302.8624	28.01	-3.28	101247.370	2.5	134256.050	2.5
302.8700	10.01	-.66	246415.040	1.5	279422.890	.5
302.8717	18.01	-3.66	172213.800	1.5	205221.470	1.5
302.8733	24.00	-4.78	24093.160	2.0	57100.660	2.0
302.8749	28.01	-2.52	101247.370	2.5	134254.690	1.5
302.8766	8.01	-.89	232753.860	3.5	265761.000	4.5
302.8780	73.00	-.62	9920.875	0.0	42937.469	0.0
302.8796	15.01	-1.44	105303.190	1.0	138310.000	2.0
302.8825	29.01	-4.92	111876.600	3.0	144883.090	2.0
302.8863	10.01	-.59	219947.460	.5	252953.540	1.5
302.8910	18.01	-1.85	163299.470	2.5	196305.040	3.5
302.8912	18.01	-.45	159706.460	.5	192712.000	1.5
302.8918	28.01	-2.22	101247.370	2.5	134252.850	3.5
302.8960	58.01	-.41	6291.287	0.0	39305.919	0.0
302.8970	23.00	-4.69	2220.130	2.5	35225.040	2.5
302.8980	64.01	-.66	4758.794	0.0	37773.208	0.0
302.9027	28.01	-2.45	68735.980	2.5	101740.270	3.5
302.9036	25.01	-.04	43370.370	3.0	76374.560	2.0
302.9064	11.01	-.57	300107.710	2.0	333111.600	1.0
302.9100	3.01	.05	559501.000	0.0	592514.106	0.0
302.9103	25.01	-4.76	68496.370	1.0	101499.840	2.0
302.9159	15.01	-2.37	105550.450	2.0	138553.300	2.0
302.9160	24.00	-.28	7927.470	2.0	40930.310	1.0
302.9200	79.00	-1.18	9114.300	0.0	42126.316	0.0
302.9205	28.01	-3.44	101247.370	2.5	134249.720	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
302.9235	26.00	-2.37	12560.933	3.0	45562.959	3.0
302.9256	8.02	-4.87	370524.200	2.0	403526.000	1.0
302.9261	8.01	-2.18	232959.260	3.5	265961.000	2.5
302.9273	28.00	-2.99	13521.352	2.0	46522.965	2.0
302.9303	28.00	-1.87	15734.018	1.0	48735.308	2.0
302.9305	11.01	-1.17	297639.340	2.0	330640.600	1.0
302.9305	11.01	-1.17	297639.340	2.0	330640.600	1.0
302.9360	77.00	-.66	6291.287	0.0	39301.560	0.0
302.9416	9.01	-2.24	237508.230	3.0	270508.290	2.0
302.9437	25.01	-1.32	34910.430	4.0	67910.260	4.0
302.9479	9.01	-3.15	237508.920	2.0	270508.290	2.0
302.9520	40.00	.13	1209.863	0.0	34218.392	0.0
302.9571	23.01	-.43	13741.610	3.0	46739.980	2.0
302.9688	26.01	-3.32	33466.500	4.5	66463.590	5.5
302.9711	10.01	-.71	280473.580	1.5	313470.420	2.5
302.9719	22.01	-.36	12676.990	4.5	45673.750	4.5
302.9726	28.01	-3.67	101258.010	1.5	134254.690	1.5
302.9733	24.01	-2.61	40415.340	.5	73411.940	1.5
302.9740	41.01	-.05	12743.888	0.0	45750.021	0.0
302.9752	26.00	-4.98	12968.552	2.0	45964.944	2.0
302.9762	24.00	-3.29	28679.430	1.0	61675.720	2.0
302.9830	51.00	.16	15292.819	0.0	49297.971	0.0
302.9899	27.02	-3.91	140200.100	1.5	173194.900	2.5
302.9899	27.02	-3.91	140200.100	1.5	173194.900	2.5
302.9899	27.02	-4.79	140200.100	1.5	173194.900	2.5
302.9910	25.01	-2.81	52373.180	3.0	85367.850	2.0
302.9910	18.02	-2.54	239193.480	1.0	272188.160	2.0
302.9922	24.00	-1.43	24093.160	2.0	57087.700	2.0
302.9981	14.01	-1.20	124317.000	2.5	157310.900	3.5
302.9993	16.01	-.25	131186.860	2.5	164180.630	3.5
303.0000	8.02	-2.34	365550.600	1.0	398544.300	2.0
303.0000	25.00	-2.06	30354.210	3.5	63347.910	4.5
303.0014	24.00	-1.93	28682.180	2.0	61675.720	2.0
303.0041	29.01	-3.90	95565.650	4.0	128558.900	3.0
303.0141	25.01	-3.10	49427.320	4.0	82419.480	3.0
303.0149	26.00	-.12	19621.004	5.0	52613.072	5.0
303.0216	24.01	-2.56	40415.340	.5	73406.680	.5
303.0220	28.01	-4.81	100010.170	.5	133001.470	.5
303.0243	24.00	-.05	8095.210	3.0	41086.260	3.0
303.0258	29.00	-1.69	40086.787	0.0	73087.277	0.0
303.0290	73.00	-1.03	5968.656	0.0	38968.798	0.0
303.0293	24.00	-1.31	25177.390	4.0	58167.890	4.0
303.0310	58.01	-.03	5726.684	0.0	38726.608	0.0
303.0323	10.00	-3.63	134459.287	1.0	167449.464	1.0
303.0450	75.00	0.00	14115.066	0.0	47113.466	0.0
303.0480	25.01	-2.52	52379.380	2.0	85367.850	2.0
303.0514	8.01	-4.05	232480.100	.5	265468.200	.5
303.0514	8.01	-3.69	232480.100	.5	265468.200	1.5
303.0524	28.01	-2.95	66571.340	2.5	99559.330	2.5
303.0605	26.00	-2.10	18378.187	2.0	51365.300	3.0
303.0658	23.01	-1.57	40430.100	4.0	73416.630	5.0
303.0700	76.00	-.20	5081.424	0.0	38077.102	0.0
303.0737	21.00	-.76	168.340	2.5	33154.010	2.5
303.0763	26.00	-2.57	24118.815	4.0	57104.207	5.0
303.0788	10.01	-.63	249695.530	1.5	282680.650	.5
303.0885	23.01	-3.24	30673.140	2.0	63657.200	2.0
303.0896	26.01	-2.10	66589.170	4.5	99573.110	4.5
303.0920	40.01	-.84	0.000	0.0	32993.283	0.0
303.0931	10.01	-1.44	305566.940	1.5	338550.510	.5
303.0933	23.00	-2.52	323.420	3.5	33306.960	4.5
303.0955	27.02	-3.87	140211.600	2.5	173194.900	2.5
303.0955	27.02	-3.87	140211.600	2.5	173194.900	2.5
303.0955	27.02	-4.50	140211.600	2.5	173194.900	2.5
303.0957	26.00	-4.72	18378.187	2.0	51361.460	3.0
303.0992	22.00	-1.41	8602.340	2.0	41585.240	3.0
303.1010	76.00	-.76	8630.355	0.0	41622.658	0.0
303.1044	22.00	-2.12	15877.180	2.0	48859.510	1.0
303.1050	25.01	.20	34761.810	5.0	67744.080	6.0
303.1110	70.01	-1.75	0.000	0.0	32991.214	0.0
303.1160	72.01	-.60	4839.451	0.0	37830.121	0.0
303.1209	26.00	-.20	19788.248	4.0	52768.780	4.0
303.1255	23.00	-5.83	2112.320	.5	35092.360	1.5
303.1270	75.00	-.20	22987.393	0.0	55976.866	0.0
303.1288	27.00	-1.05	15774.040	1.5	48753.720	1.5
303.1293	28.01	-2.89	66579.710	1.5	99559.330	2.5
303.1300	76.00	-.20	14760.326	0.0	47749.473	0.0
303.1306	25.01	-3.60	31514.350	4.0	64493.830	4.0
303.1327	25.01	-.66	59537.400	4.0	92516.650	4.0
303.1336	28.01	-3.30	67031.020	.5	100010.170	.5
303.1351	24.00	-1.08	7927.470	2.0	40906.460	1.0
303.1377	24.01	-1.70	31083.110	1.5	64061.820	1.5
303.1428	23.00	-1.55	17136.440	6.5	50114.590	5.5
303.1489	24.00	-.38	24056.110	5.0	57033.600	4.0
303.1523	27.00	-2.55	17233.680	3.5	50210.800	4.5
303.1575	23.00	-2.09	8412.940	.5	41389.490	1.5
303.1598	24.02	-3.16	63172.200	2.0	96148.500	1.0
303.1635	26.00	-1.16	8154.713	1.0	41130.620	1.0
303.1641	25.00	-3.11	30419.610	2.5	63395.450	3.5
303.1641	24.01	-2.47	35607.600	3.5	68583.440	2.5
303.1700	90.01	-1.62	4436.164	0.0	37420.958	0.0
303.1734	28.01	-2.35	105588.890	4.5	138563.710	3.5
303.1791	24.01	-2.91	54784.670	3.5	87758.880	3.5
303.1864	28.00	-1.63	0.000	4.0	32973.414	4.0
303.1931	22.00	-6.58	6742.757	4.0	39715.437	3.0
303.1950	24.00	-4.15	24303.940	3.0	57276.420	3.0
303.1962	28.01	-4.29	100010.170	.5	132982.510	1.5
303.1997	25.01	-1.57	53017.160	1.0	85989.120	2.0
303.1998	15.01	-2.53	105550.450	2.0	138522.400	1.0
303.2046	28.01	-4.59	99340.550	3.5	132311.980	4.5
303.2086	27.02	-3.30	138970.500	1.5	171941.500	.5
303.2086	27.02	-3.30	138970.500	1.5	171941.500	.5
303.2091	8.01	-.25	232959.260	3.5	265930.200	4.5
303.2114	25.02	-3.10	100001.300	2.5	132971.990	3.5
303.2144	24.00	-4.19	25177.390	4.0	58147.760	3.0
303.2182	23.01	-1.40	19112.930	4.0	52082.880	4.0
303.2184	28.01	-3.80	100475.820	3.5	133445.750	4.5
303.2260	27.02	-3.34	140225.800	3.5	173194.900	2.5
303.2260	27.02	-3.34	140225.800	3.5	173194.900	2.5
303.2260	27.02	-3.98	140225.800	3.5	173194.900	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
303.2283	24.00	-1.31	33040.100	2.0	66008.950	3.0
303.2284	24.01	-2.73	54625.760	2.5	87594.600	1.5
303.2339	10.01	-1.15	305582.270	.5	338550.510	.5
303.2410	77.00	-.68	12098.628	0.0	45075.699	0.0
303.2455	28.01	-2.85	23108.280	2.5	56075.260	2.5
303.2478	8.01	-.32	232796.270	2.5	265763.000	3.5
303.2570	8.01	-2.60	232796.270	2.5	265762.000	1.5
303.2573	27.02	-2.97	138774.700	2.5	171740.400	1.5
303.2573	27.02	-2.97	138774.700	2.5	171740.400	1.5
303.2582	24.02	-3.10	63420.300	3.0	96385.900	2.0
303.2584	25.01	-4.74	66929.220	2.0	99894.800	3.0
303.2625	6.00	-3.63	86912.860	1.0	119878.000	1.0
303.2657	24.01	-.99	39684.000	3.5	72648.790	3.5
303.2680	28.01	-4.28	68281.620	.5	101246.160	.5
303.2708	26.02	-4.00	109570.840	2.0	142535.070	2.0
303.2730	58.01	-1.12	2339.068	0.0	35312.659	0.0
303.2759	8.02	-1.97	365619.120	2.0	398582.800	1.0
303.2770	41.01	.63	10485.478	0.0	43458.635	0.0
303.2790	75.00	-.58	16534.792	0.0	49507.731	0.0
303.2796	25.01	-4.52	66929.220	2.0	99892.500	2.0
303.2800	50.00	.26	17018.737	0.0	49991.567	0.0
303.2810	76.00	-.26	13308.491	0.0	46281.213	0.0
303.2840	64.01	.08	564.603	0.0	33536.999	0.0
303.2850	33.00	-.45	18551.230	0.0	51523.517	0.0
303.2862	22.00	-4.58	15877.180	2.0	48839.740	3.0
303.2909	23.01	-3.71	19191.500	6.0	52153.550	5.0
303.2931	24.01	-1.30	21822.860	2.5	54784.670	3.5
303.2932	14.01	-1.20	124449.600	3.5	157411.400	2.5
303.3012	28.01	-3.06	101247.370	2.5	134208.300	2.5
303.3031	26.02	-2.41	186454.890	5.0	219415.610	5.0
303.3078	25.01	-2.57	49427.320	4.0	82387.530	3.0
303.3099	26.00	-1.68	19552.474	1.0	52512.460	1.0
303.3120	58.01	-.52	4758.794	0.0	37728.146	0.0
303.3159	28.01	-3.64	98969.440	5.5	131928.770	4.5
303.3188	8.01	-1.95	232745.980	1.5	265705.000	2.5
303.3190	92.01	-.76	1693.808	0.0	34662.399	0.0
303.3210	25.01	-3.76	31514.350	4.0	64473.130	3.0
303.3248	23.01	-5.82	14461.730	3.0	47420.100	4.0
303.3285	23.00	-2.29	16917.150	5.5	49875.120	4.5
303.3322	25.00	-3.44	33825.490	2.5	66783.050	3.5
303.3329	8.01	-1.16	232747.510	2.5	265705.000	2.5
303.3331	24.00	-4.54	25106.340	3.0	58063.800	2.0
303.3399	28.01	-3.27	70706.770	1.5	103663.500	1.5
303.3432	21.01	-1.95	27443.650	2.0	60400.020	1.0
303.3438	23.01	.71	20363.220	6.0	53319.520	7.0
303.3450	44.00	-.20	7420.492	0.0	40386.257	0.0
303.3458	26.01	-1.54	47389.820	1.5	80345.910	.5
303.3507	18.01	-1.33	139258.250	.5	172213.800	1.5
303.3539	25.01	-1.48	34910.430	4.0	67865.630	4.0
303.3567	27.02	-4.78	138774.700	2.5	171729.600	2.5
303.3580	74.00	-.29	12098.628	0.0	45062.980	0.0
303.3585	25.01	-.81	36364.300	1.0	69319.010	0.0
303.3597	25.01	-2.80	49820.160	2.0	82774.730	1.0
303.3597	26.01	-4.85	66377.370	3.5	99331.950	4.5
303.3618	25.01	-3.43	49465.130	3.0	82419.480	3.0
303.3620	77.00	-.95	11775.998	0.0	44739.916	0.0
303.3630	23.00	-4.13	2424.890	4.5	35379.110	3.5
303.3742	23.03	-1.27	222794.600	2.0	255747.600	3.0
303.3767	23.00	-2.59	8476.200	1.5	41428.930	2.5
303.3773	25.00	-2.14	34938.700	4.5	67891.360	3.5
303.3797	26.00	-2.81	22838.320	2.0	55790.720	3.0
303.3819	23.01	.34	14655.630	5.0	47607.790	6.0
303.3828	22.01	-.06	32025.500	2.5	64977.570	3.5
303.3902	26.02	-2.28	186791.780	2.0	219743.040	1.0
303.3913	8.01	-2.03	232753.860	3.5	265705.000	2.5
303.3989	26.01	-4.50	60445.280	2.5	93395.600	2.5
303.4004	23.01	-2.28	40195.520	3.0	73145.680	3.0
303.4031	24.00	-1.77	31048.000	7.0	63997.860	6.0
303.4049	24.01	-.79	35356.060	1.5	68305.730	1.5
303.4050	64.01	-.08	241.973	0.0	33201.219	0.0
303.4060	44.00	-.58	8952.985	0.0	41912.122	0.0
303.4060	90.01	-.21	8307.725	0.0	41266.862	0.0
303.4069	27.00	-2.01	21215.900	.5	54165.350	1.5
303.4110	27.02	-2.76	73540.200	3.5	106489.200	3.5
303.4120	50.00	-.22	1613.150	0.0	34571.635	0.0
303.4147	25.01	-1.43	49882.150	4.0	82830.750	4.0
303.4154	24.00	-4.63	31049.330	6.0	63997.860	6.0
303.4183	24.00	-3.17	33060.740	3.0	66008.950	3.0
303.4190	24.00	-1.90	8095.210	3.0	41043.350	3.0
303.4200	74.00	.41	19680.435	0.0	52638.052	0.0
303.4285	23.03	-.12	223304.600	4.0	256251.700	4.0
303.4313	8.02	-.77	332777.100	1.0	365723.900	1.0
303.4327	25.01	-2.10	48333.060	5.0	81279.710	4.0
303.4340	10.01	-2.41	280473.580	1.5	313420.090	2.5
303.4362	23.01	-1.38	20980.920	2.0	53927.190	3.0
303.4425	27.00	-2.20	1406.840	2.5	34352.420	1.5
303.4437	10.01	-1.76	280473.580	1.5	313419.040	1.5
303.4463	10.01	.49	246192.450	2.5	279137.620	3.5
303.4485	26.00	-2.41	12968.552	2.0	45913.480	3.0
303.4527	9.02	-.93	380250.520	2.5	413195.000	2.5
303.4543	20.00	-1.70	15315.943	2.0	48260.250	3.0
303.4545	22.00	-5.04	170.132	3.0	33114.412	2.0
303.4550	24.01	-1.10	31117.590	2.5	64061.820	1.5
303.4550	75.00	.01	20325.695	0.0	53279.510	0.0
303.4614	26.02	-4.34	186712.020	1.0	219655.550	2.0
303.4618	8.01	-2.73	232747.510	2.5	265691.000	3.5
303.4640	70.01	-.40	31779.063	0.0	64731.901	0.0
303.4660	20.00	-2.44	15315.943	2.0	48258.980	2.0
303.4691	17.03	-.15	219454.000	1.0	252396.700	2.0
303.4708	24.00	-4.47	31055.350	5.0	63997.860	6.0
303.4722	20.00	-3.61	15315.943	2.0	48258.300	1.0
303.4731	26.01	-3.19	31483.200	3.5	64425.460	2.5
303.4731	14.02	-.13	209531.400	2.0	242473.660	3.0
303.4761	19.00	-3.50	0.000	.5	32941.940	1.5
303.4801	8.01	-3.53	232526.700	1.5	265468.200	.5
303.4801	8.01	-4.33	232526.700	1.5	265468.200	1.5
303.4807	25.01	-.85	36274.290	2.0	69215.730	1.0
303.4832	24.01	-4.22	53566.220	3.5	86507.380	2.5
303.4857	25.01	-2.30	49889.860	3.0	82830.750	4.0
303.4920	19.00	-3.81	0.000	.5	32940.210	.5
303.4987	22.00	-2.26	15975.590	3.0	48915.070	2.0
303.5001	24.01	-.85	32603.730	2.5	65543.060	3.5
303.5017	23.00	-5.42	2153.200	1.5	35092.360	1.5
303.5033	23.00	-2.18	8715.720	3.5	41654.700	2.5
303.5119	28.01	-2.51	104298.230	4.5	137236.280	3.5
303.5144	27.01	-1.55	52229.600	2.0	85167.380	3.0
303.5148	23.01	-4.06	39612.970	5.0	72550.710	4.0
303.5203	8.01	-2.43	232753.860	3.5	265691.000	3.5
303.5207	23.02	-.49	61777.150	1.5	94714.250	.5
303.5214	24.01	-3.73	33418.110	2.5	66355.130	1.5
303.5239	24.01	-.90	51789.210	3.5	84725.960	3.5
303.5240	26.00	-4.31	24772.019	1.0	57708.760	2.0
303.5242	23.02	-1.97	56256.750	1.5	89193.470	1.5
303.5258	24.01	-3.55	54418.080	.5	87354.620	1.5
303.5264	29.01	-4.30	114000.000	3.0	146936.480	2.0
303.5278	28.01	-3.98	103653.030	3.5	136589.350	3.5
303.5301	23.00	-1.19	9544.540	.5	42480.620	.5
303.5330	42.00	-.14	18147.942	0.0	51093.289	0.0
303.5354	25.01	.01	34910.430	4.0	67845.930	5.0
303.5382	29.01	-4.25	118484.000	3.0	151419.200	3.0
303.5396	28.01	-4.44	100592.980	3.5	133528.020	3.5
303.5432	8.02	-.57	267375.650	1.0	300310.310	1.0
303.5440	25.00	-2.57	30354.210	3.5	63288.780	3.5
303.5461	18.02	-3.42	239193.480	1.0	272127.820	1.0
303.5470	44.00	-.65	9033.642	0.0	41977.469	0.0
303.5480	24.00	-4.57	24286.540	1.0	57220.670	2.0
303.5527	24.01	-3.34	47354.630	2.5	80288.250	1.5
303.5530	90.01	-2.18	0.000	0.0	32943.176	0.0
303.5533	24.00	-4.05	24303.940	3.0	57237.500	4.0
303.5538	18.02	-1.30	210212.260	3.0	243145.760	2.0
303.5774	26.01	-1.61	65363.660	5.5	98294.600	5.5
303.5785	26.02	-3.15	89697.520	3.0	122628.340	2.0
303.5921	10.01	-.24	249445.990	2.5	282375.330	1.5
303.5937	28.01	-3.38	101357.200	4.5	134286.380	4.5
303.5953	11.02	-4.98	373633.000	1.5	406562.000	1.5
303.5967	28.01	-4.01	101366.140	2.5	134294.990	2.5
303.5998	28.01	-2.83	103025.580	2.5	135954.090	3.5
303.6006	23.00	-3.09	553.020	4.5	33481.450	3.5
303.6055	25.01	-2.67	70940.240	2.0	103868.140	1.0
303.6079	23.01	-2.78	16340.970	3.0	49268.610	4.0
303.6101	29.00	-1.84	13227.833	0.0	46164.814	0.0
303.6179	28.01	-2.61	107082.210	2.5	140008.760	3.5
303.6183	25.00	-4.59	24779.320	1.5	57705.830	.5
303.6285	27.02	-4.59	72083.300	4.5	105008.700	3.5
303.6305	8.02	-1.75	365619.120	2.0	398544.300	2.0
303.6310	42.00	.21	18389.915	0.0	51324.629	0.0
303.6372	28.01	-2.99	101357.200	4.5	134281.660	5.5
303.6390	40.01	0.00	4436.164	0.0	37370.010	0.0
303.6450	78.00	-.13	13389.148	0.0	46322.343	0.0
303.6460	25.00	-2.05	35041.370	3.5	67964.870	2.5
303.6535	28.01	-3.85	100078.780	1.5	133001.470	.5
303.6550	75.00	-.61	16212.162	0.0	49144.272	0.0
303.6560	22.00	-3.97	12118.394	4.0	45040.810	4.0
303.6562	25.01	-3.95	49465.130	3.0	82387.530	3.0
303.6588	10.01	-1.89	280797.260	2.5	313719.370	2.5
303.6590	39.01	.19	28552.762	0.0	61484.439	0.0
303.6613	6.00	-3.91	86956.160	1.0	119878.000	1.0
303.6623	10.01	-.54	280797.260	2.5	313718.990	3.5
303.6626	26.02	-2.64	89907.850	4.0	122829.550	3.0
303.6697	24.00	-1.12	27597.220	3.0	60518.160	3.0
303.6697	24.00	-.48	27597.220	3.0	60518.160	3.0
303.6701	24.00	-3.17	27163.200	0.0	60084.090	1.0
303.6771	22.01	-1.81	12628.770	1.5	45548.900	1.5
303.6802	29.01	-4.46	118484.000	3.0	151403.800	2.0
303.6814	26.02	-3.62	92523.910	5.0	125443.580	4.0
303.6874	8.01	-2.22	232745.980	1.5	265665.000	2.5
303.6889	18.01	-2.82	157673.320	2.5	190592.170	1.5
303.6931	29.01	-3.17	118484.000	3.0	151402.400	3.0
303.6935	22.00	-2.39	16106.080	4.0	49024.430	3.0
303.6982	26.01	-.82	46967.470	2.5	79885.320	2.5
303.6986	28.01	-3.77	100010.170	.5	132927.970	1.5
303.6986	28.02	-4.51	78303.100	2.0	111220.900	3.0
303.6998	26.01	-3.11	67000.630	2.5	99918.300	1.5
303.7015	8.01	-3.39	232747.510	2.5	265665.000	2.5
303.7021	28.01	-3.94	101357.200	4.5	134274.620	5.5
303.7040	24.01	-3.31	31531.620	1.5	64448.840	2.5
303.7041	24.00	-.22	8307.570	4.0	41224.780	4.0
303.7069	11.01	.28	299889.160	1.0	332806.060	2.0
303.7069	11.01	.28	299889.160	1.0	332806.060	2.0
303.7155	26.00	-3.83	22838.320	2.0	55754.290	2.0
303.7198	24.01	-1.79	47372.750	1.5	80288.250	1.5
303.7220	28.01	-3.44	101754.800	2.5	134670.070	1.5
303.7233	25.01	-3.09	49820.160	2.0	82735.290	2.0
303.7250	14.02	-.43	209559.330	3.0	242474.270	4.0
303.7258	25.02	-4.04	145643.450	2.5	178558.300	1.5
303.7263	28.01	-4.78	70748.700	.5	103663.500	1.5
303.7288	14.02	-.23	209559.330	3.0	242473.660	4.0
303.7301	28.01	-4.17	101357.200	4.5	134271.590	4.5
303.7306	14.02	-1.19	209559.330	3.0	242473.660	3.0
303.7358	23.00	-2.17	8578.520	2.5	41492.290	3.5
303.7367	23.00	-5.05	2311.370	3.5	35225.040	2.5
303.7377	24.01	-4.46	54499.700	1.5	87413.270	2.5
303.7390	26.00	-.58	888.132	1.0	33801.555	2.0
303.7402	23.00	-2.08	8476.200	1.5	41389.490	1.5
303.7491	25.00	-3.34	33825.490	2.5	66737.820	3.5
303.7500	73.01	-.02	6775.232	0.0	39697.043	0.0
303.7521	24.00	-2.56	27703.840	4.0	60615.840	3.0
303.7565	27.01	-2.08	52684.500	1.0	85596.030	2.0
303.7626	26.01	-3.50	33466.500	4.5	66377.370	3.5
303.7695	28.01	-4.95	101246.160	.5	134156.280	1.5
303.7720	10.01	.01	246415.040	1.5	279324.890	1.5
303.7728	24.01	-2.10	51584.440	1.5	84494.200	2.5
303.7730	58.01	-.14	4274.849	0.0	37194.167	0.0
303.7750	77.00	-.51	12421.258	0.0	45340.359	0.0
303.7771	23.03	-2.75	254824.100	1.0	287733.400	2.0
303.7781	26.00	-3.18	7985.783	2.0	40894.972	2.0
303.7783	29.01	-3.02	108335.430	2.0	141244.600	1.0
303.7797	26.02	-3.65	84159.550	4.0	117068.560	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
303.7807	28.01	-4.44	101247.370	2.5	134156.280	1.5
303.7821	28.01	-4.51	100619.260	4.5	133528.020	3.5
303.7823	8.01	-2.91	232796.270	2.5	265705.000	2.5
303.7903	24.00	-3.39	27176.220	1.0	60084.090	1.0
303.7913	25.00	-3.99	17451.520	2.5	50359.280	3.5
303.7929	28.00	-.57	204.786	3.0	33112.368	3.0
303.7931	18.03	-.68	257348.890	1.5	290256.450	1.5
303.7960	75.00	-.63	13711.778	0.0	46628.604	0.0
303.7990	70.01	-.74	32827.611	0.0	65744.112	0.0
303.7991	28.01	-2.63	105668.780	2.5	138575.690	2.5
303.8009	24.00	-2.27	27597.220	3.0	60503.940	4.0
303.8028	23.01	-2.27	40001.660	2.0	72908.170	3.0
303.8036	24.01	-1.18	39742.360	2.5	72648.790	3.5
303.8091	25.01	-.17	35004.430	3.0	67910.260	4.0
303.8180	44.00	-.77	7985.094	0.0	40899.536	0.0
303.8186	8.01	-3.68	232526.700	1.5	265431.500	2.5
303.8285	28.01	-3.08	100078.780	1.5	132982.510	1.5
303.8302	27.00	-2.26	7442.410	3.5	40345.950	2.5
303.8353	24.01	-3.31	54784.670	3.5	87687.660	4.5
303.8377	25.01	-1.81	48317.850	4.0	81220.580	3.0
303.8470	25.01	-3.10	49291.310	3.0	82193.040	2.0
303.8507	25.01	-.27	34910.430	4.0	67811.750	3.0
303.8523	23.01	-1.30	19902.600	0.0	52803.750	1.0
303.8529	24.01	-2.79	32355.940	3.5	65257.030	3.5
303.8563	26.01	-4.02	66672.390	3.5	99573.110	4.5
303.8575	23.00	-6.74	2112.320	.5	35012.910	.5
303.8600	90.01	-1.12	6129.972	0.0	39039.865	0.0
303.8619	25.00	-1.66	27201.540	2.5	60101.650	2.5
303.8727	22.01	-1.57	12774.810	5.5	45673.750	4.5
303.8772	26.01	-2.24	31387.980	2.5	64286.440	3.5
303.8783	28.01	-3.33	67694.640	2.5	100592.980	3.5
303.8820	24.01	-2.38	36272.660	4.5	69170.600	5.5
303.8890	25.01	-1.28	37847.900	2.0	70745.080	3.0
303.8932	28.01	-4.71	79823.030	3.5	112719.750	3.5
303.8958	25.02	-4.12	100001.300	2.5	132897.740	2.5
303.9005	25.01	-3.06	70940.240	2.0	103836.170	2.0
303.9006	24.01	-2.85	54418.080	.5	87314.000	.5
303.9028	24.00	-3.04	33113.270	4.0	66008.950	3.0
303.9031	28.01	-4.12	101357.200	4.5	134252.850	3.5
303.9060	32.00	.52	7017.204	0.0	39922.115	0.0
303.9098	28.01	-4.77	105668.780	2.5	138563.710	3.5
303.9117	8.01	-.81	232796.270	2.5	265691.000	3.5
303.9186	25.00	-2.16	27248.000	1.5	60141.980	.5
303.9190	25.01	-2.31	37851.150	3.0	70745.080	3.0
303.9203	14.01	-1.23	124567.500	2.5	157461.300	1.5
303.9245	9.02	.27	380250.520	2.5	413143.860	3.5
303.9260	77.00	-.01	12098.628	0.0	45001.374	0.0
303.9318	26.00	-2.50	19621.004	5.0	52513.546	6.0
303.9321	24.00	-3.07	24093.160	2.0	56985.670	3.0
303.9332	25.01	-2.57	49820.160	2.0	82712.550	3.0
303.9332	24.01	-3.52	39824.520	4.5	72716.910	4.5
303.9360	49.00	-.01	0.000	0.0	32901.664	0.0
303.9410	41.01	-1.30	2581.041	0.0	35482.163	0.0
303.9416	8.01	-1.98	232747.510	2.5	265639.000	3.5
303.9433	29.01	-3.89	118484.000	3.0	151375.300	2.0
303.9486	24.01	-3.48	36101.820	3.5	68992.550	4.5
303.9510	58.01	-.66	5565.369	0.0	38465.409	0.0
303.9521	28.01	-2.82	104298.230	4.5	137188.580	4.5
303.9548	25.01	-.19	43484.500	2.0	76374.560	2.0
303.9553	23.01	-2.27	32040.760	2.0	64930.760	1.0
303.9557	25.01	-2.17	52653.270	4.0	85543.230	5.0
303.9562	28.01	-4.68	101366.140	2.5	134256.050	2.5
303.9562	27.00	-1.31	13795.520	2.5	46685.430	1.5
303.9572	26.02	-2.66	118867.870	1.0	151757.670	2.0
303.9584	25.01	-4.51	67008.930	3.0	99898.600	4.0
303.9586	10.01	.04	249108.640	3.5	281998.280	2.5
303.9593	9.02	-3.87	431432.270	1.5	464321.840	2.5
303.9614	24.01	-3.80	54625.760	2.5	87515.100	3.5
303.9664	26.00	-1.76	20874.482	3.0	53763.280	3.0
303.9670	70.01	-.35	35650.624	0.0	68548.932	0.0
303.9680	41.00	-.52	5887.999	0.0	38786.199	0.0
303.9687	28.01	-4.31	101366.140	2.5	134254.690	1.5
303.9736	24.00	-.19	24200.230	6.0	57088.250	5.0
303.9750	9.02	.12	380307.130	1.5	413195.000	2.5
303.9752	21.00	-2.33	168.340	2.5	33056.190	3.5
303.9760	24.00	.10	8095.210	3.0	40982.970	2.0
303.9765	23.01	-.72	20980.920	2.0	53868.630	2.0
303.9804	28.01	-3.71	101754.800	2.5	134642.090	3.5
303.9820	41.01	-.14	11292.053	0.0	44188.738	0.0
303.9820	42.00	.20	25487.776	0.0	58384.461	0.0
303.9857	28.01	-4.13	101366.140	2.5	134252.850	3.5
303.9857	24.00	-4.38	24299.890	2.0	57186.600	3.0
303.9935	25.01	-4.62	67008.930	3.0	99894.800	3.0
303.9937	21.01	.64	32349.980	3.0	65235.830	4.0
304.0002	8.01	-1.26	232753.860	3.5	265639.000	3.5
304.0011	28.01	-1.43	103663.500	1.5	136548.550	2.5
304.0030	75.00	-.47	14115.066	0.0	47009.478	0.0
304.0135	28.01	-4.66	96535.870	3.5	129419.580	4.5
304.0141	23.00	-1.86	8715.720	3.5	41599.360	4.5
304.0147	28.01	-4.44	101366.140	2.5	134249.720	1.5
304.0204	25.02	-3.64	100054.100	.5	132937.060	.5
304.0265	27.01	-5.04	18031.500	2.0	50913.800	2.0
304.0310	44.00	-1.09	1129.205	0.0	34020.588	0.0
304.0340	64.01	-.97	4758.794	0.0	37649.852	0.0
304.0355	24.01	-2.82	54784.670	3.5	87666.000	2.5
304.0428	26.00	-1.32	7376.762	4.0	40257.300	5.0
304.0434	25.00	-2.43	34938.700	4.5	67819.170	4.5
304.0470	77.00	-.17	18389.915	0.0	51279.567	0.0
304.0527	26.02	-2.60	151537.800	4.0	184417.270	5.0
304.0583	9.02	-3.78	432060.640	1.5	464939.500	2.5
304.0599	25.00	-.01	25281.040	2.5	58159.730	2.5
304.0668	24.00	-1.71	31049.330	6.0	63927.270	5.0
304.0700	73.01	-.62	5565.369	0.0	38452.533	0.0
304.0770	63.01	-2.31	1613.150	0.0	34499.557	0.0
304.0809	27.00	-2.34	13795.520	2.5	46671.940	2.5
304.0840	24.00	-1.11	8095.210	3.0	40971.290	2.0
304.0843	26.01	-2.50	33501.320	3.5	66377.370	3.5
304.0900	76.00	-.11	2661.698	0.0	35546.699	0.0
304.0907	23.01	-3.95	30673.140	2.0	63548.500	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
304.0922	24.01	.49	34631.140	4.5	67506.340	5.5
304.0926	25.01	-3.60	51553.060	5.0	84428.210	5.0
304.0930	14.02	.09	209599.700	4.0	242474.810	5.0
304.0943	18.02	-2.93	239193.480	1.0	272068.450	1.0
304.0980	14.02	-1.55	209599.700	4.0	242474.270	4.0
304.1000	75.00	-.50	14921.641	0.0	47805.561	0.0
304.1018	14.02	-1.45	209599.700	4.0	242473.860	4.0
304.1036	14.02	-3.00	209599.700	4.0	242473.660	3.0
304.1062	20.00	-2.27	15157.901	0.0	48031.580	1.0
304.1096	20.00	-4.43	15210.063	1.0	48083.383	2.0
304.1159	26.01	-3.82	65696.110	4.5	98568.750	3.5
304.1196	23.00	-6.97	2220.130	2.5	35092.360	1.5
304.1218	9.03	-.64	556316.000	2.0	589188.000	2.0
304.1219	25.00	-.95	25287.740	3.5	58159.730	2.5
304.1225	24.00	-4.93	31055.350	5.0	63927.270	5.0
304.1258	28.01	-2.43	106620.530	3.5	139492.100	2.5
304.1273	13.01	-1.97	110087.500	2.0	142958.900	1.0
304.1338	25.01	-4.65	32787.600	4.0	65658.300	5.0
304.1380	29.01	-3.52	118532.150	2.0	151402.400	3.0
304.1416	25.02	-3.88	144817.680	3.5	171687.540	3.5
304.1420	23.01	-.43	16340.970	3.0	49210.780	3.0
304.1448	24.01	-3.75	35607.600	3.5	68477.110	4.5
304.1480	25.00	-1.45	30419.610	2.5	63288.780	3.5
304.1484	28.01	-4.26	99442.860	4.5	132311.980	4.5
304.1520	8.01	-2.58	232796.270	2.5	265665.000	2.5
304.1526	29.01	-2.30	108335.430	2.0	141204.100	3.0
304.1555	26.01	-2.32	66463.590	5.5	99331.950	4.5
304.1560	14.01	-1.01	124615.700	1.5	157484.000	.5
304.1583	24.00	-3.80	24286.540	1.0	57154.590	0.0
304.1606	28.01	-2.42	76402.030	2.5	109269.830	1.5
304.1610	28.01	-1.48	103663.500	1.5	136531.260	1.5
304.1639	26.00	-1.41	12560.933	3.0	45428.385	4.0
304.1700	42.00	.55	16696.107	0.0	49572.459	0.0
304.1717	24.01	.08	35610.500	4.5	68477.110	4.5
304.1740	26.00	-1.18	7728.058	3.0	40594.413	4.0
304.1740	74.00	.52	15324.929	0.0	48200.849	0.0
304.1750	28.01	-2.22	103653.030	3.5	136519.280	4.5
304.1838	27.02	-3.58	73726.600	2.5	106591.900	1.5
304.1846	22.01	-2.15	29544.370	2.5	62409.580	3.5
304.1852	26.01	-3.67	65580.090	5.5	98445.240	4.5
304.1944	22.00	-3.29	15975.590	3.0	48839.740	3.0
304.1957	23.01	-4.91	14556.090	4.0	47420.100	4.0
304.1979	26.02	-4.44	186791.780	2.0	219655.550	2.0
304.1984	23.01	-1.67	40430.100	4.0	73293.820	5.0
304.1990	75.00	-.61	16212.162	0.0	49085.380	0.0
304.2021	26.00	-1.40	8154.713	1.0	41018.029	2.0
304.2026	28.01	-3.00	79823.030	3.5	112686.300	2.5
304.2032	25.01	-4.41	70940.240	2.0	103803.440	3.0
304.2060	73.01	.07	4032.876	0.0	36905.337	0.0
304.2174	24.01	-3.35	32355.940	3.5	65217.610	4.5
304.2208	14.01	-.41	124449.600	3.5	157310.900	3.5
304.2217	25.01	-2.45	35004.430	3.0	67865.630	4.0
304.2232	24.00	-.71	27223.050	2.0	60084.090	1.0
304.2265	23.01	-.23	16340.970	3.0	49201.660	2.0
304.2282	17.01	-4.66	112608.000	1.0	145468.500	1.0
304.2316	25.00	-1.66	27281.850	.5	60141.980	.5
304.2340	26.00	-4.42	17726.985	2.0	50586.857	3.0
304.2345	22.01	-2.23	29734.450	3.5	62594.270	4.5
304.2350	69.01	-1.49	161.315	0.0	33030.643	0.0
304.2355	23.00	-6.66	2153.200	1.5	35012.910	.5
304.2407	22.01	-.67	32025.500	2.5	64884.650	2.5
304.2440	73.01	.58	11695.340	0.0	44563.696	0.0
304.2448	11.01	-3.32	300107.710	2.0	332966.420	2.0
304.2448	11.01	-3.32	300107.710	2.0	332966.420	2.0
304.2466	18.01	-3.42	172335.520	2.5	205194.040	1.5
304.2478	27.00	-1.83	816.000	3.5	33674.380	2.5
304.2480	44.00	-.82	3064.986	0.0	35932.910	0.0
304.2508	23.00	-4.26	8578.520	2.5	41436.580	3.5
304.2510	25.02	-3.48	144619.190	1.5	177477.230	2.5
304.2539	22.00	-2.07	0.000	2.0	32857.721	3.0
304.2640	78.00	-.91	806.575	0.0	33672.770	0.0
304.2650	70.01	-.24	33311.556	0.0	66177.643	0.0
304.2667	26.00	-1.21	7985.783	2.0	40842.130	3.0
304.2727	22.01	-1.38	34748.500	4.5	67604.200	3.5
304.2731	25.00	-.62	25281.040	2.5	58136.690	3.5
304.2740	76.01	1.08	11372.710	0.0	44237.825	0.0
304.2742	24.00	-4.68	24277.060	0.0	57132.590	1.0
304.2766	22.00	-4.46	8602.340	2.0	41457.620	3.0
304.2775	8.02	-2.69	365619.120	2.0	398474.300	3.0
304.2785	24.01	-1.08	32854.460	4.5	65709.530	5.5
304.2799	24.01	-2.81	54499.700	1.5	87354.620	1.5
304.2830	44.00	-.46	10566.135	0.0	43430.278	0.0
304.2884	9.03	.14	677906.000	4.0	710760.000	3.0
304.2900	28.01	-2.91	103025.580	2.5	135879.410	3.5
304.2901	23.01	-1.67	18269.490	1.0	51123.310	2.0
304.2912	28.01	-2.11	103663.500	1.5	136517.200	.5
304.2916	25.00	-1.40	27248.000	1.5	60101.650	2.5
304.2998	28.01	-4.26	100592.980	3.5	133445.750	4.5
304.3010	64.00	-.32	967.890	0.0	33830.089	0.0
304.3018	26.00	-3.74	21038.987	2.0	53891.540	3.0
304.3018	8.02	-.54	267375.650	1.0	300228.210	0.0
304.3060	90.01	-1.43	2177.753	0.0	35039.412	0.0
304.3111	26.02	-4.82	118686.250	4.0	151537.600	4.0
304.3121	23.00	-.57	137.380	2.5	32988.820	3.5
304.3122	25.01	-.76	36364.300	1.0	69215.730	1.0
304.3138	25.00	-.72	25285.430	4.5	58136.690	3.5
304.3161	10.01	-4.41	219947.460	.5	252798.480	.5
304.3217	23.00	-2.53	8578.520	2.5	41428.930	2.5
304.3250	40.00	-1.41	564.603	0.0	33424.210	0.0
304.3256	25.00	-2.35	35041.370	3.5	67891.360	3.5
304.3265	25.00	-4.01	35114.980	2.5	67964.870	2.5
304.3274	8.02	-2.88	370524.200	2.0	403374.000	3.0
304.3330	28.01	-3.81	100078.780	1.5	132927.970	1.5
304.3338	17.01	-4.22	126725.100	1.0	159574.200	2.0
304.3352	25.00	.19	25287.740	3.5	58136.690	3.5
304.3364	23.01	-4.52	40430.100	4.0	73278.920	4.0
304.3366	27.02	-4.71	78434.300	.5	111283.100	.5
304.3448	24.00	-1.96	28679.430	1.0	61527.340	1.0
304.3451	26.02	-4.55	118686.250	4.0	151534.130	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
304.3472	22.00	-2.58	15877.180	2.0	48724.830	1.0
304.3500	76.00	-.87	5726.684	0.0	38583.592	0.0
304.3518	22.00	-2.88	15877.180	2.0	48724.340	2.0
304.3523	23.01	-.75	16421.510	4.0	49268.610	4.0
304.3557	23.00	-6.93	0.000	1.5	32846.740	2.5
304.3557	23.00	-.68	0.000	1.5	32846.740	2.5
304.3559	23.00	-2.62	17136.440	6.5	49983.160	5.5
304.3621	24.00	-3.70	24286.540	1.0	57132.590	1.0
304.3640	76.00	-.60	10082.190	0.0	42937.587	0.0
304.3662	14.01	-.20	124615.700	1.5	157461.300	1.5
304.3678	25.01	-1.95	49889.860	3.0	82735.290	2.0
304.3703	24.00	-1.52	28682.180	2.0	61527.340	1.0
304.3717	22.00	-3.60	8492.421	1.0	41337.430	2.0
304.3717	14.01	-.31	124639.000	.5	157484.000	.5
304.3764	25.00	-.86	25265.740	5.5	58110.240	4.5
304.3768	14.02	-2.81	201597.730	1.0	234442.180	2.0
304.3799	22.01	-1.27	12628.770	1.5	45472.890	.5
304.3810	74.00	-.97	4758.794	0.0	37612.356	0.0
304.3819	14.01	-.27	124567.500	2.5	157411.400	2.5
304.3819	14.02	-1.63	201598.280	2.0	234442.180	2.0
304.3842	23.00	-1.36	9636.960	1.5	42480.620	.5
304.3875	24.01	-1.47	32836.840	3.5	65680.150	4.5
304.3889	29.01	-3.64	118532.150	2.0	151375.300	2.0
304.3920	73.00	-.62	10566.135	0.0	43418.510	0.0
304.3928	8.01	-1.09	232796.270	2.5	265639.000	3.5
304.3931	14.02	-.88	201599.480	3.0	234442.180	2.0
304.3942	25.00	-3.88	24779.320	1.5	57621.900	1.5
304.3997	27.00	-.55	0.000	4.5	32841.990	4.5
304.4010	70.01	-.84	30246.570	0.0	63097.973	0.0
304.4028	29.00	-1.67	41135.335	0.0	73986.544	0.0
304.4040	27.00	-1.42	15774.040	1.5	48615.560	2.5
304.4070	76.00	-.21	16131.504	0.0	48982.260	0.0
304.4080	75.00	-.50	14921.641	0.0	47772.289	0.0
304.4086	10.01	-.65	249839.630	.5	282680.650	.5
304.4136	28.01	-4.27	71457.740	3.5	104298.230	4.5
304.4139	26.02	-2.80	151534.130	3.0	184374.590	4.0
304.4163	27.02	-4.01	139743.400	2.5	172583.600	3.5
304.4163	27.02	-4.01	139743.400	2.5	172583.600	3.5
304.4163	27.02	-3.81	139743.400	2.5	172583.600	3.5
304.4201	25.01	-2.84	47073.560	3.0	79913.350	4.0
304.4216	24.01	-2.20	39877.280	3.5	72716.910	4.5
304.4383	28.01	-3.61	100332.090	4.5	133169.920	3.5
304.4400	58.01	-.74	4920.109	0.0	37767.304	0.0
304.4410	76.00	-.49	13308.491	0.0	46155.578	0.0
304.4423	25.02	-3.94	146391.300	.5	179228.690	1.5
304.4479	26.02	-3.03	151537.800	4.0	184374.590	4.0
304.4553	25.01	-4.47	73683.110	4.0	106519.100	5.0
304.4572	25.00	.26	17052.290	4.5	49888.080	3.5
304.4683	28.00	-4.72	25753.578	4.0	58588.168	3.0
304.4752	25.00	-4.16	24788.050	2.5	57621.900	1.5
304.4760	41.01	.53	13550.463	0.0	46393.774	0.0
304.4796	28.01	-2.71	100078.780	1.5	132912.150	2.5
304.4842	26.01	-2.06	31999.120	3.5	64832.000	4.5
304.4848	24.00	-2.92	31009.000	3.0	63841.810	4.0
304.4858	24.00	-3.31	24299.890	2.0	57132.590	1.0
304.4910	76.00	-.37	10969.423	0.0	43811.116	0.0
304.4913	25.01	-4.37	31661.720	3.0	64493.830	4.0
304.4934	23.00	-.71	323.420	3.5	33155.300	4.5
304.4969	12.02	-2.26	531833.100	3.0	564664.600	2.0
304.4994	23.01	-.80	40195.520	3.0	73026.760	2.0
304.5003	28.00	-1.46	1332.153	3.0	34163.294	2.0
304.5025	17.01	-4.00	126743.300	2.0	159574.200	2.0
304.5046	14.02	-2.11	201597.730	1.0	234428.400	1.0
304.5058	18.01	-4.36	186171.260	.5	219001.800	1.5
304.5072	25.01	-2.07	49882.150	4.0	82712.550	3.0
304.5075	26.00	-2.98	7376.762	4.0	40207.120	3.0
304.5097	14.02	-1.63	201598.280	2.0	234428.400	1.0
304.5133	27.00	-1.26	16195.680	.5	49025.420	1.5
304.5161	23.01	-1.21	18293.870	2.0	51123.310	2.0
304.5229	28.01	-3.78	101144.630	3.5	133973.330	2.5
304.5321	26.01	-2.05	44915.070	3.5	77742.780	2.5
304.5370	39.00	-.90	483.945	0.0	33320.677	0.0
304.5434	28.01	-2.96	100619.260	4.5	133445.750	4.5
304.5508	24.01	-2.02	32854.460	4.5	65680.150	4.5
304.5550	90.01	-.46	10082.190	0.0	42916.982	0.0
304.5556	10.01	-.20	246597.710	.5	279422.890	.5
304.5559	8.02	-1.55	365719.160	3.0	398544.300	2.0
304.5589	26.00	-1.88	19788.248	4.0	52613.072	5.0
304.5590	25.00	.28	25285.430	4.5	58110.240	4.5
304.5591	11.01	-.96	299889.160	1.0	332713.960	0.0
304.5624	24.01	-.74	51669.750	2.5	84494.200	2.5
304.5640	24.01	-2.97	39824.520	4.5	72648.790	3.5
304.5681	28.01	-3.14	103025.580	2.5	135849.410	2.5
304.5710	44.00	-.38	9114.300	0.0	41947.367	0.0
304.5719	23.00	-3.37	8715.720	3.5	41539.140	4.5
304.5720	26.01	-2.59	67000.630	2.5	99824.040	2.5
304.5730	21.01	.58	27443.650	2.0	60266.950	3.0
304.5743	20.00	-1.93	15210.063	1.0	48033.230	2.0
304.5745	26.00	-2.92	18378.187	2.0	51201.330	2.0
304.5770	45.00	-1.88	3226.301	0.0	36058.721	0.0
304.5787	25.01	-2.85	49889.860	3.0	82712.550	3.0
304.5804	25.00	-.49	25287.740	3.5	58110.240	4.5
304.5823	14.01	-.31	124639.000	.5	157461.300	1.5
304.5830	40.00	-.47	4113.534	0.0	36945.307	0.0
304.5851	27.02	-3.73	140787.300	2.5	173609.300	1.5
304.5851	27.02	-3.73	140787.300	2.5	173609.300	1.5
304.5896	20.00	-2.39	15210.063	1.0	48031.580	1.0
304.5906	26.02	-2.83	114339.950	4.0	147161.360	4.0
304.5960	73.00	-.14	13227.833	0.0	46058.205	0.0
304.6034	26.00	-2.50	20037.815	0.0	52857.840	1.0
304.6057	28.01	-4.61	100389.520	2.5	133209.300	2.5
304.6078	18.01	-1.73	163299.470	2.5	196119.020	3.5
304.6080	72.01	.04	15002.299	0.0	47831.378	0.0
304.6165	24.01	-1.39	42898.120	2.5	75716.740	3.5
304.6193	26.02	-1.39	186597.300	6.0	219415.610	5.0
304.6252	24.01	-2.62	34631.140	4.5	67448.820	4.5
304.6266	25.01	-.41	43557.030	1.0	76374.560	2.0
304.6269	23.00	-2.31	9544.540	.5	42362.040	.5
304.6284	14.02	-1.51	201597.730	1.0	234415.070	0.0
304.6450	74.00	-1.15	1613.150	0.0	34438.241	0.0
304.6460	92.01	-1.35	241.973	0.0	33066.957	0.0
304.6480	64.00	-.27	483.945	0.0	33308.713	0.0
304.6480	70.01	-.49	34198.789	0.0	67023.557	0.0
304.6493	26.02	-2.56	118721.600	2.0	151536.680	1.0
304.6564	24.00	-1.72	27703.840	4.0	60518.160	3.0
304.6564	24.00	-1.38	27703.840	4.0	60518.160	3.0
304.6566	24.01	-3.15	54499.700	1.5	87314.000	.5
304.6580	25.00	-.84	34938.700	4.5	67752.840	5.5
304.6582	24.00	-4.63	24286.540	1.0	57100.660	2.0
304.6658	26.02	-1.95	118721.600	2.0	151534.900	2.0
304.6659	17.01	-2.88	147053.700	2.0	179867.000	1.0
304.6669	26.01	-1.91	44929.590	2.5	77742.780	2.5
304.6679	22.01	-1.09	9395.760	1.5	42208.840	2.5
304.6710	58.01	-.50	5646.026	0.0	38468.316	0.0
304.6729	25.02	-3.89	100085.200	1.5	132897.740	2.5
304.6730	26.02	-1.74	118721.600	2.0	151534.130	3.0
304.6760	45.00	-1.33	7743.122	0.0	40564.874	0.0
304.6760	69.01	-1.41	161.315	0.0	32983.067	0.0
304.6779	27.02	-3.27	140382.900	3.5	173194.900	2.5
304.6779	27.02	-3.27	140382.900	3.5	173194.900	2.5
304.6779	27.02	-4.28	140382.900	3.5	173194.900	2.5
304.6800	42.00	.24	16696.107	0.0	49517.428	0.0
304.6808	26.00	-1.82	21999.132	4.0	54810.820	4.0
304.6834	25.01	-3.44	31661.720	3.0	64473.130	3.0
304.6875	23.00	-2.23	8578.520	2.5	41389.490	1.5
304.6922	26.00	-1.93	19621.004	5.0	52431.470	6.0
304.6954	26.00	-4.00	25899.974	4.0	58710.090	3.0
304.7017	26.02	-4.78	114351.920	3.0	147161.360	4.0
304.7028	25.00	.40	25265.740	5.5	58075.060	5.5
304.7044	26.00	-2.01	23783.617	5.0	56592.760	4.0
304.7053	18.01	-4.27	163506.450	3.5	196315.510	2.5
304.7060	70.01	-.57	33472.871	0.0	66291.391	0.0
304.7103	25.01	-1.59	49291.310	3.0	82099.820	4.0
304.7127	8.02	.02	267632.590	2.0	300440.850	2.0
304.7146	25.01	-1.48	72247.380	3.0	105055.430	2.0
304.7160	77.00	.05	12985.861	0.0	45803.304	0.0
304.7199	26.00	-2.24	22946.810	1.0	55754.290	2.0
304.7214	25.01	-1.50	35004.430	3.0	67811.750	3.0
304.7217	23.00	-4.68	553.020	4.5	33360.310	3.5
304.7250	75.00	.55	27907.502	0.0	60723.976	0.0
304.7310	42.00	.38	16696.107	0.0	49511.935	0.0
304.7345	24.00	-2.05	24282.340	4.0	57088.250	5.0
304.7420	27.02	-4.29	139137.500	5.5	171942.600	4.5
304.7442	25.01	-2.59	49427.320	4.0	82232.180	5.0
304.7443	25.02	-3.87	144672.380	2.5	177477.230	2.5
304.7447	24.00	-.72	24897.550	4.0	57702.360	5.0
304.7453	25.00	-5.00	17568.480	1.5	50373.230	2.5
304.7491	22.00	-5.13	12118.394	4.0	44922.730	3.0
304.7546	8.01	-2.50	232959.260	3.5	265763.000	3.5
304.7557	10.01	.13	246415.040	1.5	279218.660	2.5
304.7593	26.01	-2.13	31483.200	3.5	64286.440	3.5
304.7606	26.00	-.52	704.003	2.0	33507.102	3.0
304.7624	24.01	-1.31	21822.860	2.5	54625.760	2.5
304.7685	26.02	-4.45	150654.900	3.0	183457.150	4.0
304.7732	8.01	-1.68	232959.260	3.5	265761.000	4.5
304.7807	24.01	-1.60	21824.820	1.5	54625.760	2.5
304.7834	6.00	-4.28	87077.360	0.0	119878.000	1.0
304.7868	28.00	-3.87	16017.317	0.0	48817.600	1.0
304.7885	24.00	-.35	27703.840	4.0	60503.940	4.0
304.7911	25.00	-1.16	35165.050	1.5	67964.870	2.5
304.8025	18.01	-3.04	163506.450	3.5	196305.040	3.5
304.8100	41.00	-.17	5887.999	0.0	38695.322	0.0
304.8105	27.00	-1.29	15774.040	1.5	48571.770	.5
304.8207	23.01	.64	20280.190	5.0	53076.820	6.0
304.8223	26.02	-3.76	105895.350	1.0	138691.810	1.0
304.8237	28.01	-4.37	67694.640	2.5	100490.950	1.5
304.8278	28.01	-2.74	79923.880	4.5	112719.750	3.5
304.8293	14.01	.10	124615.700	1.5	157411.400	2.5
304.8395	25.01	-3.59	31661.720	3.0	64456.330	2.0
304.8412	25.01	-3.95	52653.270	4.0	85447.700	5.0
304.8414	25.02	-4.93	115774.000	3.5	148568.400	2.5
304.8434	28.01	-4.72	99040.750	1.5	131834.940	2.5
304.8500	44.00	-.85	7420.492	0.0	40223.510	0.0
304.8544	9.03	-1.82	556316.000	2.0	589109.000	1.0
304.8580	23.01	-1.83	40430.100	4.0	73222.720	4.0
304.8640	92.00	-.25	564.603	0.0	33366.114	0.0
304.8647	23.01	-.54	18293.870	2.0	51085.770	3.0
304.8660	74.00	.15	18147.942	0.0	50949.238	0.0
304.8669	9.02	-4.50	431432.270	1.5	464223.930	1.5
304.8684	25.02	-2.78	143127.000	.5	175918.500	.5
304.8693	17.01	-2.58	126782.800	3.0	159574.200	2.0
304.8754	22.01	-1.20	12758.150	2.5	45548.900	1.5
304.8769	25.00	-4.71	17282.000	3.5	50072.590	4.5
304.8780	44.00	-1.25	2016.438	0.0	34816.443	0.0
304.8786	18.01	-3.02	163299.470	2.5	196089.870	2.5
304.8810	28.01	-4.16	101366.140	2.5	134156.280	1.5
304.8827	25.01	-3.08	71078.180	1.0	103868.140	1.0
304.8832	14.02	-1.81	201597.730	1.0	234387.640	1.0
304.8858	25.00	-.59	25285.430	4.5	58075.060	5.5
304.8860	73.00	-1.31	1935.780	0.0	34734.925	0.0
304.8882	27.00	-1.42	1406.840	2.5	34196.210	1.5
304.8883	14.02	-1.33	201598.280	2.0	234387.640	1.0
304.8891	23.01	-.47	16421.510	4.0	49210.780	3.0
304.8952	23.02	-1.71	56669.050	1.5	89457.670	2.5
304.8988	25.00	-2.63	27201.540	2.5	59989.770	1.5
304.8994	25.02	-3.62	115780.230	2.5	148568.400	2.5
304.9005	26.01	-.78	47389.820	1.5	80177.870	1.5
304.9024	25.01	-.70	36427.890	0.0	69215.730	1.0
304.9027	24.00	-2.91	24299.890	2.0	57087.700	2.0
304.9040	76.00	-.36	12663.231	0.0	45460.439	0.0
304.9049	23.01	-2.51	40001.660	2.0	72789.230	3.0
304.9055	24.01	-3.04	54625.760	2.5	87413.270	2.5
304.9072	25.01	-3.80	43131.400	2.0	75918.730	2.0
304.9090	90.01	-.64	4436.164	0.0	37232.834	0.0
304.9135	26.00	-2.57	20874.482	3.0	53661.130	3.0
304.9153	24.00	-1.67	31055.350	5.0	63841.810	4.0
304.9173	26.01	-3.25	32909.870	5.5	65696.110	4.5
304.9224	23.00	-4.14	8715.720	3.5	41501.410	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
304.9234	26.02	-3.54	105906.230	2.0	138691.810	1.0
304.9243	25.00	-2.38	30354.210	3.5	63139.700	2.5
304.9290	72.00	-.65	8872.327	0.0	41666.846	0.0
304.9330	40.00	-.63	4113.534	0.0	36907.623	0.0
304.9385	23.02	-2.45	56160.420	2.5	88944.380	2.5
304.9440	77.00	-.84	5726.684	0.0	38519.590	0.0
304.9460	76.00	-.80	6049.314	0.0	38842.005	0.0
304.9482	24.01	.14	51943.040	4.5	84725.960	3.5
304.9526	26.02	-2.99	151534.130	3.0	184316.580	3.0
304.9560	73.00	-.84	1935.780	0.0	34727.396	0.0
304.9568	26.01	-3.45	27620.390	2.5	60402.380	2.5
304.9597	26.02	-3.25	151534.900	2.0	184316.580	3.0
304.9690	74.00	-.73	2903.671	0.0	35693.889	0.0
304.9716	28.01	-3.63	100389.520	2.5	133169.920	3.5
304.9867	26.02	-3.85	151537.800	4.0	184316.580	3.0
304.9875	24.00	-1.45	8307.570	4.0	41086.260	3.0
304.9932	25.01	-4.14	32787.600	4.0	65565.680	4.0
304.9958	25.00	-.95	35041.370	3.5	67819.170	4.5
305.0040	18.01	-4.17	163299.470	2.5	196076.390	1.5
305.0072	13.00	-.57	29066.960	1.5	61843.540	2.5
305.0073	23.00	-2.35	8715.720	3.5	41492.290	3.5
305.0090	25.00	-.96	35114.980	2.5	67891.360	3.5
305.0100	73.00	-1.05	5968.656	0.0	38754.466	0.0
305.0126	24.01	.54	34813.060	5.5	67589.060	6.5
305.0209	11.01	-.15	300391.590	0.0	333166.700	1.0
305.0209	11.01	-.15	300391.590	0.0	333166.700	1.0
305.0219	28.01	-4.59	104503.220	2.5	137278.220	1.5
305.0284	26.02	-4.17	186791.780	2.0	219566.080	3.0
305.0298	26.02	-4.15	88694.670	5.0	121468.820	5.0
305.0316	28.01	-4.73	99154.810	4.5	131928.770	4.5
305.0323	23.00	-5.42	9544.540	.5	42318.420	1.5
305.0353	18.00	-4.16	93750.639	1.0	126524.200	0.0
305.0390	76.00	.76	22503.448	0.0	55286.141	0.0
305.0445	26.02	-1.90	186882.980	3.0	219655.550	2.0
305.0460	26.02	-2.52	83646.980	1.0	116419.390	2.0
305.0473	10.01	-.63	280947.100	1.5	313719.370	2.5
305.0495	27.00	-1.20	15774.040	1.5	48546.070	1.5
305.0544	24.01	-1.70	39877.280	3.5	72648.790	3.5
305.0610	28.02	-4.33	79143.300	2.0	111914.100	2.0
305.0634	23.01	-1.58	20980.920	2.0	53751.460	1.0
305.0654	25.01	-.16	36274.290	2.0	69044.610	2.0
305.0675	25.02	-2.77	143148.400	1.5	175918.500	.5
305.0694	27.02	-3.78	138970.500	1.5	171740.400	1.5
305.0694	27.02	-3.78	138970.500	1.5	171740.400	1.5
305.0717	10.01	-2.53	280700.770	3.5	313470.420	2.5
305.0735	24.01	-1.42	35707.660	5.5	68477.110	4.5
305.0738	23.01	-.70	18353.890	3.0	51123.310	2.0
305.0742	26.00	-3.19	21038.987	2.0	53808.370	1.0
305.0758	28.01	-2.10	66571.340	2.5	99340.550	3.5
305.0760	72.00	-.11	5565.369	0.0	38344.086	0.0
305.0767	10.01	-1.11	280700.770	3.5	313469.890	3.5
305.0782	22.00	-3.97	16267.510	5.0	49036.460	4.0
305.0812	28.00	-.29	204.786	3.0	32973.414	4.0
305.0882	23.00	-2.75	0.000	1.5	32767.880	1.5
305.0931	28.00	-1.96	25753.578	4.0	58520.923	5.0
305.0931	27.00	-1.50	13795.520	2.5	46562.870	1.5
305.0980	90.01	-.71	9517.587	0.0	42293.941	0.0
305.1027	26.01	-1.79	65363.660	5.5	98129.980	6.5
305.1159	27.02	-3.82	139818.700	3.5	172583.600	3.5
305.1159	27.02	-3.82	139818.700	3.5	172583.600	3.5
305.1159	27.02	-4.08	139818.700	3.5	172583.600	3.5
305.1170	76.00	-1.22	5081.424	0.0	37855.737	0.0
305.1193	28.00	-3.46	25753.578	4.0	58518.110	4.0
305.1199	23.01	-4.33	14655.630	5.0	47420.100	4.0
305.1242	24.00	-3.13	27703.840	4.0	60467.850	5.0
305.1302	23.01	-1.22	32040.760	2.0	64804.130	2.0
305.1368	24.01	-2.65	34631.140	4.5	67393.800	3.5
305.1373	27.02	-4.08	73726.600	2.5	106489.200	3.5
305.1422	25.01	-.45	35004.430	3.0	67766.510	2.0
305.1426	28.01	-4.35	96535.870	3.5	129297.910	3.5
305.1495	12.02	-.63	530178.200	2.0	562939.500	2.0
305.1549	22.01	-3.26	32697.940	2.5	65458.650	3.5
305.1657	15.01	-1.05	105550.450	2.0	138310.000	2.0
305.1661	18.02	-.64	207532.150	1.0	240291.660	2.0
305.1699	27.02	-4.53	138970.500	1.5	171729.600	2.5
305.1727	28.00	-2.28	29084.478	4.0	61843.280	5.0
305.1780	90.01	-1.07	6613.917	0.0	39381.679	0.0
305.1803	25.01	-4.47	71078.180	1.0	103836.170	2.0
305.1980	58.01	-.18	4274.849	0.0	37040.463	0.0
305.2016	19.02	.08	208687.800	1.5	241443.500	2.5
305.2037	23.01	-1.92	40195.520	3.0	72951.000	4.0
305.2068	8.02	-1.85	365719.160	3.0	398474.300	3.0
305.2137	17.01	-1.59	126032.000	2.0	158786.400	3.0
305.2156	29.01	-3.78	85388.770	2.0	118142.970	3.0
305.2160	77.00	-.26	18954.517	0.0	51718.199	0.0
305.2162	25.01	-4.84	51553.060	5.0	84307.200	4.0
305.2180	23.00	-2.86	553.020	4.5	33306.960	4.5
305.2204	23.00	-3.52	137.380	2.5	32891.060	3.5
305.2221	24.00	-.82	24833.860	3.0	57587.360	4.0
305.2277	27.02	-4.02	138774.700	2.5	171527.600	3.5
305.2288	26.02	-4.66	169777.600	4.0	202030.380	3.0
305.2305	23.03	.21	254468.800	2.0	287221.400	2.0
305.2430	24.00	-3.35	24282.340	4.0	57033.600	4.0
305.2464	25.02	-4.29	146066.070	1.5	178816.960	2.5
305.2554	29.00	-1.98	41538.623	0.0	74298.076	0.0
305.2566	17.02	-.11	221862.900	.5	254612.700	1.5
305.2628	26.01	-2.21	65696.110	4.5	98445.240	4.5
305.2651	23.02	-3.33	56256.750	1.5	89005.640	.5
305.2664	22.00	-2.17	15975.590	3.0	48724.340	2.0
305.2675	28.01	-4.26	96535.870	3.5	129284.500	2.5
305.2676	25.01	-3.22	72306.810	2.0	105055.430	2.0
305.2735	28.00	-2.39	29084.478	4.0	61832.470	4.0
305.2931	21.01	.70	27602.320	3.0	60348.200	4.0
305.2944	8.01	-2.76	232959.260	3.5	265705.000	2.5
305.3061	26.00	-.97	19552.474	1.0	52296.960	2.0
305.3090	41.00	-.32	5887.999	0.0	38641.701	0.0
305.3149	18.01	-2.34	172335.520	2.5	205079.070	2.5
305.3163	14.01	.39	124567.500	2.5	157310.900	3.5
305.3220	26.01	-1.53	66589.170	4.5	99331.950	4.5
305.3227	25.01	-4.43	55115.800	2.0	87858.510	2.0
305.3288	26.02	-4.60	109570.840	2.0	142312.900	3.0
305.3315	25.00	-1.37	27248.000	1.5	59989.770	1.5
305.3322	24.01	-2.03	36101.820	3.5	68843.510	3.5
305.3387	23.01	.24	14556.090	4.0	47297.080	5.0
305.3456	26.00	-4.04	8154.713	1.0	40894.972	2.0
305.3461	8.01	-4.99	232480.100	.5	265220.300	1.5
305.3480	24.02	-2.21	63038.600	1.0	95778.600	0.0
305.3570	64.01	-.41	3952.218	0.0	36700.771	0.0
305.3600	77.00	-.67	11775.998	0.0	44524.230	0.0
305.3630	75.00	-.04	21616.215	0.0	54364.125	0.0
305.3642	26.01	-2.97	65556.340	4.5	98294.600	5.5
305.3649	24.01	-1.78	34631.140	4.5	67369.330	5.5
305.3653	23.00	-.02	0.000	1.5	32738.140	1.5
305.3658	11.01	.49	300107.710	2.0	332845.800	3.0
305.3658	11.01	.49	300107.710	2.0	332845.800	3.0
305.3701	28.01	-4.20	105838.060	3.5	138575.690	2.5
305.3787	24.01	-1.64	35569.020	2.5	68305.730	1.5
305.3797	17.01	-3.21	126032.000	2.0	158768.600	2.0
305.3873	24.00	.27	8307.570	4.0	41043.350	3.0
305.3889	23.01	-.22	16533.000	5.0	49268.610	4.0
305.3938	22.00	-4.03	8602.340	2.0	41337.430	2.0
305.3964	25.01	-3.39	72320.620	1.0	105055.430	2.0
305.4010	74.00	-1.09	9436.930	0.0	42180.765	0.0
305.4030	24.01	-.83	51584.440	1.5	84318.540	1.5
305.4061	25.01	-3.66	48317.850	4.0	81051.620	3.0
305.4071	22.00	-2.68	16106.080	4.0	48839.740	3.0
305.4088	28.01	-4.90	100475.820	3.5	133209.300	2.5
305.4124	26.02	-2.25	83646.980	1.0	116380.070	1.0
305.4126	27.00	-2.33	0.000	4.5	32733.070	3.5
305.4127	28.01	-2.74	104503.220	2.5	137236.280	3.5
305.4188	22.00	-7.17	14105.680	3.0	46838.090	4.0
305.4207	26.02	-4.92	147161.360	4.0	179893.560	5.0
305.4237	23.01	-1.20	18353.890	3.0	51085.770	3.0
305.4251	8.01	-2.59	232959.260	3.5	265691.000	3.5
305.4272	10.01	-1.58	280700.770	3.5	313432.280	3.5
305.4310	28.00	-.68	879.813	2.0	33610.916	2.0
305.4346	26.01	-8.14	26932.740	.5	59663.450	1.5
305.4346	10.01	-.01	280700.770	3.5	313431.490	4.5
305.4363	25.00	-.02	17282.000	3.5	50012.530	2.5
305.4373	24.01	-4.66	54784.670	3.5	87515.100	3.5
305.4403	27.02	-4.20	73861.800	1.5	106591.900	1.5
305.4428	27.00	-4.17	16467.900	4.5	49197.740	4.5
305.4428	10.01	-1.08	280989.530	1.5	313719.370	2.5
305.4444	24.00	-2.61	24303.940	3.0	57033.600	4.0
305.4519	24.01	-2.96	54625.760	2.5	87354.620	1.5
305.4520	72.01	-1.48	3629.588	0.0	36367.956	0.0
305.4595	26.02	-3.61	82382.870	3.0	115110.920	4.0
305.4608	25.01	-3.98	49465.130	3.0	82193.040	2.0
305.4618	25.02	-2.87	144959.740	4.5	177687.540	3.5
305.4676	10.01	-.33	246597.710	.5	279324.890	1.5
305.4679	13.00	-.60	29020.410	.5	61747.560	1.5
305.4686	25.00	-1.74	30354.210	3.5	63081.280	2.5
305.4696	25.01	-1.90	47073.560	3.0	79800.520	4.0
305.4704	22.01	-.79	29544.370	2.5	62271.250	2.5
305.4716	27.00	-4.06	1406.840	2.5	34133.590	3.5
305.4790	28.01	-2.91	101247.370	2.5	133973.330	2.5
305.4819	28.01	-2.50	105838.060	3.5	138563.710	3.5
305.4839	18.02	-.48	207532.150	1.0	240257.590	1.0
305.4840	40.01	.74	8065.752	0.0	40800.691	0.0
305.4872	23.00	-1.16	9636.960	1.5	42362.040	.5
305.4892	23.00	-3.50	0.000	1.5	32724.860	.5
305.4900	75.00	-.81	11534.025	0.0	44268.321	0.0
305.4940	44.00	-.39	7985.094	0.0	40718.961	0.0
305.4940	63.01	-1.29	1613.150	0.0	34347.017	0.0
305.4945	26.00	-2.42	21038.987	2.0	53763.280	3.0
305.4970	76.00	-.58	10969.423	0.0	43702.969	0.0
305.4992	24.00	-4.02	27703.840	4.0	60427.630	5.0
305.5050	24.00	-2.34	24833.860	3.0	57557.030	3.0
305.5053	25.01	-2.34	49882.150	4.0	82605.290	4.0
305.5063	26.01	-2.61	31364.470	1.5	64087.500	2.5
305.5117	24.01	-4.50	34631.140	4.5	67353.600	4.5
305.5210	76.00	.01	13953.751	0.0	46684.725	0.0
305.5220	39.01	.51	29036.707	0.0	61767.574	0.0
305.5240	58.01	.09	4436.164	0.0	37166.817	0.0
305.5264	26.00	-1.46	12560.933	3.0	45281.816	2.0
305.5266	23.00	-4.82	8715.720	3.5	41436.580	3.5
305.5281	18.01	-4.08	172335.520	2.5	205056.220	1.5
305.5295	28.01	-3.24	103025.580	2.5	135746.130	1.5
305.5301	28.01	-4.55	103025.580	2.5	135746.060	3.5
305.5305	24.01	-.97	34659.480	.5	67379.920	1.5
305.5320	42.00	.37	16615.449	0.0	49345.245	0.0
305.5322	20.00	-1.68	15315.943	2.0	48036.212	3.0
305.5338	25.00	-2.33	30419.610	2.5	63139.700	2.5
305.5346	11.01	-1.31	300391.590	0.0	333111.600	1.0
305.5357	24.01	-2.49	36272.660	4.5	68992.550	4.5
305.5368	26.01	-.91	47626.140	.5	80345.910	.5
305.5375	26.02	-4.30	167085.120	3.0	199804.810	4.0
305.5399	23.01	-5.46	14461.730	3.0	47181.170	3.0
305.5410	10.01	-2.72	280700.770	3.5	313420.090	2.5
305.5412	24.01	-1.29	31083.110	1.5	63802.410	.5
305.5440	72.01	-.33	15163.614	0.0	47892.124	0.0
305.5500	28.01	-4.72	100490.950	1.5	133209.300	2.5
305.5520	41.01	.77	15970.189	0.0	48697.843	0.0
305.5554	26.02	-2.77	83646.980	1.0	116364.760	0.0
305.5590	92.01	-1.30	0.000	0.0	32726.904	0.0
305.5599	20.00	-2.40	15315.943	2.0	48033.230	2.0
305.5633	29.01	-4.00	88362.030	2.0	121078.960	3.0
305.5682	24.01	-3.76	72648.790	3.5	105365.200	4.5
305.5743	25.00	-3.77	23296.670	3.5	56012.420	3.5
305.5753	20.00	-3.56	15315.943	2.0	48031.580	1.0
305.5759	23.01	-3.09	40430.100	4.0	73145.680	3.0
305.5773	25.01	-1.49	49889.860	3.0	82605.290	4.0
305.5850	23.03	-.24	223033.000	3.0	255747.600	3.0
305.5851	25.01	-2.67	49517.580	5.0	82232.180	5.0
305.5859	26.01	-2.07	65580.090	5.5	98294.600	5.5
305.5860	28.01	-4.87	105861.190	2.5	138575.690	2.5
305.5889	23.01	-2.72	20089.560	1.0	52803.750	1.0
305.5908	25.00	-2.08	30425.710	1.5	63139.700	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
305.5914	26.02	-3.97	186378.940	4.0	219092.860	5.0
305.5920	25.01	-1.63	72306.810	2.0	105020.670	1.0
305.5944	23.01	-1.31	20363.220	6.0	53076.820	6.0
305.5980	23.00	-3.25	8715.720	3.5	41428.930	2.5
305.5997	26.02	-3.63	151534.130	3.0	184247.160	2.0
305.6033	23.01	-2.81	40195.520	3.0	72908.170	3.0
305.6069	26.02	-3.25	151534.900	2.0	184247.160	2.0
305.6075	25.01	-4.59	31760.930	2.0	64473.130	3.0
305.6155	11.01	-.30	264928.000	2.0	297639.340	2.0
305.6163	29.01	-3.60	118071.340	1.0	150782.600	2.0
305.6165	25.00	-3.51	23296.670	3.5	56007.910	2.5
305.6178	22.00	-4.26	15877.180	2.0	48588.280	3.0
305.6187	27.01	-4.62	13261.100	2.0	45972.100	3.0
305.6218	24.00	-2.29	27816.880	5.0	60527.550	6.0
305.6218	24.01	-1.64	31351.150	2.5	64061.820	1.5
305.6236	26.02	-4.07	151536.680	1.0	184247.160	2.0
305.6262	22.01	-4.32	32602.510	1.5	65312.710	2.5
305.6340	23.00	.10	137.380	2.5	32846.740	2.5
305.6340	23.00	-5.73	137.380	2.5	32846.740	2.5
305.6376	22.00	-6.64	6556.828	1.0	39265.800	2.0
305.6399	25.01	-4.00	32856.950	3.0	65565.680	4.0
305.6427	24.00	-2.26	28679.430	1.0	61387.860	0.0
305.6475	25.00	-1.67	27281.850	.5	59989.770	1.5
305.6511	26.02	-3.98	186454.890	5.0	219162.420	6.0
305.6593	25.00	-3.79	24779.320	1.5	57485.970	2.5
305.6620	73.01	1.00	17099.394	0.0	49815.270	0.0
305.6634	24.01	-2.06	32836.840	3.5	65543.060	3.5
305.6664	27.00	-1.57	16778.160	2.5	49484.050	3.5
305.6678	8.01	-4.52	232959.260	3.5	265665.000	2.5
305.6708	25.01	-.86	53597.130	2.0	86302.550	3.0
305.6720	71.01	.11	14115.066	0.0	46829.871	0.0
305.6735	22.01	-1.16	9363.710	.5	42068.850	1.5
305.6749	24.01	-.01	51789.210	3.5	84494.200	2.5
305.6749	24.01	-3.71	72716.910	4.5	105421.900	5.5
305.6767	28.01	-4.67	100309.290	5.5	133014.080	5.5
305.6780	58.01	-.17	2581.041	0.0	35295.204	0.0
305.6787	26.02	-2.23	117950.320	4.0	150654.900	3.0
305.6798	26.01	-.89	32875.630	6.5	65580.090	5.5
305.6841	19.02	-.25	209461.300	.5	242165.300	1.5
305.6904	24.00	-4.49	24282.340	4.0	56985.670	3.0
305.6929	24.01	-2.40	34631.140	4.5	67334.200	3.5
305.6978	25.01	-1.15	49291.310	3.0	81993.850	4.0
305.6979	28.01	-2.73	105861.190	2.5	138563.710	3.5
305.6993	25.00	-1.11	30411.740	.5	63114.110	1.5
305.7020	72.00	-.07	4516.821	0.0	37228.416	0.0
305.7038	22.00	-4.73	11531.760	2.0	44233.650	3.0
305.7074	23.01	-.64	19902.600	0.0	52604.110	1.0
305.7100	9.01	-.41	202449.350	1.0	235150.580	2.0
305.7113	26.02	-3.78	186303.440	3.0	219004.530	4.0
305.7144	13.00	-.20	29142.780	2.5	61843.540	2.5
305.7210	25.01	-2.42	72320.620	1.0	105020.670	1.0
305.7220	40.01	-.27	8065.752	0.0	40775.207	0.0
305.7220	73.01	.91	14518.354	0.0	47227.809	0.0
305.7232	26.02	-3.82	167002.000	2.0	199701.820	3.0
305.7260	26.01	-4.42	31387.980	2.5	64087.500	2.5
305.7280	77.00	-.69	7017.204	0.0	39726.017	0.0
305.7317	28.01	-4.30	100332.090	4.5	133031.000	4.5
305.7342	26.02	-4.22	84369.920	2.0	117068.560	3.0
305.7346	25.01	-3.17	72322.070	0.0	105020.670	1.0
305.7369	11.01	-.52	300107.710	2.0	332806.060	2.0
305.7369	11.01	-.52	300107.710	2.0	332806.060	2.0
305.7389	10.00	-3.27	135888.717	1.0	168586.860	0.0
305.7408	22.01	-1.75	0.000	1.5	32697.940	2.5
305.7410	25.00	-3.38	24788.050	2.5	57485.970	2.5
305.7447	26.00	-.14	6928.266	5.0	39625.784	4.0
305.7489	22.00	-4.22	15975.590	3.0	48672.660	4.0
305.7500	22.00	-7.51	14028.470	2.0	46725.420	3.0
305.7511	21.00	-2.77	0.000	1.5	32696.840	2.5
305.7591	28.00	-3.26	14728.847	0.0	47424.830	1.0
305.7630	90.01	-1.44	6129.972	0.0	38835.041	0.0
305.7636	28.00	-.33	1713.080	1.0	34408.574	1.0
305.7645	25.01	-3.26	31760.930	2.0	64456.330	2.0
305.7657	27.00	-3.79	20500.710	1.5	53195.980	2.5
305.7660	75.00	-.44	16212.162	0.0	48916.910	0.0
305.7694	28.01	-3.17	67694.640	2.5	100389.520	2.5
305.7695	25.01	-4.76	37851.150	3.0	70546.020	4.0
305.7729	25.00	-2.28	30419.610	2.5	63114.110	1.5
305.7767	28.01	-2.73	100475.820	3.5	133169.920	3.5
305.7792	26.00	-4.39	7728.058	3.0	40421.890	4.0
305.7814	8.01	-3.25	232526.700	1.5	265220.300	1.5
305.7814	8.01	-4.97	232526.700	1.5	265220.300	2.5
305.7830	10.01	-3.56	281025.940	2.5	313719.370	2.5
305.7843	24.01	-1.26	34813.060	5.5	67506.340	5.5
305.7865	10.01	-2.34	281025.940	2.5	313718.990	3.5
305.7890	45.00	-.46	16050.847	0.0	48753.135	0.0
305.7973	27.02	-2.75	138774.700	2.5	171466.600	2.5
305.7973	27.02	-2.75	138774.700	2.5	171466.600	2.5
305.7976	27.00	-3.41	14399.280	.5	47091.140	.5
305.7991	17.01	-1.47	126032.000	2.0	158723.700	1.0
305.7998	22.01	-2.80	32767.020	3.5	65458.650	3.5
305.8047	28.01	-3.46	68154.310	1.5	100845.410	.5
305.8076	22.01	-.66	9518.050	2.5	42208.840	2.5
305.8161	9.01	-.19	202460.690	2.0	235150.580	2.0
305.8165	25.01	-2.66	49427.320	4.0	82117.160	5.0
305.8168	24.00	-1.41	24897.550	4.0	57587.360	4.0
305.8281	24.01	-3.07	32854.460	4.5	65543.060	3.5
305.8300	25.00	-1.40	30425.710	1.5	63114.110	1.5
305.8340	24.01	-2.10	32855.090	2.5	65543.060	3.5
305.8372	23.02	-1.89	56256.750	1.5	88944.380	2.5
305.8376	22.00	-4.75	170.132	3.0	32857.721	3.0
305.8378	26.01	-1.72	67000.630	2.5	99688.200	3.5
305.8425	24.00	-1.21	27816.880	5.0	60503.940	4.0
305.8545	24.00	-3.27	24299.890	2.0	56985.670	3.0
305.8550	58.01	-.74	5081.424	0.0	37776.655	0.0
305.8640	73.00	-.92	5968.656	0.0	38662.925	0.0
305.8651	26.00	-4.01	26140.164	3.0	58824.810	2.0
305.8660	76.00	.02	0.000	0.0	32694.056	0.0
305.8680	8.04	-.04	664486.000	0.0	697179.842	0.0
305.8720	11.01	-.73	299193.750	2.0	331877.670	1.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
305.8738	25.00	-4.13	24802.250	3.5	57485.970	2.5
305.8780	75.00	-.34	13711.778	0.0	46404.551	0.0
305.8796	26.02	-3.20	186882.980	3.0	219566.080	3.0
305.8846	29.01	-3.98	85388.770	2.0	118071.340	1.0
305.8890	23.03	-1.98	255445.500	3.0	288127.600	4.0
305.8900	28.01	-3.79	100332.090	4.5	133014.080	5.5
305.8924	24.00	-4.54	24303.940	3.0	56985.670	3.0
305.8937	26.01	-3.55	66411.700	6.5	99093.290	5.5
305.8949	23.00	-1.08	9636.960	1.5	42318.420	1.5
305.8980	63.00	-.66	0.000	0.0	32690.635	0.0
305.9030	13.00	-1.10	29066.960	1.5	61747.560	1.5
305.9049	23.01	-2.87	40001.660	2.0	72682.060	2.0
305.9057	25.01	-.62	36364.300	1.0	69044.610	2.0
305.9087	26.00	-.66	415.932	3.0	33095.922	4.0
305.9105	10.01	-.58	249695.530	1.5	282375.330	1.5
305.9111	8.01	-1.75	232959.260	3.5	265639.000	3.5
305.9206	25.00	-.15	33825.490	2.5	66504.210	1.5
305.9300	8.02	-.61	267632.590	2.0	300310.310	1.0
305.9359	26.02	-4.49	167207.300	4.0	199884.390	5.0
305.9382	24.01	-1.96	21822.860	2.5	54499.700	1.5
305.9512	24.01	-1.92	21824.250	.5	54499.700	1.5
305.9542	22.01	-.65	29734.450	3.5	62409.580	3.5
305.9565	24.01	-1.41	21824.820	1.5	54499.700	1.5
305.9726	10.01	-1.25	280797.260	2.5	313470.420	2.5
305.9733	22.01	-1.70	9395.760	1.5	42068.850	1.5
305.9734	22.01	-1.80	93.940	2.5	32767.020	3.5
305.9740	58.01	-1.06	4436.164	0.0	37118.680	0.0
305.9776	10.01	-.93	280797.260	2.5	313469.890	3.5
305.9777	23.01	-2.49	40001.660	2.0	72674.280	2.0
305.9788	25.01	-3.08	49427.320	4.0	82099.820	4.0
305.9920	64.00	-.51	161.315	0.0	32841.908	0.0
305.9924	13.00	-1.29	29020.410	.5	61691.460	.5
305.9992	9.01	-.04	202480.260	3.0	235150.580	2.0
306.0002	26.01	-2.68	32909.870	5.5	65580.090	5.5
306.0019	26.02	-2.44	118867.870	1.0	151537.910	0.0
306.0023	24.03	-3.58	127202.000	4.5	159872.000	4.5
306.0039	25.01	-4.03	37847.900	2.0	70517.720	3.0
306.0049	27.00	-.43	15774.040	1.5	48443.760	2.5
306.0110	40.01	-1.07	241.973	0.0	32920.537	0.0
306.0134	26.02	-2.08	118867.870	1.0	151536.680	1.0
306.0144	23.03	-.40	222794.600	2.0	255463.300	2.0
306.0253	25.01	-4.47	53781.700	3.0	86449.240	4.0
306.0290	73.00	-1.18	3871.561	0.0	36548.203	0.0
306.0299	22.00	-6.51	6598.749	2.0	39265.800	2.0
306.0300	76.00	-.95	4113.534	0.0	36790.069	0.0
306.0301	26.02	-2.19	118867.870	1.0	151534.900	2.0
306.0320	75.00	-.26	16534.792	0.0	49211.113	0.0
306.0414	28.01	-4.80	99559.330	2.5	132225.150	1.5
306.0430	22.00	-4.49	16106.080	4.0	48771.730	5.0
306.0440	90.00	-1.03	0.000	0.0	32675.040	0.0
306.0453	23.00	.28	323.420	3.5	32988.820	3.5
306.0525	21.01	-.49	27602.320	3.0	60266.950	3.0
306.0539	26.00	-1.60	24118.815	4.0	56783.306	3.0
306.0569	23.02	-1.89	56529.300	.5	89193.470	1.5
306.0608	24.00	-1.80	25038.610	5.0	57702.360	5.0
306.0667	18.01	-4.41	186340.480	1.5	219003.600	2.5
306.0676	22.01	-1.48	20891.880	3.5	53554.900	2.5
306.0780	42.01	.23	16857.422	0.0	49528.833	0.0
306.0803	25.00	-1.59	30419.610	2.5	63081.280	2.5
306.0906	18.01	-1.75	172335.520	2.5	204996.090	3.5
306.0935	23.00	-3.84	0.000	1.5	32660.260	2.5
306.0984	6.00	-3.89	87218.260	2.0	119878.000	1.0
306.0985	26.00	-2.28	12560.933	3.0	45220.662	3.0
306.0997	27.02	-4.09	70934.100	2.5	103593.700	2.5
306.1001	26.01	-2.19	66672.390	3.5	99331.950	4.5
306.1002	25.02	-3.34	144817.680	3.5	177477.230	2.5
306.1008	24.00	-1.45	24897.550	4.0	57557.030	3.0
306.1013	27.00	-3.46	13795.520	2.5	46454.950	1.5
306.1034	21.00	-2.56	0.000	1.5	32659.210	1.5
306.1110	41.00	-.43	9275.615	0.0	41943.503	0.0
306.1130	24.01	-3.12	36101.820	3.5	68760.000	3.5
306.1174	28.01	-4.26	98467.250	3.5	131124.960	3.5
306.1240	41.00	-.92	5242.739	0.0	37909.240	0.0
306.1250	19.02	-.66	212725.400	1.5	245382.300	.5
306.1350	40.01	-1.07	725.918	0.0	33391.245	0.0
306.1355	11.01	-.33	300510.920	1.0	333166.700	1.0
306.1355	11.01	-.33	300510.920	1.0	333166.700	1.0
306.1375	25.00	-1.05	30425.710	1.5	63081.280	2.5
306.1410	77.00	-.13	17663.997	0.0	50328.684	0.0
306.1495	26.02	-4.14	186268.790	2.0	218923.080	3.0
306.1588	24.01	-1.52	32603.730	2.5	65257.030	3.5
306.1590	42.00	.25	16615.449	0.0	49276.216	0.0
306.1610	75.00	-.02	22019.503	0.0	54682.056	0.0
306.1618	26.01	-2.44	31387.980	2.5	64040.960	3.5
306.1641	24.00	-.39	20519.600	6.0	53172.330	5.0
306.1806	24.00	-.53	27816.880	5.0	60467.850	5.0
306.1813	23.03	-2.79	222794.600	2.0	255445.500	3.0
306.1815	27.00	-.82	816.000	3.5	33466.870	3.5
306.1848	10.01	-1.37	280768.520	.5	313419.040	1.5
306.1860	17.01	-1.01	149798.300	2.0	182448.700	2.0
306.1883	25.02	-3.37	144619.190	1.5	177269.340	1.5
306.1977	27.00	-1.37	14036.280	1.5	46685.430	1.5
306.1982	26.02	-4.65	89697.520	3.0	122346.610	3.0
306.2011	24.01	-.18	51669.750	2.5	84318.540	1.5
306.2025	24.00	-2.99	20523.690	4.0	53172.330	5.0
306.2047	17.01	-2.98	153257.000	2.0	185905.400	1.0
306.2048	24.00	-1.50	20523.940	5.0	53172.330	5.0
306.2057	24.01	-4.13	72716.910	4.5	105365.200	4.5
306.2057	20.00	-3.28	15157.901	0.0	47806.200	1.0
306.2082	28.01	-3.14	98467.250	3.5	131115.280	4.5
306.2118	25.00	-.44	17451.520	2.5	50099.160	1.5
306.2168	23.01	-.82	20156.640	0.0	52803.750	1.0
306.2190	76.00	-.65	4113.534	0.0	36769.901	0.0
306.2194	27.00	-2.52	816.000	3.5	33462.830	2.5
306.2226	26.02	-3.73	151534.900	2.0	184181.390	1.0
306.2228	26.01	-.73	32909.870	5.5	65556.340	4.5
306.2245	25.01	-2.54	37851.150	3.0	70497.440	4.0
306.2373	22.01	-1.61	20951.770	2.5	53596.700	1.5
306.2393	26.02	-3.85	151536.680	1.0	184181.390	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
306.2419	26.01	-2.31	67273.860	1.5	99918.300	1.5
306.2446	27.00	-6.15	8460.810	2.5	41104.960	2.5
306.2460	25.02	-4.54	115711.600	4.5	148355.600	3.5
306.2484	10.01	-1.58	280173.010	4.5	312816.750	4.5
306.2492	10.01	.15	280173.010	4.5	312816.670	5.5
306.2512	25.01	-1.48	53805.800	4.0	86449.240	4.0
306.2542	24.00	-3.42	23512.000	1.0	56155.120	2.0
306.2641	18.01	-2.43	172335.520	2.5	204977.590	2.5
306.2644	27.00	-2.04	16195.680	.5	48837.720	.5
306.2645	22.00	-3.08	15877.180	2.0	48519.210	2.0
306.2699	23.01	-.96	14655.630	5.0	47297.080	5.0
306.2702	9.02	-3.05	357479.350	1.5	390120.770	.5
306.2784	28.01	-2.94	101740.270	3.5	134380.820	3.5
306.2821	23.01	-6.38	14461.730	3.0	47101.880	2.0
306.2867	26.00	-1.71	23783.617	5.0	56423.276	4.0
306.2870	29.01	-2.66	118142.970	3.0	150782.600	2.0
306.3010	25.00	-3.30	34938.700	4.5	67576.840	4.5
306.3010	58.01	.71	7178.519	0.0	39826.143	0.0
306.3026	26.02	-3.05	186454.890	5.0	219092.860	5.0
306.3079	25.00	-3.16	34343.900	4.5	66981.300	3.5
306.3079	21.00	-3.22	0.000	1.5	32637.400	.5
306.3089	26.01	-2.34	65931.460	3.5	98568.750	3.5
306.3130	70.01	-.54	30085.255	0.0	62731.600	0.0
306.3136	17.03	.14	215389.300	1.0	248026.100	2.0
306.3151	26.00	-1.06	17550.180	3.0	50186.814	2.0
306.3223	25.01	-4.01	56883.380	1.0	89519.250	2.0
306.3233	24.01	-1.66	34813.060	5.5	67448.820	4.5
306.3242	23.01	.55	20242.320	4.0	52877.990	5.0
306.3242	27.00	-2.45	14036.280	1.5	46671.940	2.5
306.3243	22.01	-.09	29544.370	2.5	62180.020	1.5
306.3265	16.02	-1.38	174036.190	1.0	206671.610	2.0
306.3303	10.01	-.59	280797.260	2.5	313432.280	3.5
306.3334	25.01	-2.58	49465.130	3.0	82099.820	4.0
306.3411	29.00	-2.06	13227.833	0.0	45871.184	0.0
306.3489	22.01	-1.83	9363.710	.5	41996.740	.5
306.3560	73.00	-.88	5565.369	0.0	38207.132	0.0
306.3570	40.00	-.62	4355.506	0.0	36997.163	0.0
306.3590	28.01	-6.19	24788.200	1.5	57420.160	2.5
306.3631	23.01	-1.11	32299.240	1.0	64930.760	1.0
306.3670	70.01	-.78	34602.076	0.0	67242.667	0.0
306.3727	23.00	-4.64	137.380	2.5	32767.880	1.5
306.3759	28.01	-4.50	68735.980	2.5	101366.140	2.5
306.3780	72.00	-.90	5484.711	0.0	38124.130	0.0
306.3790	41.01	.39	13550.463	0.0	46189.776	0.0
306.3802	26.01	-.92	66463.590	5.5	99093.290	5.5
306.3810	24.01	-1.52	31219.490	4.5	63849.110	5.5
306.3826	24.00	-3.52	24093.160	2.0	56722.600	1.0
306.3880	92.01	-1.42	2258.411	0.0	34896.765	0.0
306.3888	25.00	-2.71	33825.490	2.5	66454.270	3.5
306.3905	24.01	-2.93	54784.670	3.5	87413.270	2.5
306.3929	26.00	-1.55	19552.474	1.0	52180.820	1.0
306.3933	28.01	-2.76	23796.180	1.5	56424.490	1.5
306.3976	8.02	-1.26	365846.460	4.0	398474.300	3.0
306.4023	28.01	-3.73	103025.580	2.5	135652.930	1.5
306.4027	27.02	-3.97	139314.200	.5	171941.500	.5
306.4027	27.02	-3.97	139314.200	.5	171941.500	.5
306.4132	22.01	-.74	29968.080	4.5	62594.270	4.5
306.4149	9.03	-.21	586263.000	2.0	618889.000	1.0
306.4182	25.01	-4.54	40759.500	0.0	73385.150	1.0
306.4188	26.02	-2.86	186378.940	4.0	219004.530	4.0
306.4206	8.02	-2.60	370900.600	2.0	403526.000	1.0
306.4236	23.01	-5.64	14556.090	4.0	47181.170	3.0
306.4255	25.01	-2.28	49517.580	5.0	82142.460	6.0
306.4280	42.00	.96	16696.107	0.0	49330.200	0.0
306.4287	24.00	-2.59	27816.880	5.0	60441.420	6.0
306.4290	13.00	-.60	29066.960	1.5	61691.460	.5
306.4352	24.01	-.39	51584.440	1.5	84208.280	.5
306.4364	27.00	-3.02	816.000	3.5	33439.720	4.5
306.4364	11.01	-2.00	298169.140	1.0	330792.850	2.0
306.4364	11.01	-2.00	298169.140	1.0	330792.850	2.0
306.4403	28.01	-4.44	71457.740	3.5	104081.040	4.5
306.4447	10.01	-1.91	280797.260	2.5	313420.090	2.5
306.4510	77.00	-1.01	10485.478	0.0	43117.122	0.0
306.4512	26.00	-3.30	21038.987	2.0	53661.130	3.0
306.4530	41.01	.42	10162.848	0.0	42794.279	0.0
306.4546	10.01	-2.45	280797.260	2.5	313419.040	1.5
306.4600	75.00	-.48	17099.394	0.0	49730.080	0.0
306.4615	28.00	-1.98	879.813	2.0	33500.854	3.0
306.4630	40.01	-.59	4194.191	0.0	36824.557	0.0
306.4680	72.01	-.27	12017.970	0.0	44647.804	0.0
306.4694	26.00	-2.70	25899.974	4.0	58520.180	4.0
306.4710	78.00	-.43	0.000	0.0	32629.515	0.0
306.4738	22.00	-7.68	14105.680	3.0	46725.420	3.0
306.4747	26.02	-3.22	186303.440	3.0	218923.080	3.0
306.4840	44.00	.16	9033.642	0.0	41661.773	0.0
306.4840	68.00	-1.51	0.000	0.0	32628.131	0.0
306.4853	18.02	-.44	207532.150	1.0	240150.660	0.0
306.4940	74.00	-1.56	3306.958	0.0	35934.024	0.0
306.5023	26.02	-4.87	167085.120	3.0	199701.820	3.0
306.5040	42.01	1.28	37828.377	0.0	70454.379	0.0
306.5040	70.01	-.14	28633.420	0.0	61259.422	0.0
306.5050	24.00	-.63	24940.610	2.0	57557.030	3.0
306.5059	28.01	-4.57	100592.980	3.5	133209.300	2.5
306.5074	25.00	-1.93	27201.540	2.5	59817.700	2.5
306.5108	21.01	.82	27841.170	4.0	60456.970	5.0
306.5123	8.02	-1.05	365515.760	0.0	398131.400	1.0
306.5129	18.01	-1.56	172335.520	2.5	204951.090	3.5
306.5205	22.01	-4.14	32697.940	2.5	65312.710	2.5
306.5210	40.01	-1.41	0.000	0.0	32624.192	0.0
306.5260	41.01	.03	10727.450	0.0	43351.110	0.0
306.5310	46.00	-.73	7662.464	0.0	40285.592	0.0
306.5315	26.01	-1.79	31811.870	2.5	64425.460	2.5
306.5333	27.00	-3.57	17233.680	3.5	49847.080	2.5
306.5400	22.00	-2.91	15975.590	3.0	48588.280	3.0
306.5411	18.01	-4.51	163506.450	3.5	196119.020	3.5
306.5534	25.01	-2.62	53597.130	2.0	86208.400	1.0
306.5560	14.02	-2.99	175263.100	1.0	207874.090	0.0
306.5582	24.00	-2.32	27816.880	5.0	60427.630	5.0
306.5609	23.01	-.70	20089.560	1.0	52700.030	2.0
306.5644	27.01	-4.63	17771.500	3.0	50361.600	3.0
306.5703	25.01	-1.59	46903.260	2.0	79512.730	3.0
306.5742	25.01	-1.00	75563.490	0.0	108172.540	1.0
306.5780	62.01	-1.64	322.630	0.0	32940.757	0.0
306.5822	17.01	-2.91	153257.000	2.0	185865.200	3.0
306.5866	25.01	-4.98	43311.000	1.0	75918.730	2.0
306.5925	25.01	-2.11	33147.390	5.0	65754.500	6.0
306.5930	90.01	-.71	9598.245	0.0	42214.776	0.0
306.5989	26.02	-4.05	167299.600	5.0	199906.030	6.0
306.6022	25.00	-.38	17282.000	3.5	49888.080	3.5
306.6100	41.01	.04	13631.121	0.0	46245.843	0.0
306.6111	26.02	-4.47	84369.920	2.0	116975.050	2.0
306.6118	28.01	-1.66	103025.580	2.5	135630.630	2.5
306.6120	76.00	-.18	15082.956	0.0	47697.466	0.0
306.6142	22.00	-6.97	6661.003	3.0	39265.800	2.0
306.6144	13.00	-.57	29142.780	2.5	61747.560	1.5
306.6172	25.00	-1.75	34250.520	5.5	66855.000	4.5
306.6174	24.00	-3.63	31393.400	5.0	63997.860	6.0
306.6189	26.01	-3.71	31483.200	3.5	64087.500	2.5
306.6196	25.01	-1.34	71263.920	1.0	103868.140	1.0
306.6217	22.01	-.50	93.940	2.5	32697.940	2.5
306.6231	25.01	-4.49	53698.700	2.0	86302.550	3.0
306.6234	28.01	-1.49	103025.580	2.5	135629.400	3.5
306.6299	22.01	-2.93	20951.770	2.5	53554.900	2.5
306.6333	15.01	-1.65	105224.830	0.0	137827.600	1.0
306.6349	27.02	-4.91	140200.100	1.5	172802.700	2.5
306.6357	22.01	-.61	0.000	1.5	32602.510	1.5
306.6372	28.01	-2.50	94729.250	2.5	127331.600	2.5
306.6379	23.00	.46	553.020	4.5	33155.300	4.5
306.6410	90.01	-.71	12098.628	0.0	44710.053	0.0
306.6424	28.00	-.72	27260.891	6.0	59862.690	5.0
306.6479	26.00	-1.17	21999.132	4.0	54600.350	3.0
306.6501	22.01	-1.13	9395.760	1.5	41996.740	.5
306.6504	9.02	-1.57	357479.350	1.5	390080.300	1.5
306.6522	23.00	-.60	137.380	2.5	32738.140	1.5
306.6530	11.01	-.65	300510.920	1.0	333111.600	1.0
306.6600	29.01	-2.68	118142.970	3.0	150742.900	3.0
306.6633	25.01	-2.22	49517.580	5.0	82117.160	5.0
306.6657	25.01	-4.39	49820.160	2.0	82419.480	3.0
306.6683	26.00	-2.37	23783.617	5.0	56382.664	5.0
306.6688	10.01	-1.89	280173.010	4.5	312772.010	3.5
306.6710	22.00	-3.10	11776.806	4.0	44375.570	5.0
306.6735	26.01	-1.76	65696.110	4.5	98294.600	5.5
306.6740	9.02	-.89	357479.350	1.5	390077.800	2.5
306.6781	28.01	-2.36	103025.580	2.5	135623.590	1.5
306.6800	23.01	-1.26	20280.190	5.0	52877.990	5.0
306.6874	28.01	-2.86	103025.580	2.5	135622.600	3.5
306.6879	25.02	-3.59	144672.380	2.5	177269.340	1.5
306.6889	18.01	-1.95	163506.450	3.5	196103.310	4.5
306.6911	24.00	-2.70	20520.920	3.0	53117.540	4.0
306.6957	20.00	-2.80	15210.063	1.0	47806.200	1.0
306.7010	32.00	.49	16292.819	0.0	48897.864	0.0
306.7087	20.00	-2.56	15157.901	0.0	47752.655	1.0
306.7102	23.01	.15	14461.730	3.0	47056.320	4.0
306.7120	26.00	-1.54	12968.552	2.0	45562.959	3.0
306.7127	28.01	-2.15	103025.580	2.5	135619.910	1.5
306.7172	22.00	-3.44	11639.804	3.0	44233.650	3.0
306.7172	24.00	-1.35	20523.690	4.0	53117.540	4.0
306.7174	24.01	-1.63	21824.250	.5	54418.080	.5
306.7185	23.01	-2.33	40195.520	3.0	72789.230	3.0
306.7196	24.00	-.52	20523.940	5.0	53117.540	4.0
306.7199	25.01	-2.59	72320.620	1.0	104914.180	0.0
306.7228	24.01	-2.00	21824.820	1.5	54418.080	.5
306.7246	26.00	-.31	7376.762	4.0	39969.830	3.0
306.7247	25.01	-1.49	53597.130	2.0	86190.180	2.0
306.7253	28.01	-4.81	100389.520	2.5	132982.510	1.5
306.7299	28.01	-2.06	103025.580	2.5	135618.080	2.5
306.7300	45.00	-.45	12663.231	0.0	45265.194	0.0
306.7301	10.01	-2.36	280173.010	4.5	312765.490	3.5
306.7380	26.02	-3.49	186268.790	2.0	218860.430	2.0
306.7400	75.00	-1.15	0.000	0.0	32600.900	0.0
306.7410	72.00	-.45	2339.068	0.0	34939.862	0.0
306.7431	27.02	-3.69	140211.600	2.5	172802.700	2.5
306.7450	10.01	-.72	280173.010	4.5	312763.910	4.5
306.7519	23.01	-6.05	14461.730	3.0	47051.890	3.0
306.7557	28.01	-2.49	104646.520	3.5	137236.280	3.5
306.7590	17.01	-2.10	129065.400	2.0	161654.800	1.0
306.7629	26.02	-3.58	186882.980	3.0	219471.970	4.0
306.7701	23.00	-3.67	18438.070	4.5	51026.300	5.5
306.7705	25.01	-2.82	43131.400	2.0	75719.590	1.0
306.7720	83.00	0.00	0.000	0.0	32597.499	0.0
306.7835	26.02	-3.94	147161.360	4.0	179748.170	5.0
306.7850	25.00	-2.85	24802.250	3.5	57388.900	4.5
306.7854	23.03	-.73	255146.800	2.0	287733.400	2.0
306.7946	26.00	-2.49	21715.735	5.0	54301.360	4.0
306.8000	42.00	.67	16696.107	0.0	49290.631	0.0
306.8058	18.02	-.80	207673.160	0.0	240257.590	1.0
306.8061	8.02	-1.05	365550.600	1.0	398135.000	0.0
306.8154	18.01	-4.61	163506.450	3.5	196089.870	2.5
306.8175	21.00	-1.92	168.340	2.5	32751.540	3.5
306.8175	26.00	-1.55	12968.552	2.0	45551.748	1.0
306.8215	25.00	-1.67	27201.540	2.5	59784.310	3.5
306.8221	17.02	.12	222100.700	1.5	254683.400	2.5
306.8234	24.01	-2.49	38269.670	3.5	70852.240	3.5
306.8265	25.01	-3.58	49517.580	5.0	82099.820	4.0
306.8268	28.01	-3.49	105981.500	4.5	138563.710	3.5
306.8325	25.02	-3.36	115774.000	3.5	148355.600	3.5
306.8400	8.02	-1.65	365550.600	1.0	398131.400	1.0
306.8418	27.00	-6.03	8460.810	2.5	41041.430	3.5
306.8511	25.01	-3.61	43339.100	2.0	75918.730	2.0
306.8640	64.01	-.26	564.603	0.0	33152.329	0.0
306.8680	58.01	-.70	4194.191	0.0	36781.492	0.0
306.8683	26.02	-3.12	88663.870	4.0	121241.670	4.0
306.8757	26.01	-2.40	33501.320	3.5	66078.340	2.5
306.8764	28.01	-3.14	100592.980	3.5	133169.920	3.5
306.8787	8.02	-.80	365550.600	1.0	398127.300	2.0
306.8887	10.01	-2.49	280268.960	2.5	312844.600	1.5
306.8890	77.00	-.36	2823.013	0.0	35408.084	0.0
306.8906	29.00	-4.26	13227.833	0.0	45812.735	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
306.8912	25.02	-4.58	115780.230	2.5	148355.600	3.5
306.8919	29.01	-4.92	114000.000	3.0	146575.300	2.0
306.8919	27.01	-5.95	18338.500	1.0	50913.800	2.0
306.8939	26.00	-2.81	11976.239	4.0	44551.325	3.0
306.8977	28.01	-4.96	105439.850	1.5	138014.530	2.5
306.9021	27.00	-2.92	20500.710	1.5	53074.920	1.5
306.9041	17.01	-1.53	149798.300	2.0	182372.300	1.0
306.9067	23.00	-3.69	18302.270	3.5	50876.000	4.5
306.9090	77.00	-.93	5726.684	0.0	38309.632	0.0
306.9110	63.01	-.05	24035.941	0.0	56618.677	0.0
306.9180	72.00	-.43	10485.478	0.0	43067.471	0.0
306.9196	28.01	-4.26	98561.220	2.5	131133.580	2.5
306.9206	25.01	-2.05	71263.920	1.0	103836.170	2.0
306.9240	73.00	.39	12179.286	0.0	44760.642	0.0
306.9274	25.01	-1.95	49291.310	3.0	81862.840	4.0
306.9338	24.01	-1.49	36272.660	4.5	68843.510	3.5
306.9420	64.00	-.70	161.315	0.0	32740.760	0.0
306.9425	26.00	-2.67	26140.164	3.0	58710.090	3.0
306.9439	25.01	-4.44	55371.300	3.0	87941.080	4.0
306.9446	25.00	-1.73	27248.000	1.5	59817.700	2.5
306.9446	25.00	-3.12	33825.490	2.5	66395.190	2.5
306.9465	17.01	-3.87	129065.400	2.0	161634.900	2.0
306.9559	28.01	-4.70	97273.830	2.5	129842.330	2.5
306.9573	24.01	-4.46	32355.940	3.5	64924.300	3.5
306.9574	24.00	-3.75	21856.940	3.0	54425.290	4.0
306.9616	11.02	-4.12	373633.000	1.5	406200.900	2.5
306.9638	22.00	-4.19	8602.340	2.0	41170.003	3.0
306.9640	26.02	-3.36	84369.920	2.0	116937.570	1.0
306.9640	58.01	-.53	4436.164	0.0	37013.274	0.0
306.9641	23.00	-2.92	323.420	3.5	32891.060	3.5
306.9644	27.02	-3.65	70934.100	2.5	103501.700	3.5
306.9656	26.02	-1.80	186998.600	4.0	219566.080	3.0
306.9663	17.01	-2.66	126219.000	3.0	158786.400	3.0
306.9666	25.01	-2.40	49820.160	2.0	82387.530	3.0
306.9680	41.01	.46	12985.861	0.0	45562.547	0.0
306.9710	77.00	-.14	12098.628	0.0	44674.995	0.0
306.9740	22.00	-2.90	16106.080	4.0	48672.660	4.0
306.9745	25.01	-1.77	49427.320	4.0	81993.850	4.0
306.9776	25.00	-1.40	34938.700	4.5	67504.900	5.5
306.9796	25.02	-4.09	144619.190	1.5	177185.180	.5
306.9825	26.02	-4.82	82382.870	3.0	114948.550	3.0
306.9843	24.01	-2.55	32854.460	4.5	65419.950	5.5
306.9878	26.02	-3.72	186597.300	6.0	219162.420	6.0
306.9940	75.00	-.43	11534.025	0.0	44107.952	0.0
306.9940	76.00	-.90	5726.684	0.0	38300.611	0.0
307.0003	28.01	-3.51	68281.620	.5	100845.410	.5
307.0076	26.02	-2.58	89783.590	4.0	122346.610	3.0
307.0100	23.01	-.37	32040.760	2.0	64603.530	3.0
307.0230	26.00	-2.67	22249.430	3.0	54810.820	4.0
307.0266	25.00	-.24	17451.520	2.5	50012.530	2.5
307.0330	27.00	-3.49	15774.040	1.5	48334.370	1.5
307.0521	27.02	-4.01	139818.700	3.5	172377.000	3.5
307.0525	21.01	-2.42	30815.650	1.0	63373.910	2.0
307.0546	27.00	-1.09	16195.680	.5	48753.720	1.5
307.0554	21.01	-3.04	27443.650	2.0	60001.600	3.0
307.0572	26.01	-3.66	31483.200	3.5	64040.960	3.5
307.0608	29.01	-4.25	88362.030	2.0	120919.410	1.0
307.0645	26.02	-3.51	186303.440	3.0	218860.430	2.0
307.0682	29.01	-3.99	114000.000	3.0	146556.600	3.0
307.0684	26.01	-1.83	30388.550	4.5	62945.120	3.5
307.0691	24.00	-2.72	20517.400	2.0	53073.900	3.0
307.0713	24.01	-1.95	34813.060	5.5	67369.330	5.5
307.0746	26.01	-3.15	66012.830	4.5	98568.750	3.5
307.0748	27.00	-1.55	18389.570	1.5	50945.470	.5
307.0815	28.01	-3.86	100475.820	3.5	133031.000	4.5
307.0821	25.01	-1.04	46903.260	2.0	79458.380	2.0
307.0831	11.01	-1.92	299193.750	2.0	331748.770	1.0
307.0831	11.01	-1.92	299193.750	2.0	331748.770	1.0
307.0849	27.00	-3.25	16470.600	1.5	49025.420	1.5
307.0859	28.01	-4.27	101740.270	3.5	134294.990	2.5
307.0860	23.00	-2.63	137.380	2.5	32692.090	3.5
307.0888	10.01	.03	280262.330	3.5	312816.750	4.5
307.0900	41.01	.63	14679.669	0.0	47243.413	0.0
307.0900	42.00	.46	16615.449	0.0	49179.193	0.0
307.0950	23.00	-3.08	18198.080	2.5	50751.830	3.5
307.1011	24.01	-3.19	32603.730	2.5	65156.840	2.5
307.1023	24.00	-1.35	20520.920	3.0	53073.900	3.0
307.1088	10.01	-.67	249445.990	2.5	281998.280	2.5
307.1110	58.01	-.92	1855.123	0.0	34416.640	0.0
307.1141	26.01	-.95	47626.140	.5	80177.870	1.5
307.1160	75.00	.04	16534.792	0.0	49095.779	0.0
307.1180	41.01	.27	15808.874	0.0	48369.649	0.0
307.1181	15.01	-2.85	106001.990	1.0	138553.300	2.0
307.1201	26.02	-4.52	114339.950	4.0	146891.040	3.0
307.1229	22.01	-.97	9518.050	2.5	42068.850	1.5
307.1242	28.01	-2.44	100619.260	4.5	133169.920	3.5
307.1267	26.00	-1.74	23783.617	5.0	56334.010	6.0
307.1284	24.00	-.65	20523.690	4.0	53073.900	3.0
307.1287	26.01	-2.02	67273.860	1.5	99824.040	2.5
307.1315	26.01	-1.14	65580.090	5.5	98129.980	6.5
307.1338	26.02	-2.28	186454.890	5.0	219004.530	4.0
307.1342	17.01	-3.60	126219.000	3.0	158768.600	2.0
307.1351	27.02	-2.70	140645.400	3.5	173194.900	2.5
307.1351	27.02	-2.70	140645.400	3.5	173194.900	2.5
307.1369	24.00	-1.98	31377.960	4.0	63927.270	5.0
307.1390	17.03	-.47	215026.000	0.0	247575.100	1.0
307.1409	8.02	-3.26	300228.210	0.0	332777.100	1.0
307.1422	24.00	-1.07	25038.610	5.0	57587.360	4.0
307.1440	42.00	-.02	16534.792	0.0	49092.810	0.0
307.1452	28.01	-3.73	103653.030	3.5	136201.460	3.5
307.1485	22.00	-3.44	11531.760	2.0	44079.840	2.0
307.1493	10.01	-1.53	281171.380	2.5	313719.370	2.5
307.1529	10.01	-.25	281171.380	2.5	313718.990	3.5
307.1560	41.01	.25	11292.053	0.0	43848.799	0.0
307.1566	20.00	-2.28	15210.063	1.0	47757.286	2.0
307.1568	24.01	-1.68	32836.840	3.5	65384.040	4.5
307.1580	56.00	-.76	0.000	0.0	32556.534	0.0
307.1587	26.02	-3.30	88694.670	5.0	121241.670	4.0
307.1620	58.01	-.79	2339.068	0.0	34895.178	0.0
307.1651	26.01	-2.61	33466.500	4.5	66012.830	4.5
307.1666	18.01	-4.41	155043.070	2.5	187589.230	2.5
307.1671	28.01	-3.59	101740.270	3.5	134286.380	4.5
307.1705	26.02	-4.20	88923.070	6.0	121468.820	5.0
307.1711	22.01	-4.18	32767.020	3.5	65312.710	2.5
307.1719	25.01	-3.03	59537.400	4.0	92083.000	3.0
307.1732	23.01	-1.73	32040.760	2.0	64586.230	2.0
307.1760	25.00	-.99	34463.370	1.5	67008.540	2.5
307.1777	25.01	-2.26	71323.150	2.0	103868.140	1.0
307.1857	26.02	-3.01	186378.940	4.0	218923.080	3.0
307.1906	22.00	-2.37	15975.590	3.0	48519.210	2.0
307.1940	78.00	-1.22	10001.532	0.0	42544.251	0.0
307.1956	27.00	-2.31	1809.330	1.5	34352.420	1.5
307.2003	20.00	-2.68	15210.063	1.0	47752.655	1.0
307.2021	10.01	-3.77	280262.330	3.5	312804.730	2.5
307.2060	30.00	-.54	32746.953	0.0	65298.401	0.0
307.2063	28.01	-3.63	98561.220	2.5	131103.180	2.5
307.2102	22.01	-.52	225.470	3.5	32767.020	3.5
307.2110	90.01	-.76	4113.534	0.0	36664.452	0.0
307.2197	24.01	-1.94	34813.060	5.5	67353.600	4.5
307.2207	22.01	-2.18	32767.020	3.5	65307.450	4.5
307.2257	23.01	-2.26	22273.540	1.0	54813.450	0.0
307.2301	10.01	-.95	306011.070	.5	338550.510	.5
307.2331	26.02	-2.85	114351.920	3.0	146891.040	3.0
307.2337	27.00	-.94	1406.840	2.5	33945.900	2.5
307.2390	58.01	-1.03	2339.068	0.0	34887.019	0.0
307.2410	41.00	-.87	4920.109	0.0	37467.848	0.0
307.2452	24.01	-1.51	31168.780	3.5	63706.620	4.5
307.2474	26.02	-3.88	82410.940	2.0	114948.550	3.0
307.2500	25.01	-4.79	49882.150	4.0	82419.480	3.0
307.2509	24.01	-1.77	38315.000	2.5	70852.240	3.5
307.2510	41.01	.25	12985.861	0.0	45532.541	0.0
307.2535	6.00	-2.53	87341.040	0.0	119878.000	1.0
307.2550	22.01	.03	29734.450	3.5	62271.250	2.5
307.2560	64.01	.63	10001.532	0.0	42547.682	0.0
307.2647	10.01	-1.39	280268.960	2.5	312804.730	2.5
307.2654	10.01	-1.42	249839.630	.5	282375.330	1.5
307.2669	27.00	-1.69	18389.570	1.5	50925.110	1.5
307.2676	25.00	-2.01	35041.370	3.5	67576.040	4.5
307.2704	23.02	-2.57	56922.500	2.5	89457.670	2.5
307.2712	10.01	-2.38	280268.960	2.5	312804.040	1.5
307.2804	27.00	-3.36	13795.520	2.5	46329.630	2.5
307.2827	24.00	-3.00	31393.400	5.0	63927.270	5.0
307.2876	25.01	-3.26	34761.810	5.0	67295.160	4.0
307.2879	18.01	-3.83	186470.280	1.5	219003.600	2.5
307.2880	72.00	-.35	0.000	0.0	32542.761	0.0
307.2890	58.01	-.40	5081.424	0.0	37624.079	0.0
307.2960	75.00	-.02	17180.052	0.0	49721.966	0.0
307.2968	22.01	-.21	0.000	1.5	32534.380	.5
307.3049	18.01	-4.38	186470.280	1.5	219001.800	1.5
307.3128	25.00	-.33	17568.480	1.5	50099.160	1.5
307.3164	17.02	-2.67	209042.100	.5	241572.400	1.5
307.3174	24.01	-3.39	31531.620	1.5	64061.820	1.5
307.3228	25.01	-1.69	49889.860	3.0	82419.480	3.0
307.3232	24.01	-1.18	32854.460	4.5	65384.040	4.5
307.3235	26.00	-2.28	24574.655	4.0	57104.207	5.0
307.3240	41.01	-.89	2339.068	0.0	34878.017	0.0
307.3280	74.00	-1.01	6129.972	0.0	38668.498	0.0
307.3313	25.01	-2.01	49465.130	3.0	81993.850	4.0
307.3334	21.00	-2.15	168.340	2.5	32696.840	2.5
307.3339	23.00	-3.14	18126.270	1.5	50654.720	2.5
307.3340	44.00	-.21	11372.710	0.0	43910.600	0.0
307.3340	68.00	-.51	0.000	0.0	32537.890	0.0
307.3353	26.02	-4.17	84369.920	2.0	116898.220	2.0
307.3483	23.00	-7.04	2220.130	2.5	34747.060	3.5
307.3515	27.00	-1.92	14036.280	1.5	46562.870	1.5
307.3661	23.01	-5.00	20242.320	4.0	52767.360	3.0
307.3668	24.00	-.37	25177.390	4.0	57702.360	5.0
307.3720	23.02	-1.87	56669.050	1.5	89193.470	1.5
307.3721	15.01	-1.90	105303.190	1.0	137827.600	1.0
307.3798	29.00	-2.88	11211.395	0.0	43744.437	0.0
307.3824	23.00	-4.63	323.420	3.5	32846.740	2.5
307.3824	23.00	-.46	323.420	3.5	32846.740	2.5
307.3824	10.01	-1.53	280947.100	1.5	313470.420	2.5
307.3865	26.00	-1.39	24335.764	2.0	56858.650	2.0
307.3865	23.00	-3.57	137.380	2.5	32660.260	2.5
307.3866	28.00	-3.38	26665.903	3.0	59188.780	3.0
307.3888	22.00	-3.13	11639.804	3.0	44162.440	4.0
307.3889	28.01	-3.87	100389.520	2.5	132912.150	2.5
307.3975	26.00	-1.22	21715.735	5.0	54237.460	4.0
307.4043	23.00	.41	18680.120	5.5	51201.120	6.5
307.4053	23.01	-2.77	40430.100	4.0	72951.000	4.0
307.4054	22.00	-8.45	6556.828	1.0	39077.713	1.0
307.4057	25.01	-1.74	53781.700	3.0	86302.550	3.0
307.4080	76.00	-.62	6049.314	0.0	38579.372	0.0
307.4099	15.01	-2.20	106001.990	1.0	138522.400	1.0
307.4100	72.00	-1.16	2339.068	0.0	34868.914	0.0
307.4126	24.00	-1.51	20517.400	2.0	53037.520	2.0
307.4144	23.01	-3.02	36425.070	4.0	68945.000	3.0
307.4149	26.00	-1.69	24338.766	3.0	56858.650	2.0
307.4242	12.02	-1.15	530420.600	1.0	562939.500	2.0
307.4300	8.02	-.75	365619.120	2.0	398137.400	3.0
307.4327	11.01	.37	299193.750	2.0	331711.750	3.0
307.4327	11.01	.37	299193.750	2.0	331711.750	3.0
307.4327	16.05	-.82	596877.000	2.5	629395.000	2.5
307.4327	16.05	.48	596877.000	2.5	629395.000	3.5
307.4327	16.05	.32	596877.000	1.5	629395.000	2.5
307.4367	25.00	-3.18	24788.050	2.5	57305.620	3.5
307.4370	42.00	.95	16696.107	0.0	49223.096	0.0
307.4393	17.02	-2.42	209042.100	.5	241559.400	.5
307.4459	24.00	-.79	20520.920	3.0	53037.520	2.0
307.4499	23.01	-2.71	40001.660	2.0	72517.840	1.0
307.4510	25.01	-3.57	62564.700	1.0	95080.760	1.0
307.4520	24.00	-3.69	24286.540	1.0	56802.500	0.0
307.4565	28.01	-3.63	105499.050	3.5	138014.530	2.5
307.4632	23.01	-8.21	20363.220	6.0	52877.990	5.0
307.4652	28.01	-4.68	98561.220	2.5	131075.780	1.5
307.4653	23.01	-.75	20089.560	1.0	52604.110	1.0
307.4663	24.01	-1.66	35356.060	1.5	67870.500	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
307.4696	13.01	-2.84	110087.500	2.0	142601.600	3.0
307.4722	29.01	-3.07	88362.030	2.0	120875.650	2.0
307.4726	26.01	-1.74	65931.460	3.5	98445.240	4.5
307.4749	28.01	-4.68	77332.470	2.5	109846.000	3.5
307.4790	72.00	-.59	5565.369	0.0	38087.915	0.0
307.4798	25.01	-1.31	71323.150	2.0	103836.170	2.0
307.4815	23.00	.29	18513.460	4.5	51026.300	5.5
307.4839	28.01	-3.69	101740.270	3.5	134252.850	3.5
307.4868	8.02	-.80	365619.120	2.0	398131.400	1.0
307.4894	17.02	-.78	222100.700	1.5	254612.700	1.5
307.4895	24.01	-1.37	35356.060	1.5	67868.050	2.5
307.4924	28.00	-1.58	29320.782	3.0	61832.470	4.0
307.4940	26.01	-4.52	33501.320	3.5	66012.830	4.5
307.4952	28.01	-2.70	68735.980	2.5	101247.370	2.5
307.4960	76.00	.89	22503.448	0.0	55024.196	0.0
307.4979	25.00	-1.42	34343.900	4.5	66855.000	4.5
307.4997	25.01	-3.97	33147.390	5.0	65658.300	5.0
307.5015	23.01	-.99	32420.040	0.0	64930.760	1.0
307.5034	28.01	-3.93	100490.950	1.5	133001.470	.5
307.5072	10.01	-1.96	280262.330	3.5	312772.450	2.5
307.5112	25.01	-1.02	53698.700	2.0	86208.400	1.0
307.5114	10.01	-3.32	280262.330	3.5	312772.010	3.5
307.5180	25.00	-3.78	33825.490	2.5	66334.470	3.5
307.5218	26.01	-2.34	30764.460	3.5	63273.030	2.5
307.5218	22.01	-.03	93.940	2.5	32602.510	1.5
307.5219	25.01	-2.73	62572.200	2.0	95080.760	1.0
307.5243	28.01	-3.73	104081.040	4.5	136589.350	3.5
307.5256	8.02	-.95	365619.120	2.0	398127.300	2.0
307.5273	17.01	-1.54	153257.000	2.0	185765.000	2.0
307.5300	72.00	-.96	10404.820	0.0	42921.973	0.0
307.5344	25.01	-3.51	39813.380	2.0	72320.620	1.0
307.5365	21.01	-.49	27841.170	4.0	60348.200	4.0
307.5464	23.01	-.88	18269.490	1.0	50775.470	2.0
307.5520	25.01	-3.62	49882.150	4.0	82387.530	3.0
307.5567	23.01	-.76	32299.240	1.0	64804.130	2.0
307.5630	22.00	-3.06	16267.510	5.0	48771.730	5.0
307.5640	26.01	-2.27	66589.170	4.5	99093.290	5.5
307.5665	24.01	-2.64	35356.060	1.5	67859.910	.5
307.5694	23.00	.16	18372.460	3.5	50876.000	4.5
307.5699	10.01	-1.05	280268.960	2.5	312772.450	2.5
307.5710	25.00	-3.20	24802.250	3.5	57305.620	3.5
307.5721	26.00	-.49	7728.058	3.0	40231.312	2.0
307.5730	10.01	-.83	280262.330	3.5	312765.490	3.5
307.5740	10.01	-.90	280268.960	2.5	312772.010	3.5
307.5770	18.02	-2.46	239193.480	1.0	271696.220	0.0
307.5775	16.02	-1.92	174036.190	1.0	206538.870	1.0
307.5788	29.01	-3.08	117747.450	3.0	150250.000	2.0
307.5811	17.02	-3.59	209182.800	1.5	241685.100	2.5
307.5819	25.00	-4.41	18402.460	2.5	50904.680	2.5
307.5877	24.00	-1.67	24833.860	3.0	57335.470	4.0
307.5879	10.01	-4.52	280262.330	3.5	312763.910	4.5
307.5900	30.00	-2.75	0.000	0.0	32510.810	0.0
307.5931	23.00	.06	9636.960	1.5	42138.000	2.5
307.6008	23.01	-1.01	14556.090	4.0	47056.320	4.0
307.6018	26.02	-4.82	147161.360	4.0	179661.480	3.0
307.6020	70.01	-.99	26616.982	0.0	59126.524	0.0
307.6063	8.02	-.87	365719.160	3.0	398218.800	4.0
307.6140	75.00	-.56	15082.956	0.0	47591.229	0.0
307.6151	24.00	-1.63	24093.160	2.0	56591.880	2.0
307.6176	23.00	-3.69	18085.820	.5	50584.270	1.5
307.6228	8.01	-1.71	233430.100	.5	265928.000	1.5
307.6248	26.02	-3.09	90423.680	2.0	122921.370	1.0
307.6250	25.01	-3.16	49889.860	3.0	82387.530	3.0
307.6250	58.01	-.79	4758.794	0.0	37265.905	0.0
307.6289	25.00	-2.24	30354.210	3.5	62851.470	3.5
307.6304	7.01	-1.10	188857.370	2.0	221354.470	2.0
307.6337	25.01	-.75	53805.800	4.0	86302.550	3.0
307.6358	10.01	-.35	280268.960	2.5	312765.490	3.5
307.6379	17.01	-1.20	149952.400	1.0	182448.700	2.0
307.6380	73.00	-1.52	5968.656	0.0	38474.393	0.0
307.6389	29.01	-4.81	114000.000	3.0	146496.200	3.0
307.6399	27.02	-2.54	138970.500	1.5	171466.600	2.5
307.6399	27.02	-2.54	138970.500	1.5	171466.600	2.5
307.6399	27.02	-4.80	138970.500	1.5	171466.600	2.5
307.6427	23.01	-5.04	14556.090	4.0	47051.890	3.0
307.6450	26.02	-2.53	186597.300	6.0	219092.860	5.0
307.6455	25.01	-3.64	39826.570	1.0	72322.070	0.0
307.6455	26.01	-.55	47389.820	1.5	79885.320	2.5
307.6503	23.02	-1.26	56922.500	2.5	89417.500	3.5
307.6533	25.01	-4.71	37847.900	2.0	70342.580	3.0
307.6573	7.01	-1.99	188857.370	2.0	221351.630	1.0
307.6574	24.00	-.94	20517.400	2.0	53011.650	1.0
307.6593	25.01	-3.17	39826.570	1.0	72320.620	1.0
307.6613	23.00	-2.36	9824.580	2.5	42318.420	1.5
307.6651	25.01	-2.86	39813.380	2.0	72306.810	2.0
307.6660	83.00	-1.02	11292.053	0.0	43794.832	0.0
307.6682	17.03	.38	216468.100	2.0	248961.200	3.0
307.6690	77.00	-.39	10485.478	0.0	42987.940	0.0
307.6698	23.00	.01	18258.890	2.5	50751.830	3.5
307.6765	25.02	-4.89	146066.070	1.5	178558.300	1.5
307.6836	25.01	-2.18	53698.700	2.0	86190.180	2.0
307.6841	25.01	-3.33	37851.150	3.0	70342.580	3.0
307.6861	26.01	-3.28	68000.820	4.5	100492.040	3.5
307.6870	41.01	-.21	2984.328	0.0	35484.889	0.0
307.6894	21.00	-4.09	168.340	2.5	32659.210	1.5
307.6908	28.01	-3.96	94729.250	2.5	127219.970	3.5
307.6920	64.01	-.55	0.000	0.0	32500.033	0.0
307.6937	26.01	-1.80	66078.340	2.5	98568.750	3.5
307.6952	20.00	-2.57	15315.943	2.0	47806.200	1.0
307.6974	10.00	-2.69	135888.717	1.0	168378.740	2.0
307.7034	25.01	-2.06	49291.310	3.0	81780.700	3.0
307.7060	76.00	-.60	8630.355	0.0	41128.909	0.0
307.7080	64.01	-.69	3952.218	0.0	36450.561	0.0
307.7121	24.01	-3.45	40228.440	5.5	72716.910	4.5
307.7161	28.01	-2.74	68131.210	3.5	100619.260	4.5
307.7163	26.01	-.94	32875.630	6.5	65363.660	5.5
307.7228	28.01	-3.79	103025.580	2.5	135512.920	2.5
307.7228	24.01	-4.03	36272.660	4.5	68760.000	3.5
307.7240	25.01	-4.62	55371.300	3.0	87858.510	2.0
307.7240	73.00	.03	10566.135	0.0	43062.788	0.0
307.7248	24.01	-3.22	31219.490	4.5	63706.620	4.5
307.7304	23.01	-1.61	40195.520	3.0	72682.060	2.0
307.7330	58.01	-.54	5565.369	0.0	38061.071	0.0
307.7335	10.02	-.07	379834.000	1.0	412320.210	2.0
307.7336	24.00	-1.89	28637.000	3.0	61123.200	4.0
307.7340	90.01	-.78	9114.300	0.0	41609.897	0.0
307.7348	28.01	-4.52	100332.090	4.5	132818.160	4.5
307.7349	22.01	-2.56	30958.700	2.5	63444.760	3.5
307.7360	63.01	-1.68	0.000	0.0	32495.386	0.0
307.7364	28.01	-3.52	99442.860	4.5	131928.770	4.5
307.7375	25.01	-3.96	73683.110	4.0	106168.900	5.0
307.7375	18.03	-2.60	257348.890	1.5	289834.680	2.5
307.7400	21.01	-2.11	27443.650	2.0	59929.180	2.0
307.7438	26.00	-3.00	26339.682	2.0	58824.810	2.0
307.7440	76.00	-.12	10969.423	0.0	43463.964	0.0
307.7472	18.01	-3.69	179592.130	2.5	212076.900	2.5
307.7478	23.03	-.41	225804.100	2.0	258288.800	1.0
307.7582	24.01	-1.96	31117.590	2.5	63601.200	3.5
307.7600	71.01	.43	12340.601	0.0	44833.453	0.0
307.7660	42.01	.79	35247.336	0.0	67739.554	0.0
307.7703	21.01	-2.78	27917.690	1.0	60400.020	1.0
307.7715	22.00	-2.23	16106.080	4.0	48588.280	3.0
307.7720	76.00	.20	8630.355	0.0	41121.940	0.0
307.7770	24.01	-1.18	36101.820	3.5	68583.440	2.5
307.7772	23.01	-2.47	18293.870	2.0	50775.470	2.0
307.7822	24.00	-4.00	21847.880	2.0	54328.950	3.0
307.7827	24.00	-.42	25106.340	3.0	57587.360	4.0
307.7839	10.01	-1.01	280989.530	1.5	313470.420	2.5
307.7861	23.00	-.15	18174.060	1.5	50654.720	2.5
307.7865	26.01	-2.77	54063.530	.5	86544.140	1.5
307.7896	25.01	-1.39	71323.150	2.0	103803.440	3.0
307.7901	25.01	-3.40	39826.570	1.0	72306.810	2.0
307.7955	18.01	-2.39	179592.130	2.5	212071.800	3.5
307.7958	28.01	-3.75	100389.520	2.5	132869.160	3.5
307.7982	28.00	-5.43	14728.847	0.0	47208.228	1.0
307.8008	10.02	-1.61	379834.000	1.0	412313.110	1.0
307.8013	26.00	-3.39	7728.058	3.0	40207.120	3.0
307.8022	22.00	-7.25	6598.749	2.0	39077.713	1.0
307.8041	23.01	-2.11	40195.520	3.0	72674.280	2.0
307.8056	18.02	-3.95	239193.480	1.0	271672.080	1.0
307.8094	9.03	-3.07	460385.800	1.0	492864.000	2.0
307.8107	23.01	-1.54	40430.100	4.0	72908.170	3.0
307.8110	76.00	-.67	5726.684	0.0	38214.152	0.0
307.8162	24.00	-3.14	31364.330	3.0	63841.810	4.0
307.8230	73.00	-.94	5968.656	0.0	38454.857	0.0
307.8271	23.02	-1.76	56529.300	.5	89005.640	.5
307.8277	25.01	-2.25	49517.580	5.0	81993.850	4.0
307.8317	11.01	-.33	265693.290	1.0	298169.140	1.0
307.8336	11.01	-2.90	299193.750	2.0	331669.400	2.0
307.8336	11.01	-2.90	299193.750	2.0	331669.400	2.0
307.8380	76.00	-1.06	4113.534	0.0	36598.153	0.0
307.8431	26.00	-1.15	20037.815	0.0	52512.460	1.0
307.8438	26.01	-2.58	31811.870	2.5	64286.440	3.5
307.8454	30.02	-3.66	260418.100	2.0	292892.500	2.0
307.8454	30.02	-2.50	260418.100	2.0	292892.500	3.0
307.8461	28.01	-4.87	98276.700	4.5	130751.030	5.5
307.8464	25.01	-4.45	70231.070	2.0	102705.370	3.0
307.8498	26.00	-3.41	24118.815	4.0	56592.760	4.0
307.8549	8.02	-.61	370900.600	2.0	403374.000	3.0
307.8552	26.02	-2.15	186998.600	4.0	219471.970	4.0
307.8588	10.01	-.75	280947.100	1.5	313420.090	2.5
307.8621	18.01	-2.45	160239.350	1.5	192712.000	1.5
307.8637	22.01	.13	225.470	3.5	32697.940	2.5
307.8681	24.00	-4.28	21856.940	3.0	54328.950	3.0
307.8688	10.01	-2.18	280947.100	1.5	313419.040	1.5
307.8698	26.01	-.27	46967.470	2.5	79439.300	3.5
307.8733	11.01	-3.58	298169.140	1.0	330640.600	1.0
307.8733	11.01	-3.58	298169.140	1.0	330640.600	1.0
307.8767	25.02	-4.93	176464.780	3.5	208935.880	4.5
307.8791	22.00	-4.77	386.874	4.0	32857.721	3.0
307.8820	90.01	-.51	4032.876	0.0	36512.852	0.0
307.8860	75.00	-.93	11695.340	0.0	44174.894	0.0
307.8880	10.00	-3.34	135888.717	1.0	168358.630	1.0
307.8928	28.01	-1.87	66571.340	2.5	99040.750	1.5
307.8928	26.02	-3.84	147161.360	4.0	179630.770	4.0
307.8935	23.01	-2.52	18269.490	1.0	50738.820	1.0
307.9058	28.01	-2.74	101740.270	3.5	134208.300	2.5
307.9092	28.01	-3.19	103025.580	2.5	135493.260	1.5
307.9176	10.00	-3.07	135888.717	1.0	168355.510	1.0
307.9221	23.00	-6.35	2153.200	1.5	34619.520	2.5
307.9263	27.00	-3.68	14036.280	1.5	46502.150	.5
307.9285	26.01	-2.78	31483.200	3.5	63948.840	4.5
307.9314	24.01	-1.36	36272.660	4.5	68737.990	5.5
307.9350	26.01	-3.18	33466.500	4.5	65931.460	3.5
307.9365	23.00	-2.32	323.420	3.5	32788.220	4.5
307.9371	27.00	-1.83	0.000	4.5	32464.730	4.5
307.9382	25.01	-2.84	53597.130	2.0	86061.750	3.0
307.9393	27.00	-1.12	13795.520	2.5	46260.020	1.5
307.9424	29.01	-3.31	115639.020	2.0	148103.200	3.0
307.9426	23.00	-.33	18120.120	.5	50584.270	1.5
307.9455	24.00	-2.18	31377.960	4.0	63841.810	4.0
307.9629	25.00	-.51	17637.150	.5	50099.160	1.5
307.9640	58.01	-.33	5646.026	0.0	38117.354	0.0
307.9652	28.01	-3.09	68131.210	3.5	100592.980	3.5
307.9721	28.01	-2.82	66579.710	1.5	99040.750	1.5
307.9749	23.01	-3.17	20343.000	2.0	52803.750	1.0
307.9767	26.02	-4.16	90483.590	3.0	122944.150	4.0
307.9814	22.00	-2.33	7255.369	2.0	39715.437	3.0
307.9836	26.00	-1.80	17726.985	2.0	50186.814	2.0
307.9858	29.01	-4.31	115569.200	5.0	148028.800	5.0
307.9859	10.02	-3.98	379834.000	1.0	412293.590	0.0
307.9880	42.00	.63	23390.681	0.0	55859.478	0.0
307.9905	28.01	-3.08	103663.500	1.5	136122.610	2.5
307.9910	58.01	-.86	1855.123	0.0	34323.604	0.0
307.9914	25.01	-2.24	49427.320	4.0	81886.330	5.0
307.9960	73.00	-.32	12179.286	0.0	44647.240	0.0
308.0010	23.00	-3.64	18126.270	1.5	50584.270	1.5
308.0055	28.01	-3.88	104503.220	2.5	136960.750	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
308.0104	28.01	-3.63	100389.520	2.5	132846.530	3.5
308.0110	71.00	-1.59	0.000	0.0	32466.373	0.0
308.0120	22.00	-2.65	11776.806	4.0	44233.650	3.0
308.0139	28.01	-3.36	104503.220	2.5	136959.860	2.5
308.0139	23.00	-3.56	18198.080	2.5	50654.720	2.5
308.0157	23.00	-5.71	0.000	1.5	32456.450	1.5
308.0199	12.02	-1.72	530178.200	2.0	562634.200	1.0
308.0247	11.01	.30	300510.920	1.0	332966.420	2.0
308.0247	11.01	.30	300510.920	1.0	332966.420	2.0
308.0299	22.00	-6.08	6661.003	3.0	39115.958	4.0
308.0303	15.01	-1.62	105303.190	1.0	137758.100	0.0
308.0336	23.00	-.20	9544.540	.5	41999.100	1.5
308.0350	41.01	.18	10727.450	0.0	43191.293	0.0
308.0391	29.01	-4.85	114482.500	2.0	146936.480	2.0
308.0409	26.01	-2.69	32909.870	5.5	65363.660	5.5
308.0410	42.00	.36	16615.449	0.0	49078.660	0.0
308.0455	22.01	-3.63	34543.360	3.5	66996.670	3.5
308.0489	25.01	-1.08	75719.590	1.0	108172.540	1.0
308.0538	28.01	-4.69	68156.570	1.5	100609.010	2.5
308.0564	28.00	-4.26	26665.903	3.0	59118.060	2.0
308.0660	72.01	.37	17260.709	0.0	49721.286	0.0
308.0688	25.01	-.66	75719.590	1.0	108170.450	2.0
308.0704	24.00	-1.26	25106.340	3.0	57557.030	3.0
308.0729	28.01	-1.79	75917.630	3.5	108368.050	2.5
308.0740	92.01	-1.03	1693.808	0.0	34153.542	0.0
308.0744	10.01	-2.87	306243.420	2.5	338693.680	3.5
308.0749	28.00	-2.43	1713.080	1.0	34163.294	2.0
308.0792	20.00	-2.14	15315.943	2.0	47765.697	3.0
308.0811	23.00	-4.32	18302.270	3.5	50751.830	3.5
308.0840	72.00	-.76	2339.068	0.0	34797.748	0.0
308.0899	20.02	-1.45	350741.190	3.0	383189.820	4.0
308.0900	44.00	-.18	11695.340	0.0	44153.388	0.0
308.1003	26.00	-1.75	24335.764	2.0	56783.306	3.0
308.1009	23.01	-1.41	20156.640	0.0	52604.110	1.0
308.1120	69.00	-.61	0.000	0.0	32455.730	0.0
308.1121	23.01	-3.71	40001.660	2.0	72447.960	3.0
308.1146	25.01	-2.28	71390.140	3.0	103836.170	2.0
308.1160	42.00	-.22	18389.915	0.0	50845.224	0.0
308.1193	24.00	-3.33	24277.060	0.0	56722.600	1.0
308.1216	7.01	-.79	188909.170	1.0	221354.470	2.0
308.1249	23.01	-.53	18293.870	2.0	50738.820	1.0
308.1288	26.00	-3.40	24338.766	3.0	56783.306	3.0
308.1293	10.01	-2.70	281025.940	2.5	313470.420	2.5
308.1310	23.01	-2.73	22273.540	1.0	54717.650	1.0
308.1334	25.00	-.77	17568.480	1.5	50012.530	2.5
308.1344	22.00	-2.86	11531.760	2.0	43975.710	1.0
308.1344	10.01	-.21	281025.940	2.5	313469.890	3.5
308.1348	8.01	-3.45	233544.090	1.5	265988.000	2.5
308.1377	30.02	-3.83	260418.100	2.0	292861.700	1.0
308.1377	30.02	-2.88	260418.100	2.0	292861.700	2.0
308.1434	23.03	-2.60	223304.600	4.0	255747.600	3.0
308.1444	9.01	-3.09	257267.300	1.0	289710.200	2.0
308.1450	29.01	-2.94	115662.770	4.0	148105.600	4.0
308.1470	71.00	-.23	1935.780	0.0	34387.824	0.0
308.1476	24.00	-.75	24833.860	3.0	57276.420	3.0
308.1485	7.01	-.88	188909.170	1.0	221351.630	1.0
308.1520	23.01	-3.31	22273.540	1.0	54715.630	2.0
308.1576	22.01	.16	29968.080	4.5	62409.580	3.5
308.1591	24.00	-4.59	21810.840	1.0	54252.190	2.0
308.1591	20.00	-2.75	15315.943	2.0	47757.286	2.0
308.1597	24.00	-3.73	28637.000	3.0	61078.280	3.0
308.1650	90.01	-.53	13147.176	0.0	45597.324	0.0
308.1678	29.01	-4.43	115662.770	4.0	148103.200	3.0
308.1709	24.01	-1.71	45669.540	1.5	78109.640	1.5
308.1716	22.00	-2.75	11639.804	3.0	44079.840	2.0
308.1743	24.00	-3.31	20523.690	4.0	52963.440	4.0
308.1766	24.00	-2.55	20523.940	5.0	52963.440	4.0
308.1787	28.01	-2.57	103025.580	2.5	135464.860	3.5
308.1791	25.01	-2.26	39808.140	3.0	72247.380	3.0
308.1798	25.01	-2.53	47073.560	3.0	79512.730	3.0
308.1800	25.00	-1.65	34343.900	4.5	66783.050	3.5
308.1826	7.01	-1.25	188857.370	2.0	221296.240	2.0
308.1831	26.00	-3.71	11976.239	4.0	44415.057	4.0
308.1837	26.02	-1.79	89907.850	4.0	122346.610	3.0
308.1850	73.00	-.84	5968.656	0.0	38416.699	0.0
308.1886	28.01	-3.18	104081.040	4.5	136519.280	4.5
308.1907	28.01	-3.73	100592.980	3.5	133031.000	4.5
308.1916	23.00	-4.28	18438.070	4.5	50876.000	4.5
308.1917	24.00	-.90	24897.550	4.0	57335.470	4.0
308.1980	90.01	-1.04	4113.534	0.0	36560.208	0.0
308.1990	64.01	.10	1129.205	0.0	33575.774	0.0
308.2002	28.01	-2.97	100490.950	1.5	132927.970	1.5
308.2032	20.00	-3.85	15315.943	2.0	47752.655	1.0
308.2046	25.00	-1.20	17451.520	2.5	49888.080	3.5
308.2093	24.00	-3.81	24286.540	1.0	56722.600	1.0
308.2102	28.01	-2.14	103025.580	2.5	135461.550	2.5
308.2118	23.00	-.56	553.020	4.5	32988.820	3.5
308.2128	23.00	-4.44	2311.370	3.5	34747.060	3.5
308.2145	25.01	-3.39	49427.320	4.0	81862.840	4.0
308.2153	13.00	.03	0.000	.5	32435.435	1.5
308.2180	10.01	-.19	306243.420	2.5	338678.570	3.5
308.2200	7.01	-.23	188857.370	2.0	221292.310	3.0
308.2221	25.00	-.84	34138.880	6.5	66573.600	5.5
308.2289	25.01	-2.48	39813.380	2.0	72247.380	3.0
308.2300	58.01	-.58	3629.588	0.0	36072.893	0.0
308.2327	28.01	-3.05	104503.220	2.5	136936.820	3.5
308.2430	75.00	.12	14115.066	0.0	46557.003	0.0
308.2439	24.01	-3.01	31168.780	3.5	63601.200	3.5
308.2440	26.01	-1.85	66012.830	4.5	98445.240	4.5
308.2492	25.00	-2.24	30419.610	2.5	62851.470	3.5
308.2505	25.00	-2.30	34423.270	3.5	66855.000	4.5
308.2524	23.01	-.68	16421.510	4.0	48853.040	5.0
308.2561	21.01	-.87	27443.650	2.0	59874.790	1.0
308.2600	22.00	-3.93	7255.369	2.0	39686.100	2.0
308.2613	27.00	-1.74	0.000	4.5	32430.590	5.5
308.2616	10.01	-.70	280989.530	1.5	313420.090	2.5
308.2641	23.03	-2.10	223033.000	3.0	255463.300	2.0
308.2656	26.01	-3.42	33501.320	3.5	65931.460	3.5
308.2659	24.00	-4.28	24897.550	4.0	57327.660	5.0
308.2660	25.00	-3.01	24788.050	2.5	57218.150	3.5
308.2698	25.00	.12	34138.880	6.5	66568.580	6.5
308.2716	10.01	-1.11	280989.530	1.5	313419.040	1.5
308.2774	8.01	-4.19	233430.100	.5	265859.000	.5
308.2846	27.00	-1.69	15184.040	2.5	47612.180	1.5
308.2863	24.00	-4.95	23933.900	4.0	56361.860	5.0
308.2928	29.01	-3.16	115639.020	2.0	148066.300	2.0
308.2978	18.01	-1.05	172816.210	.5	205242.970	.5
308.3000	90.01	-.17	12340.601	0.0	44776.540	0.0
308.3017	26.01	-2.45	31999.120	3.5	64425.460	2.5
308.3031	27.02	-2.69	139314.200	.5	171740.400	1.5
308.3031	27.02	-2.69	139314.200	.5	171740.400	1.5
308.3047	24.01	-.86	59130.510	1.5	91556.540	1.5
308.3071	21.01	-2.42	27841.170	4.0	60266.950	3.0
308.3121	26.01	-4.63	60270.370	3.5	92695.620	2.5
308.3149	26.00	-2.82	19788.248	4.0	52213.207	3.0
308.3154	27.02	-2.98	73540.200	3.5	105965.100	2.5
308.3155	23.00	-6.41	2112.320	.5	34537.210	1.5
308.3196	18.01	-2.67	158167.710	1.5	190592.170	1.5
308.3206	23.01	-.31	20343.000	2.0	52767.360	3.0
308.3220	77.00	.08	12098.628	0.0	44532.253	0.0
308.3290	90.01	-.39	10566.135	0.0	42999.023	0.0
308.3297	29.01	-3.44	114000.000	3.0	146423.400	4.0
308.3349	25.00	-2.68	31001.150	2.5	63424.000	3.5
308.3350	64.01	-1.36	241.973	0.0	32674.230	0.0
308.3365	29.01	-2.38	115639.020	2.0	148061.700	3.0
308.3470	23.01	-2.28	18353.890	3.0	50775.470	2.0
308.3522	23.00	.22	9824.580	2.5	42245.610	3.5
308.3555	28.01	-3.84	76727.360	5.5	109148.050	4.5
308.3602	24.01	-1.16	32836.840	3.5	65257.030	3.5
308.3608	18.02	-1.70	211004.850	2.0	243424.970	3.0
308.3629	17.01	-1.71	149952.400	1.0	182372.300	1.0
308.3668	25.01	-4.62	37811.570	1.0	70231.070	2.0
308.3670	58.01	.26	6291.287	0.0	38720.179	0.0
308.3681	9.01	-3.57	257290.840	2.0	289710.200	2.0
308.3682	26.02	-3.02	90423.680	2.0	122843.030	1.0
308.3726	28.01	-2.12	103025.580	2.5	135444.470	3.5
308.3740	76.00	.62	22503.448	0.0	54931.603	0.0
308.3743	26.00	-.70	7985.783	2.0	40404.492	1.0
308.3747	27.00	-2.61	14036.280	1.5	46454.950	1.5
308.3783	25.01	-4.87	33147.390	5.0	65565.680	4.0
308.3787	8.02	-.50	365719.160	3.0	398137.400	3.0
308.3790	23.01	-6.31	14461.730	3.0	46879.940	2.0
308.3839	22.01	-3.96	32767.020	3.5	65184.720	3.5
308.3848	24.00	-1.02	33762.740	6.0	66180.340	5.0
308.3905	26.02	-4.25	186998.600	4.0	219415.610	5.0
308.3914	8.01	-3.60	233544.090	1.5	265961.000	2.5
308.3960	45.00	-1.39	1451.835	0.0	33877.677	0.0
308.4008	20.02	-2.25	350741.190	3.0	383157.110	3.0
308.4010	25.00	-4.04	24802.250	3.5	57218.150	3.5
308.4029	29.01	-4.87	114000.000	3.0	146415.700	2.0
308.4030	68.00	-.52	0.000	0.0	32425.106	0.0
308.4049	9.01	-2.82	257290.840	2.0	289706.330	3.0
308.4065	20.02	-3.85	350741.190	3.0	383156.510	4.0
308.4072	26.02	-2.71	90483.590	3.0	122898.840	2.0
308.4078	23.01	-3.33	20242.320	4.0	52657.510	4.0
308.4154	7.01	-.79	188937.240	0.0	221351.630	1.0
308.4156	25.00	-1.85	34423.270	3.5	66837.640	2.5
308.4210	75.00	-.20	15647.559	0.0	48070.773	0.0
308.4240	92.01	-1.34	2258.411	0.0	34681.309	0.0
308.4258	25.01	-.84	71390.140	3.0	103803.440	3.0
308.4333	23.03	-1.00	223033.000	3.0	255445.500	3.0
308.4440	58.01	.03	5404.054	0.0	37824.850	0.0
308.4476	24.01	-2.00	34659.480	.5	67070.480	1.5
308.4538	20.02	-4.63	350779.470	3.0	383189.820	4.0
308.4552	23.00	-.63	18174.060	1.5	50584.270	1.5
308.4574	25.01	-2.08	33248.320	4.0	65658.300	5.0
308.4575	24.00	-1.05	25177.390	4.0	57587.360	4.0
308.4582	28.01	-2.63	107082.210	2.5	139492.100	2.5
308.4600	76.00	-.54	13308.491	0.0	45727.605	0.0
308.4614	24.01	-1.50	38269.670	3.5	70679.220	4.5
308.4638	22.00	-5.53	6742.757	4.0	39152.057	5.0
308.4700	28.01	-4.22	68735.980	2.5	101144.630	3.5
308.4706	25.01	-3.84	43311.000	1.0	75719.590	1.0
308.4716	25.01	-.85	53781.700	3.0	86190.180	2.0
308.4741	25.01	-4.09	68284.380	3.0	100692.600	2.0
308.4749	8.02	-.75	365719.160	3.0	398127.300	2.0
308.4800	27.02	-4.11	140787.300	2.5	173194.900	2.5
308.4800	27.02	-4.11	140787.300	2.5	173194.900	2.5
308.4803	22.00	-1.54	8436.618	0.0	40844.190	1.0
308.4820	74.00	.25	17018.737	0.0	49435.539	0.0
308.4878	22.00	-2.53	7255.369	2.0	39662.150	1.0
308.4920	10.01	-.74	281025.940	2.5	313432.280	3.5
308.4965	26.02	-4.64	90423.680	2.0	122829.550	3.0
308.5023	18.01	-3.26	172816.210	.5	205221.470	1.5
308.5033	22.00	-2.11	16267.510	5.0	48672.660	4.0
308.5113	24.00	-4.36	21847.880	2.0	54252.190	2.0
308.5161	29.01	-4.47	114482.500	2.0	146886.310	1.0
308.5169	25.01	-3.24	68284.380	3.0	100688.100	3.0
308.5177	24.00	-4.87	24833.860	3.0	57237.500	4.0
308.5279	24.01	-2.37	32854.460	4.5	65257.030	3.5
308.5339	24.01	-1.63	32855.090	2.5	65257.030	3.5
308.5340	40.00	-.92	564.603	0.0	32975.942	0.0
308.5380	9.02	-4.39	464921.740	3.5	497323.250	2.5
308.5438	29.01	-2.73	115665.400	1.0	148066.300	2.0
308.5449	26.00	-4.30	20874.482	3.0	53275.270	2.0
308.5455	9.02	-2.90	464921.740	3.5	497322.460	3.5
308.5458	23.01	-2.71	14655.630	5.0	47056.320	4.0
308.5540	73.00	-.31	10566.135	0.0	42975.373	0.0
308.5582	23.00	-4.74	2220.130	2.5	34619.520	2.5
308.5592	21.01	-3.37	27602.320	3.0	60001.600	3.0
308.5620	42.00	.94	16615.449	0.0	49023.847	0.0
308.5626	29.01	-4.19	115662.770	4.0	148061.700	3.0
308.5637	25.00	-.80	27201.540	2.5	59600.350	2.5
308.5651	23.02	-2.96	56160.420	2.5	88559.080	1.5
308.5722	25.01	-2.66	68284.380	3.0	100682.300	4.0
308.5742	25.01	-3.09	49465.130	3.0	81862.840	4.0
308.5781	23.03	-1.95	254824.100	1.0	287221.400	2.0
308.5871	25.02	-4.27	176695.060	4.5	209091.410	5.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
308.5894	28.01	-4.22	104503.220	2.5	136899.330	1.5
308.5895	24.00	-2.42	28682.180	2.0	61078.280	3.0
308.5921	23.00	-.45	18258.890	2.5	50654.720	2.5
308.5968	24.00	-4.65	20519.600	6.0	52914.940	6.0
308.6017	28.01	-3.09	100619.260	4.5	133014.080	5.5
308.6063	22.01	-3.08	34543.360	3.5	66937.700	2.5
308.6070	44.00	-.40	11372.710	0.0	43776.382	0.0
308.6081	10.01	-1.11	281025.940	2.5	313420.090	2.5
308.6103	25.00	-1.26	34343.900	4.5	66737.820	3.5
308.6158	28.01	-4.57	100475.820	3.5	132869.160	3.5
308.6162	19.02	-1.77	214232.300	.5	246625.600	1.5
308.6181	10.01	-2.57	281025.940	2.5	313419.040	1.5
308.6191	24.00	-4.17	24056.110	5.0	56449.100	6.0
308.6203	23.01	-.91	18269.490	1.0	50662.360	0.0
308.6205	9.01	-.31	232063.340	1.0	264456.190	2.0
308.6236	14.02	-.04	142943.740	3.0	175336.260	2.0
308.6270	76.00	-.32	15082.956	0.0	47484.528	0.0
308.6272	28.01	-4.11	104503.220	2.5	136895.360	3.5
308.6283	9.01	-1.04	232064.160	2.0	264456.190	2.0
308.6283	9.01	-.14	232064.160	2.0	264456.190	3.0
308.6287	25.01	-1.89	53597.130	2.0	85989.120	2.0
308.6349	10.01	-4.23	219130.780	2.5	251522.120	1.5
308.6392	27.00	-2.11	13795.520	2.5	46186.410	1.5
308.6437	14.02	-.79	142945.840	2.0	175336.260	2.0
308.6440	77.00	-.34	9759.560	0.0	42159.347	0.0
308.6465	28.01	-4.25	70635.460	2.5	103025.580	2.5
308.6489	9.01	-2.59	232066.320	3.0	264456.190	2.0
308.6489	9.01	-1.04	232066.320	3.0	264456.190	3.0
308.6496	23.01	-.77	16340.970	3.0	48730.760	4.0
308.6511	9.01	.02	232066.320	3.0	264455.960	4.0
308.6515	17.02	-2.52	209182.800	1.5	241572.400	1.5
308.6666	14.02	-1.96	142948.250	1.0	175336.260	2.0
308.6690	9.01	-4.48	232063.340	1.0	264451.100	1.0
308.6690	9.01	-4.10	232063.340	1.0	264451.100	2.0
308.6725	24.00	-4.88	21810.840	1.0	54198.230	1.0
308.6756	7.01	-.76	188909.170	1.0	221296.240	2.0
308.6768	9.01	-4.93	232064.160	2.0	264451.100	1.0
308.6768	9.01	-3.90	232064.160	2.0	264451.100	2.0
308.6768	9.01	-3.49	232064.160	2.0	264451.100	3.0
308.6774	27.00	-1.00	1809.330	1.5	34196.210	1.5
308.6780	24.00	-1.00	24833.860	3.0	57220.670	2.0
308.6816	22.00	-.75	11776.806	4.0	44163.240	5.0
308.6840	23.00	-4.72	18198.080	2.5	50584.270	1.5
308.6850	39.01	.44	25971.721	0.0	58367.205	0.0
308.6892	22.00	-5.33	11776.806	4.0	44162.440	4.0
308.6906	17.01	-1.54	149952.400	1.0	182337.900	0.0
308.6965	20.02	-1.51	350805.320	4.0	383190.200	5.0
308.6970	25.01	-1.27	47073.560	3.0	79458.380	2.0
308.6974	9.01	-4.83	232066.320	3.0	264451.100	2.0
308.6974	9.01	-3.79	232066.320	3.0	264451.100	3.0
308.6979	25.01	-3.05	34910.430	4.0	67295.160	4.0
308.6984	9.01	-3.21	232066.320	3.0	264451.000	4.0
308.7001	20.02	-2.84	350805.320	4.0	383189.820	4.0
308.7035	28.01	-4.09	67694.640	2.5	100078.780	1.5
308.7045	11.01	-1.50	298169.140	1.0	330553.180	0.0
308.7045	11.01	-1.50	298169.140	1.0	330553.180	0.0
308.7047	23.00	-5.29	2153.200	1.5	34537.210	1.5
308.7050	64.00	-.62	0.000	0.0	32393.385	0.0
308.7055	23.00	-1.34	9544.540	.5	41928.470	.5
308.7057	8.01	-2.30	233544.090	1.5	265928.000	1.5
308.7069	28.01	-1.60	25036.380	2.5	57420.160	2.5
308.7073	9.02	-3.06	464939.500	2.5	497323.250	2.5
308.7106	25.01	-4.46	73780.810	3.0	106164.200	4.0
308.7127	25.01	-3.18	37847.900	2.0	70231.070	2.0
308.7148	9.02	-3.95	464939.500	2.5	497322.460	3.5
308.7150	75.00	-.62	14518.354	0.0	46910.690	0.0
308.7267	24.01	-4.65	31219.490	4.5	63601.200	3.5
308.7356	24.01	-2.63	32836.840	3.5	65217.610	4.5
308.7383	25.01	-4.17	43339.100	2.0	75719.590	1.0
308.7390	25.00	-3.16	34463.370	1.5	66843.790	1.5
308.7391	25.00	-.98	34250.520	5.5	66630.920	4.5
308.7402	25.02	-3.01	176270.250	2.5	208650.540	3.5
308.7420	45.00	-1.63	5565.369	0.0	37954.872	0.0
308.7428	26.00	-2.00	26140.164	3.0	58520.180	4.0
308.7429	23.03	-3.76	255747.600	3.0	288127.600	4.0
308.7435	14.00	-3.25	47284.061	1.0	79664.000	1.0
308.7437	25.01	-3.81	37851.150	3.0	70231.070	2.0
308.7464	24.00	-3.62	25177.390	4.0	57557.030	3.0
308.7490	23.00	-.39	18372.460	3.5	50751.830	3.5
308.7499	24.01	-3.85	52298.120	3.5	84677.390	3.5
308.7530	73.00	-.95	5968.656	0.0	38357.005	0.0
308.7535	24.01	-1.11	45730.740	2.5	78109.640	1.5
308.7537	24.00	-.80	24897.550	4.0	57276.420	3.0
308.7543	21.01	-2.33	28021.210	2.0	60400.020	1.0
308.7582	28.01	-3.81	103653.030	3.5	136031.430	2.5
308.7620	42.01	1.15	26939.612	0.0	59327.017	0.0
308.7654	28.01	-4.78	99418.610	3.5	131796.260	2.5
308.7654	20.02	-2.66	350779.470	3.0	383157.110	3.0
308.7685	23.01	-2.63	20280.190	5.0	52657.510	4.0
308.7689	29.01	-3.93	115639.020	2.0	148016.300	1.0
308.7711	20.02	-1.25	350779.470	3.0	383156.510	4.0
308.7753	17.02	-2.72	209182.800	1.5	241559.400	.5
308.7760	73.01	.05	9678.902	0.0	42064.839	0.0
308.7803	27.00	-.78	16195.680	.5	48571.770	.5
308.7822	25.00	-1.89	30411.740	.5	62787.630	1.5
308.7860	41.01	.19	12179.286	0.0	44564.174	0.0
308.7879	24.01	-.86	36101.820	3.5	68477.110	4.5
308.7898	28.01	-1.66	103025.580	2.5	135400.670	3.5
308.7950	28.01	-4.20	107082.210	2.5	139456.750	1.5
308.7976	25.00	-4.04	34463.370	1.5	66837.640	2.5
308.8004	28.01	-4.53	102742.740	1.5	135116.720	2.5
308.8021	22.01	.32	393.220	4.5	32767.020	3.5
308.8022	28.00	-1.70	26665.903	3.0	59039.693	4.0
308.8040	77.00	-.64	5726.684	0.0	38109.684	0.0
308.8071	24.01	-3.82	53566.220	3.5	85939.500	4.5
308.8078	22.00	-6.68	6742.757	4.0	39115.958	4.0
308.8093	25.00	-4.14	18531.640	3.5	50904.680	2.5
308.8100	23.00	-2.33	9636.960	1.5	42009.930	2.5
308.8109	25.01	-3.43	49820.160	2.0	82193.040	2.0
308.8132	29.00	-1.13	40974.020	0.0	73356.055	0.0
308.8160	8.02	-.17	365846.460	4.0	398218.800	4.0
308.8165	10.01	-.40	251522.120	1.5	283894.410	.5
308.8178	25.01	-4.39	73785.250	2.0	106157.400	3.0
308.8194	28.01	-3.57	104147.290	5.5	136519.280	4.5
308.8208	18.01	-2.62	172213.800	1.5	204585.640	2.5
308.8238	26.00	-1.91	25899.974	4.0	58271.500	5.0
308.8286	10.01	-1.06	280473.580	1.5	312844.600	1.5
308.8295	29.01	-4.13	115662.770	4.0	148033.700	4.0
308.8316	28.01	-4.73	100475.820	3.5	132846.530	3.5
308.8345	26.00	-2.30	26339.682	2.0	58710.090	3.0
308.8381	10.01	-2.29	280473.580	1.5	312843.600	.5
308.8452	7.01	-3.75	188857.370	2.0	221226.650	3.0
308.8470	90.01	-.57	7259.177	0.0	39637.669	0.0
308.8503	25.01	-1.81	49517.580	5.0	81886.330	5.0
308.8510	23.00	-3.20	323.420	3.5	32692.090	3.5
308.8517	13.01	-.94	106918.200	1.0	139286.800	2.0
308.8556	25.01	-4.01	49291.310	3.0	81659.500	3.0
308.8572	25.00	-3.07	30419.610	2.5	62787.630	1.5
308.8658	27.00	-3.19	16470.600	1.5	48837.720	.5
308.8674	27.00	-2.58	8460.810	2.5	40827.770	1.5
308.8760	75.00	-.42	11534.025	0.0	43909.477	0.0
308.8762	29.01	-2.01	115662.770	4.0	148028.800	5.0
308.8785	24.00	-4.76	20519.600	6.0	52885.390	5.0
308.8853	23.00	-6.09	2112.320	.5	34477.400	.5
308.8912	18.01	-2.69	172829.580	1.5	205194.040	1.5
308.8917	9.02	-3.39	421005.360	.5	453369.770	1.5
308.9037	24.01	-4.68	32854.460	4.5	65217.610	4.5
308.9047	25.01	-1.79	53698.700	2.0	86061.750	3.0
308.9072	25.01	-4.07	70342.580	3.0	102705.370	3.0
308.9095	23.00	-.42	18513.460	4.5	50876.000	4.5
308.9100	70.01	-.20	28633.420	0.0	61005.308	0.0
308.9120	42.00	.06	16696.107	0.0	49067.786	0.0
308.9122	28.00	-1.43	29481.020	4.0	61843.280	5.0
308.9134	23.00	-.86	9636.960	1.5	41999.100	1.5
308.9140	44.00	-.23	9033.642	0.0	41405.111	0.0
308.9155	25.00	-2.48	30425.710	1.5	62787.630	1.5
308.9180	74.00	-.22	14840.984	0.0	47212.034	0.0
308.9265	25.01	-3.49	70342.580	3.5	102703.340	4.0
308.9359	25.00	-1.58	34423.270	3.5	66783.050	3.5
308.9379	22.01	.16	15265.600	3.5	47625.170	2.5
308.9387	26.01	-1.56	38164.240	2.5	70523.730	3.5
308.9403	25.01	-3.22	51553.060	5.0	83912.380	5.0
308.9421	23.01	-2.16	40430.100	4.0	72789.230	3.0
308.9503	27.00	-3.14	16470.600	1.5	48828.870	2.5
308.9590	27.00	-1.41	816.000	3.5	33173.360	3.5
308.9621	23.01	-1.28	20343.000	2.0	52700.030	2.0
308.9629	28.01	-4.18	103025.580	2.5	135382.530	1.5
308.9680	25.00	-2.28	30411.740	.5	62768.160	.5
308.9710	42.00	.05	16534.792	0.0	48900.289	0.0
308.9711	24.01	-1.84	52321.300	4.5	84677.390	3.5
308.9717	22.00	-1.96	16106.080	4.0	48462.110	5.0
308.9770	25.01	-1.29	53597.130	2.0	85952.600	3.0
308.9781	22.00	-5.23	6842.964	5.0	39198.320	6.0
308.9797	23.01	-3.35	40195.520	3.0	72550.710	4.0
308.9798	21.01	-2.58	32349.980	3.0	64705.160	2.0
308.9800	44.00	-.51	7985.094	0.0	40349.648	0.0
308.9821	22.00	-4.24	15108.121	3.0	47463.060	4.0
308.9940	75.00	.02	22019.503	0.0	54382.591	0.0
308.9950	22.01	.29	30240.680	5.5	62594.270	4.5
308.9950	64.01	.35	10324.163	0.0	42687.146	0.0
308.9970	25.01	-4.05	49427.320	4.0	81780.700	3.0
308.9978	17.01	-1.38	150019.000	0.0	182372.300	1.0
308.9985	22.00	-1.68	15975.590	3.0	48328.810	4.0
309.0004	25.02	-1.28	176970.010	5.5	209323.030	6.5
309.0068	25.00	-.61	27248.000	1.5	59600.350	2.5
309.0080	90.01	-1.52	1774.465	0.0	34136.087	0.0
309.0080	76.00	.24	14760.326	0.0	47121.948	0.0
309.0083	23.03	-1.82	222794.600	2.0	255146.800	2.0
309.0122	20.02	-3.68	350805.320	4.0	383157.110	3.0
309.0124	22.00	-.99	8492.421	1.0	40844.190	1.0
309.0154	28.00	-1.75	29481.020	4.0	61832.470	4.0
309.0179	20.02	-2.25	350805.320	4.0	383156.510	4.0
309.0205	26.00	-1.23	22249.430	3.0	54600.350	3.0
309.0207	29.01	-3.41	115665.400	1.0	148016.300	1.0
309.0227	25.01	-3.55	53017.160	1.0	85367.850	2.0
309.0230	44.00	.23	17018.737	0.0	49378.788	0.0
309.0256	27.00	-1.11	16195.680	.5	48546.070	1.5
309.0283	27.01	-4.64	18031.500	2.0	50381.600	3.0
309.0290	25.01	-1.42	49882.150	4.0	82232.180	5.0
309.0300	76.00	-1.45	2661.698	0.0	35021.016	0.0
309.0303	28.01	-2.86	107142.210	1.5	139492.100	2.5
309.0367	28.01	-4.28	104503.220	2.5	136852.440	1.5
309.0370	58.01	.18	7420.492	0.0	39779.077	0.0
309.0399	23.00	-2.97	0.000	1.5	32348.890	.5
309.0419	29.01	-3.09	115639.020	2.0	147987.700	2.0
309.0440	40.00	-.65	5000.766	0.0	37358.618	0.0
309.0446	17.01	-3.24	145468.500	1.0	177816.900	2.0
309.0490	76.00	-.06	14760.326	0.0	47117.654	0.0
309.0506	25.01	-4.12	49465.130	3.0	81812.900	2.0
309.0520	58.01	-.85	2500.383	0.0	34857.397	0.0
309.0580	74.00	-.04	19115.832	0.0	51472.218	0.0
309.0644	25.01	-3.86	55371.300	3.0	87717.620	3.0
309.0657	9.02	-3.95	395385.660	2.5	427731.850	2.5
309.0658	23.00	-.60	18680.120	5.5	51026.300	5.5
309.0679	26.02	-4.09	90483.590	3.0	122829.550	3.0
309.0699	28.01	-3.70	105668.780	2.5	138014.530	2.5
309.0708	24.00	-4.12	23933.900	4.0	56279.560	4.0
309.0728	26.00	-2.84	26479.366	1.0	58824.810	2.0
309.0746	25.01	-3.65	49517.580	5.0	81862.840	4.0
309.0779	26.02	-3.85	88663.870	4.0	121008.780	3.0
309.0791	23.00	-2.11	553.020	4.5	32897.810	5.5
309.0808	28.01	-2.83	68131.210	3.5	100475.820	3.5
309.0824	18.01	-4.72	186815.960	3.5	219160.400	2.5
309.0946	24.01	-2.54	38509.070	3.5	70852.240	3.5
309.1014	25.00	-2.61	30425.710	1.5	62768.160	.5
309.1025	28.01	-4.62	100475.820	3.5	132818.160	4.5
309.1064	12.00	-.89	21850.405	0.0	54192.336	1.0
309.1084	25.00	-2.13	30419.610	2.5	62761.330	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
309.1250	76.00	-.11	17583.339	0.0	49932.712	0.0
309.1252	28.01	-4.63	100389.520	2.5	132729.480	2.5
309.1290	58.01	-.93	2500.383	0.0	34849.338	0.0
309.1361	25.01	-3.32	37811.570	1.0	70150.390	1.0
309.1436	23.00	-1.90	553.020	4.5	32891.060	3.5
309.1512	25.02	-1.69	176695.060	4.5	209032.300	5.5
309.1551	23.00	-2.10	323.420	3.5	32660.260	2.5
309.1570	28.01	-3.75	68154.310	1.5	100490.950	1.5
309.1574	23.02	-2.50	56669.050	1.5	89005.640	.5
309.1579	26.00	-.97	8154.713	1.0	40491.260	0.0
309.1607	8.02	-4.39	300440.850	2.0	332777.100	1.0
309.1629	26.02	-2.33	83138.230	5.0	115474.250	6.0
309.1649	24.00	-.55	24940.610	2.0	57276.420	3.0
309.1667	25.00	-1.91	30425.710	1.5	62761.330	2.5
309.1860	23.00	-6.78	2153.200	1.5	34486.800	2.5
309.1870	44.00	-1.47	2661.698	0.0	35004.584	0.0
309.1915	28.01	-4.53	103653.030	3.5	135986.060	3.5
309.2023	8.01	-1.48	233430.100	.5	265762.000	1.5
309.2041	22.01	-2.10	30836.520	1.5	63168.230	2.5
309.2043	22.00	-1.73	15877.180	2.0	48208.870	3.0
309.2060	64.01	.07	10566.135	0.0	42907.034	0.0
309.2060	73.00	-1.24	9194.957	0.0	41535.856	0.0
309.2070	42.01	.37	15566.901	0.0	47907.695	0.0
309.2094	10.01	-.67	280473.580	1.5	312804.730	2.5
309.2095	22.01	-3.30	31113.610	3.5	63444.760	3.5
309.2160	10.01	-2.73	280473.580	1.5	312804.040	1.5
309.2224	17.01	-1.40	126456.600	4.0	158786.400	3.0
309.2240	72.01	-.44	12017.970	0.0	44356.986	0.0
309.2253	30.02	-4.49	260613.100	5.0	292942.600	4.0
309.2253	30.02	-2.82	260613.100	5.0	292942.600	5.0
309.2440	73.00	-.46	9194.957	0.0	41531.882	0.0
309.2466	22.01	-3.50	32767.020	3.5	65094.290	4.5
309.2466	14.02	-2.96	225526.330	3.0	257853.600	3.0
309.2466	14.02	-1.15	225526.330	3.0	257853.600	4.0
309.2466	14.02	-.58	225526.330	3.0	257853.600	4.0
309.2505	21.01	-.67	27602.320	3.0	59929.180	2.0
309.2528	28.00	-4.54	26665.903	3.0	58992.520	2.0
309.2554	25.00	-1.30	27201.540	2.5	59527.890	1.5
309.2573	28.01	-4.60	92325.850	3.5	124652.000	4.5
309.2640	26.01	-4.60	54063.530	.5	86388.980	.5
309.2647	23.00	-1.58	18258.890	2.5	50584.270	1.5
309.2710	13.00	.28	112.061	1.5	32436.778	2.5
309.2729	11.01	.33	264928.000	2.0	297252.520	3.0
309.2750	30.02	-3.89	260613.100	5.0	292937.400	5.0
309.2750	30.02	-2.22	260613.100	5.0	292937.400	6.0
309.2752	28.01	-3.25	103653.030	3.5	135977.310	4.5
309.2760	23.00	-6.05	2153.200	1.5	34477.400	.5
309.2777	26.00	-3.31	7728.058	3.0	40052.080	2.0
309.2816	25.00	-2.09	33825.490	2.5	66149.100	3.5
309.2819	24.00	-.87	28637.000	3.0	60960.580	4.0
309.2838	13.00	-.67	112.061	1.5	32435.435	1.5
309.2865	10.01	-1.27	274364.570	2.5	306687.670	3.5
309.2867	25.00	-1.17	34250.520	5.5	66573.600	5.5
309.2886	27.00	-2.68	18389.570	1.5	50712.450	2.5
309.2901	10.01	.03	274364.570	2.5	306687.290	2.5
309.2920	29.01	-3.67	88362.030	2.0	120684.550	3.0
309.2932	25.01	-1.45	51553.060	5.0	83875.460	4.0
309.2941	29.01	-3.85	115665.400	1.0	147987.700	2.0
309.2941	27.01	-4.82	19189.900	4.0	51512.200	3.0
309.2954	23.00	-3.28	2424.890	4.5	34747.060	3.5
309.2954	14.02	-2.90	225526.330	3.0	257848.500	2.0
309.2982	12.00	-1.02	21870.464	1.0	54192.336	1.0
309.2986	12.00	-.71	21870.464	1.0	54192.294	2.0
309.2990	73.00	-1.59	5565.369	0.0	37896.544	0.0
309.3016	29.01	-4.34	117928.480	1.0	150250.000	2.0
309.3057	9.01	-2.42	266270.110	2.0	298591.200	2.0
309.3105	23.01	.62	3162.800	5.0	35483.390	6.0
309.3107	24.01	-4.21	32603.730	2.5	64924.300	3.5
309.3124	9.01	-1.86	266270.110	2.0	298590.500	1.0
309.3134	25.00	-2.47	27248.000	1.5	59568.290	.5
309.3148	20.02	-3.85	350741.190	3.0	383061.330	2.0
309.3158	23.01	.40	16533.000	5.0	48853.040	5.0
309.3161	24.01	-2.26	32836.840	3.5	65156.840	2.5
309.3168	25.02	-4.95	146066.070	1.5	178386.000	.5
309.3185	25.02	-3.95	176970.010	5.5	209289.760	6.5
309.3209	30.02	-2.88	260623.100	4.0	292942.600	4.0
309.3209	30.02	-4.53	260623.100	4.0	292942.600	5.0
309.3209	29.02	-3.72	89017.700	4.5	121337.200	4.5
309.3250	23.00	-2.45	137.380	2.5	32456.450	1.5
309.3275	28.01	-3.67	70706.770	1.5	103025.580	2.5
309.3347	25.00	-.79	34250.520	5.5	66568.580	6.5
309.3402	18.01	-.06	160239.350	1.5	192556.840	2.5
309.3414	25.01	-3.04	33248.320	4.0	65565.680	4.0
309.3424	14.02	-.31	142945.840	2.0	175263.100	1.0
309.3441	23.00	-4.73	2220.130	2.5	34537.210	1.5
309.3468	24.01	-.08	38563.150	4.5	70879.950	5.5
309.3487	25.00	-2.31	30354.210	3.5	62670.810	4.5
309.3502	23.00	-7.44	2112.320	.5	34428.760	1.5
309.3510	74.00	-.88	4758.794	0.0	37084.534	0.0
309.3519	26.00	-1.83	17726.985	2.0	50043.250	1.0
309.3555	26.02	-4.35	84159.550	4.0	116475.440	3.0
309.3563	28.02	-4.89	97996.300	3.0	130312.100	4.0
309.3586	25.01	-4.31	49465.130	3.0	81780.700	3.0
309.3590	76.00	.65	18793.202	0.0	51118.106	0.0
309.3640	75.00	-.37	13711.778	0.0	46036.160	0.0
309.3643	24.01	-3.33	38269.670	3.5	70584.640	2.5
309.3649	8.01	-3.88	233544.090	1.5	265859.000	.5
309.3655	14.02	-.79	142948.250	1.0	175263.100	1.0
309.3683	25.00	-.61	34423.270	3.5	66737.820	3.5
309.3684	28.01	-4.65	107142.210	1.5	139456.750	1.5
309.3698	18.02	-3.71	239193.480	1.0	271507.880	2.0
309.3707	30.02	-2.28	260623.100	4.0	292937.400	5.0
309.3707	27.02	-3.42	139627.200	1.5	171941.500	.5
309.3707	27.02	-3.42	139627.200	1.5	171941.500	.5
309.3712	29.01	-4.20	88605.160	1.0	120919.410	1.0
309.3760	39.01	.12	32101.693	0.0	64424.821	0.0
309.3791	23.00	-3.03	9824.580	2.5	42138.000	2.5
309.3794	23.00	-4.33	9636.960	1.5	41950.350	2.5
309.3799	28.01	-4.44	104646.520	3.5	136959.860	2.5
309.3806	26.00	-2.31	12968.552	2.0	45281.816	2.0
309.3830	22.00	-1.99	16458.710	6.0	48771.730	5.0
309.3870	70.01	-.29	31456.433	0.0	63778.412	0.0
309.3870	73.00	-.48	9598.245	0.0	41920.224	0.0
309.3935	24.01	-1.27	32844.920	1.5	65156.840	2.5
309.3989	29.00	-2.44	11211.395	0.0	43532.130	0.0
309.4007	10.01	-.12	251011.180	2.5	283322.350	1.5
309.4010	77.00	-1.59	4032.876	0.0	36353.392	0.0
309.4078	26.00	-4.01	19757.020	3.0	52067.450	2.0
309.4090	30.02	-3.94	260613.100	5.0	292923.400	4.0
309.4162	28.01	-3.25	23108.280	2.5	55417.830	3.5
309.4180	41.01	.57	4113.534	0.0	36432.274	0.0
309.4191	23.01	.29	16421.510	4.0	48730.760	4.0
309.4206	22.00	-6.26	6842.964	5.0	39152.057	5.0
309.4272	30.02	-4.29	260584.100	1.0	292892.500	2.0
309.4296	23.00	-3.91	2311.370	3.5	34619.520	2.5
309.4310	15.01	-1.45	106001.990	1.0	138310.000	2.0
309.4324	26.02	-4.23	84159.550	4.0	116467.410	4.0
309.4401	28.01	-3.65	103653.030	3.5	135960.080	4.5
309.4419	24.01	-2.17	52298.120	3.5	84604.990	2.5
309.4450	11.01	-.95	299193.750	2.0	331500.290	2.0
309.4476	22.00	-2.86	15156.787	4.0	47463.060	4.0
309.4494	9.01	-2.87	266270.110	2.0	298576.200	3.0
309.4526	24.00	-3.52	24056.110	5.0	56361.860	5.0
309.4565	24.00	-2.82	24286.540	1.0	56591.880	2.0
309.4570	9.01	-2.10	266270.110	2.0	298575.400	2.0
309.4636	27.02	-4.07	138774.700	2.5	171079.300	3.5
309.4636	27.02	-4.07	138774.700	2.5	171079.300	3.5
309.4636	27.02	-4.26	138774.700	2.5	171079.300	3.5
309.4649	26.00	-3.80	24118.815	4.0	56423.276	4.0
309.4660	42.00	.78	16615.449	0.0	48929.177	0.0
309.4772	25.01	-2.86	49889.860	3.0	82193.040	2.0
309.4772	26.02	-4.45	84671.870	3.0	116975.050	2.0
309.4800	40.00	-.48	4113.534	0.0	36425.800	0.0
309.4814	10.01	-1.67	249695.530	1.5	281998.280	2.5
309.4838	25.01	-3.56	37847.900	2.0	70150.390	1.0
309.4852	24.01	-3.87	53271.070	2.5	85573.420	3.5
309.4854	23.02	-1.84	56256.750	1.5	88559.080	1.5
309.4863	26.00	-2.27	21999.132	4.0	54301.360	4.0
309.4908	24.00	-2.14	27703.840	4.0	60005.600	5.0
309.4909	24.01	-1.17	32855.090	2.5	65156.840	2.5
309.4935	24.01	-3.00	35569.020	2.5	67870.500	1.5
309.4962	18.01	-4.79	172213.800	1.5	204515.000	.5
309.5036	26.00	-2.56	17550.180	3.0	49850.610	3.0
309.5040	92.01	-1.04	1693.808	0.0	34003.568	0.0
309.5048	30.02	-4.02	260623.100	4.0	292923.400	3.0
309.5060	75.00	-.24	14921.641	0.0	47231.192	0.0
309.5070	40.01	-.70	241.973	0.0	32551.420	0.0
309.5169	10.01	-1.41	281171.380	2.5	313470.420	2.5
309.5170	24.01	-1.35	35569.020	2.5	67868.050	2.5
309.5186	10.01	-1.12	280473.580	1.5	312772.450	2.5
309.5216	20.00	-1.58	15157.901	0.0	47456.452	1.0
309.5220	10.01	-1.20	281171.380	2.5	313469.890	3.5
309.5221	22.00	-6.61	6661.003	3.0	38959.499	4.0
309.5230	92.01	-1.15	2258.411	0.0	34566.188	0.0
309.5242	25.00	-3.27	24788.050	2.5	57086.330	2.5
309.5264	26.00	-2.36	21715.735	5.0	54013.780	5.0
309.5347	9.01	-2.17	266270.110	2.0	298567.300	3.0
309.5378	24.00	-.75	25038.610	5.0	57335.470	4.0
309.5390	73.00	.04	13227.833	0.0	45533.940	0.0
309.5436	25.02	-3.78	100001.300	2.5	132297.550	2.5
309.5479	24.01	.02	59130.510	1.5	91426.310	2.5
309.5516	27.00	-2.70	20500.710	1.5	52796.130	2.5
309.5542	11.01	-3.48	300510.920	1.0	332806.060	2.0
309.5542	11.01	-3.48	300510.920	1.0	332806.060	2.0
309.5590	58.01	-.71	5646.026	0.0	37950.046	0.0
309.5714	27.00	-1.95	14036.280	1.5	46329.630	2.5
309.5790	75.00	-.37	14115.066	0.0	46416.999	0.0
309.5793	28.01	-4.79	106283.160	2.5	138575.690	2.5
309.5820	40.00	-.48	4113.534	0.0	36415.154	0.0
309.5845	24.00	-4.00	24299.890	2.0	56591.880	2.0
309.5880	39.01	-1.75	967.890	0.0	33268.884	0.0
309.5891	23.00	-.64	9636.960	1.5	41928.470	.5
309.5904	28.01	-3.60	103653.030	3.5	135944.400	3.5
309.5945	8.02	-.87	365846.460	4.0	398137.400	3.0
309.5965	25.01	-1.65	35004.430	3.0	67295.160	4.0
309.5995	25.01	-.98	53698.700	2.0	85989.120	2.0
309.6007	28.01	-3.82	104646.520	3.5	136936.820	3.5
309.6056	20.02	-2.85	350805.320	4.0	383095.100	5.0
309.6123	24.01	-.04	38563.150	4.5	70852.240	3.5
309.6233	24.00	-3.82	24303.940	3.0	56591.880	2.0
309.6236	23.03	-.17	255445.500	3.0	287733.400	2.0
309.6252	10.01	-1.81	306262.770	1.5	338550.510	.5
309.6290	23.01	-.84	44098.460	3.0	76385.800	3.0
309.6292	26.01	-1.83	31999.120	3.5	64286.440	3.5
309.6295	25.01	-2.31	33278.390	3.0	65565.680	4.0
309.6321	25.00	-.62	34343.900	4.5	66630.920	4.5
309.6324	23.01	-1.25	32299.240	1.0	64586.230	2.0
309.6340	25.02	-2.23	176464.780	3.5	208751.600	4.5
309.6377	25.00	-1.58	27281.850	.5	59568.290	.5
309.6405	27.00	-2.74	14399.280	.5	46685.430	1.5
309.6410	75.00	-.68	13711.778	0.0	46007.243	0.0
309.6416	22.01	-1.13	12628.770	1.5	44914.800	1.5
309.6430	90.01	-.73	9114.300	0.0	41409.556	0.0
309.6448	17.01	-2.35	145468.500	1.0	177754.200	1.0
309.6476	16.03	.18	181432.000	.5	213717.400	1.5
309.6500	41.00	-1.10	1532.493	0.0	33827.019	0.0
309.6500	58.01	-.20	4839.451	0.0	37133.977	0.0
309.6500	58.01	-.20	4839.451	0.0	37133.977	0.0
309.6502	28.01	-4.59	77736.790	4.5	110021.920	4.5
309.6515	24.00	-3.62	21847.880	2.0	54132.880	3.0
309.6515	25.01	-2.52	49517.580	5.0	81802.580	6.0
309.6570	44.00	.44	12098.628	0.0	44392.424	0.0
309.6581	20.02	-2.09	350779.470	3.0	383063.780	3.0
309.6603	25.00	-2.86	24802.250	3.5	57086.330	2.5
309.6664	28.01	-2.95	105499.050	3.5	137782.500	4.5
309.6680	62.01	-1.52	1451.835	0.0	33744.484	0.0
309.6695	27.00	-1.23	16470.600	1.5	48753.720	1.5
309.6707	17.01	-.54	129065.400	2.0	161348.400	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
309.6760	72.00	-.84	4516.821	0.0	36808.636	0.0
309.6774	21.01	-2.71	67.680	2.0	32349.980	3.0
309.6776	28.00	-1.25	27580.411	5.0	59862.690	5.0
309.6778	23.00	-1.47	18372.460	3.5	50654.720	2.5
309.6789	22.01	-1.66	32602.510	1.5	64884.650	2.5
309.6816	20.02	-3.38	350779.470	3.0	383061.330	2.0
309.6825	26.01	-1.61	66012.830	4.5	98294.600	5.5
309.6826	14.02	-.66	142948.250	1.0	175230.010	0.0
309.6830	28.01	-2.51	68965.650	1.5	101247.370	2.5
309.6831	26.02	-4.54	105906.230	2.0	138187.930	3.0
309.6840	23.01	-2.10	20522.140	1.0	52803.750	1.0
309.6880	58.01	-1.02	1855.123	0.0	34145.686	0.0
309.6880	58.01	-1.02	1855.123	0.0	34145.686	0.0
309.6883	12.00	-2.19	21911.178	2.0	54192.336	1.0
309.6887	12.00	-1.19	21911.178	2.0	54192.294	2.0
309.6891	12.00	-.27	21911.178	2.0	54192.256	3.0
309.6946	28.01	-2.32	68965.650	1.5	101246.160	.5
309.6958	26.02	-3.99	93392.450	3.0	125672.830	2.0
309.6989	24.00	-1.48	24940.610	2.0	57220.670	2.0
309.6990	25.01	-3.72	53781.700	3.0	86061.750	3.0
309.7005	25.00	-.78	27248.000	1.5	59527.890	1.5
309.7026	25.00	-.53	34138.880	6.5	66418.550	5.5
309.7030	22.01	-1.10	32697.940	2.5	64977.570	3.5
309.7056	25.00	-1.36	27248.000	1.5	59527.360	.5
309.7066	25.00	-1.45	27201.540	2.5	59480.800	2.5
309.7083	28.01	-4.03	23796.180	1.5	56075.260	2.5
309.7113	28.00	-1.57	1332.153	3.0	33610.916	2.0
309.7130	9.01	-2.26	266270.110	2.0	298548.700	1.0
309.7131	23.01	-4.69	19902.600	0.0	52181.180	1.0
309.7133	10.01	.17	274409.110	3.5	306687.670	3.5
309.7162	23.01	-6.12	14461.730	3.0	46739.980	2.0
309.7169	10.01	-1.19	274409.110	3.5	306687.290	2.5
309.7177	22.01	-.25	9930.740	1.5	42208.840	2.5
309.7190	25.01	-3.69	68417.340	2.0	100695.300	1.0
309.7225	30.02	-3.24	260584.100	1.0	292861.700	1.0
309.7225	30.02	-2.93	260584.100	1.0	292861.700	2.0
309.7234	28.01	-2.98	105499.050	3.5	137776.550	3.5
309.7265	9.02	-4.52	395268.130	1.5	427545.310	1.5
309.7268	15.01	-1.49	105550.450	2.0	137827.600	1.0
309.7270	90.01	-1.20	4032.876	0.0	36319.373	0.0
309.7331	9.01	-.66	266270.110	2.0	298546.600	2.0
309.7351	9.01	-2.95	266270.110	2.0	298546.400	3.0
309.7384	24.00	-3.28	21856.940	3.0	54132.880	3.0
309.7387	24.00	-3.87	23933.900	4.0	56209.810	3.0
309.7414	26.01	-2.05	31811.870	2.5	64087.500	2.5
309.7416	28.01	-4.72	99559.330	2.5	131834.940	2.5
309.7421	23.00	-8.73	2153.200	1.5	34428.760	1.5
309.7422	25.02	-4.32	89204.690	4.5	121480.240	3.5
309.7443	23.02	-1.73	56669.050	1.5	88944.380	2.5
309.7449	25.01	-3.10	68417.340	2.0	100692.600	2.0
309.7450	63.01	-1.75	1613.150	0.0	33897.771	0.0
309.7489	26.00	-3.57	19562.435	4.0	51837.279	3.0
309.7543	10.01	-4.35	249445.990	2.5	281720.280	1.5
309.7594	26.01	-4.76	30388.550	4.5	62662.300	5.5
309.7600	44.00	-.21	10566.135	0.0	42849.193	0.0
309.7604	22.01	-1.61	12628.770	1.5	44902.420	2.5
309.7666	30.02	-4.54	260613.100	5.0	292886.100	6.0
309.7667	22.00	-7.65	6842.964	5.0	39115.958	4.0
309.7753	25.00	-1.06	34250.520	5.5	66522.620	4.5
309.7782	17.03	-1.20	219454.000	1.0	251725.800	1.0
309.7861	23.02	-3.10	56922.500	2.5	89193.470	1.5
309.7878	24.01	-2.82	31531.620	1.5	63802.410	.5
309.7881	25.01	-2.90	68417.340	2.0	100688.100	3.0
309.7888	29.01	-3.29	88605.160	1.0	120875.850	2.0
309.7927	9.01	-2.28	266270.110	2.0	298540.400	1.0
309.7945	23.03	-1.00	255463.300	2.0	287733.400	2.0
309.7948	26.01	-3.53	70314.740	4.5	102584.810	5.5
309.7989	24.01	-2.19	38315.000	2.5	70584.640	2.5
309.8010	92.01	-1.11	887.233	0.0	33166.018	0.0
309.8080	9.01	-.27	266270.110	2.0	298538.800	3.0
309.8089	25.00	-.66	27201.540	2.5	59470.140	3.5
309.8119	9.01	-3.05	266270.110	2.0	298538.400	2.0
309.8139	24.01	-.80	35607.600	3.5	67875.680	3.5
309.8151	28.01	-4.98	99418.610	3.5	131686.560	4.5
309.8176	22.00	-4.45	11531.760	2.0	43799.495	2.0
309.8188	26.00	-.84	21715.735	5.0	53983.300	5.0
309.8190	27.00	-1.71	1406.840	2.5	33674.380	2.5
309.8201	26.00	-4.21	11976.239	4.0	44243.668	5.0
309.8230	29.01	-4.19	116375.470	3.0	148642.600	2.0
309.8274	23.00	-7.03	2220.130	2.5	34486.800	2.5
309.8367	24.01	-2.44	45669.540	1.5	77935.240	2.5
309.8417	24.01	-2.68	35610.500	4.5	67875.680	3.5
309.8452	23.00	-6.09	8715.720	3.5	40980.540	4.5
309.8492	27.01	-4.82	17771.500	3.0	50035.900	3.0
309.8545	26.00	-1.64	24118.815	4.0	56382.664	5.0
309.8600	69.01	-1.11	161.315	0.0	32433.954	0.0
309.8601	28.01	-3.80	104503.220	2.5	136766.490	2.5
309.8640	64.01	-.71	0.000	0.0	32272.223	0.0
309.8800	9.02	-4.88	432060.640	1.5	464321.840	2.5
309.8808	23.01	-1.91	20343.000	2.0	52604.110	1.0
309.8829	10.01	-.70	281171.380	2.5	313432.280	3.5
309.8871	24.01	-2.07	35607.600	3.5	67868.050	2.5
309.8900	64.01	-1.11	0.000	0.0	32269.515	0.0
309.8924	26.02	-3.99	93412.930	2.0	125672.830	2.0
309.8969	26.00	-.96	17927.378	1.0	50186.814	2.0
309.9033	26.02	-4.99	105929.160	3.0	138187.930	3.0
309.9063	20.02	-3.85	350805.320	4.0	383063.780	3.0
309.9077	28.01	-4.07	68131.210	3.5	100389.520	2.5
309.9080	9.02	-2.44	357479.350	1.5	389737.630	.5
309.9106	28.00	-1.62	1332.153	3.0	33590.159	4.0
309.9119	26.00	-3.82	20641.110	4.0	52898.980	5.0
309.9186	22.00	-4.49	12118.394	4.0	44375.570	5.0
309.9190	41.01	-.73	2581.041	0.0	34847.536	0.0
309.9197	20.02	-1.55	350900.040	2.0	383157.110	3.0
309.9230	40.01	-.70	0.000	0.0	32266.079	0.0
309.9280	44.00	-.52	1129.205	0.0	33394.763	0.0
309.9299	9.02	-3.91	431967.930	.5	464223.930	1.5
309.9304	25.01	-2.32	53805.800	4.0	86061.750	3.0
309.9304	20.00	-1.22	15210.063	1.0	47466.014	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
309.9325	29.01	-3.21	116375.470	3.0	148631.200	3.0
309.9412	28.01	-4.12	105499.050	3.5	137753.870	4.5
309.9492	26.00	-1.96	24338.766	3.0	56592.760	4.0
309.9501	25.01	-2.64	53698.700	2.0	85952.600	3.0
309.9506	24.00	-2.67	24833.860	3.0	57087.700	2.0
309.9509	25.01	-2.14	75918.730	2.0	108172.540	1.0
309.9534	28.01	-4.21	100592.980	3.5	132846.530	3.5
309.9636	25.01	-3.76	43311.000	1.0	75563.490	0.0
309.9641	23.01	-4.52	40195.520	3.0	72447.960	3.0
309.9654	27.00	-1.60	15774.040	1.5	48026.340	.5
309.9673	26.00	-4.16	12968.552	2.0	45220.662	3.0
309.9710	25.01	-1.03	75918.730	2.0	108170.450	2.0
309.9840	27.00	-4.57	17233.680	3.5	49484.050	3.5
309.9843	26.01	-4.53	60445.280	2.5	92695.620	2.5
309.9866	23.01	-3.35	40430.100	4.0	72680.200	5.0
309.9871	24.01	-2.24	31351.150	2.5	63601.200	3.5
309.9885	28.01	-5.00	100619.260	4.5	132869.160	3.5
309.9888	24.01	-4.01	54418.080	.5	86667.950	1.5
309.9897	26.00	-.93	8154.713	1.0	40404.492	1.0
309.9924	18.01	-2.08	172829.580	1.5	205079.070	2.5
309.9928	29.00	-.53	39038.240	0.0	71297.054	0.0
309.9930	42.00	.08	16615.449	0.0	48874.242	0.0
309.9950	26.02	-3.92	93388.750	4.0	125637.980	3.0
309.9970	26.00	-.84	7376.762	4.0	39625.784	4.0
309.9978	28.01	-3.70	103653.030	3.5	135901.960	2.5
309.9984	24.00	-2.81	24200.230	6.0	56449.100	6.0
309.9999	10.01	-2.03	281171.380	2.5	313420.090	2.5
310.0040	78.00	-1.05	6533.259	0.0	38790.907	0.0
310.0051	22.01	-2.35	34748.500	4.5	66996.670	3.5
310.0100	10.01	-2.56	281171.380	2.5	313419.040	1.5
310.0120	28.01	-3.32	70778.120	3.5	103025.580	2.5
310.0222	20.00	-1.70	15210.063	1.0	47456.452	1.0
310.0256	25.00	-.86	27281.850	.5	59527.890	1.5
310.0285	21.01	-1.77	28021.210	2.0	60266.950	3.0
310.0290	77.00	-.89	2823.013	0.0	35078.060	0.0
310.0305	26.00	-.77	7985.783	2.0	40231.312	2.0
310.0305	26.02	-3.28	93392.450	3.0	125637.980	3.0
310.0307	25.00	-.76	27281.850	.5	59527.360	.5
310.0450	77.00	-.47	6291.287	0.0	38544.670	0.0
310.0469	26.02	-4.73	115110.920	4.0	147354.750	5.0
310.0475	26.02	-2.92	89697.520	3.0	121941.290	4.0
310.0500	64.01	.40	1855.123	0.0	34107.985	0.0
310.0580	22.00	-2.62	15220.390	5.0	47463.060	4.0
310.0659	22.00	-.69	8602.340	2.0	40844.190	1.0
310.0659	22.00	-.84	8602.340	2.0	40844.190	3.0
310.0667	26.00	-.73	7728.058	3.0	39969.830	3.0
310.0670	75.00	.43	16212.162	0.0	48463.256	0.0
310.0831	26.00	-1.55	19390.165	6.0	51630.230	5.0
310.0840	44.00	-.57	1129.205	0.0	33378.531	0.0
310.0880	42.00	.50	23551.996	0.0	55800.906	0.0
310.0931	20.00	-4.47	15210.063	1.0	47449.083	2.0
310.0934	23.01	.17	16340.970	3.0	48579.960	3.0
310.0979	28.01	-2.61	100490.950	1.5	132729.480	2.5
310.0981	27.02	-3.66	73726.600	2.5	105965.100	2.5
310.0994	23.00	-1.58	18513.460	4.5	50751.830	3.5
310.0998	26.00	-1.11	21999.132	4.0	54237.460	4.0
310.1010	18.01	-3.94	155351.030	1.5	187589.230	2.5
310.1030	73.01	.38	11695.340	0.0	43942.690	0.0
310.1095	22.01	-3.18	31207.440	2.5	63444.760	3.5
310.1111	8.01	-4.91	245902.850	2.5	278140.000	2.5
310.1180	64.01	-.04	10324.163	0.0	42569.953	0.0
310.1195	26.00	-3.94	21038.987	2.0	53275.270	2.0
310.1298	28.01	-2.11	68154.310	1.5	100389.520	2.5
310.1299	23.00	-3.45	553.020	4.5	32788.220	4.5
310.1317	25.01	-3.46	49882.150	4.0	82117.160	5.0
310.1360	70.01	-.48	33472.871	0.0	65716.790	0.0
310.1382	25.01	-3.90	33248.320	4.0	65482.660	3.0
310.1400	72.01	-.57	6291.287	0.0	38534.790	0.0
310.1410	28.01	-3.56	104646.520	3.5	136880.560	4.5
310.1450	24.00	-3.77	28637.000	3.0	60870.630	4.0
310.1484	22.00	-.41	15975.590	3.0	48208.870	3.0
310.1505	28.01	-2.55	101740.270	3.5	133973.330	2.5
310.1518	22.01	-1.70	9975.920	1.5	42208.840	2.5
310.1530	25.00	-1.36	27248.000	1.5	59480.800	2.5
310.1530	76.00	.13	12905.203	0.0	45147.354	0.0
310.1553	28.00	-.24	879.813	2.0	33112.368	3.0
310.1568	24.01	-3.59	50687.630	2.5	82920.030	1.5
310.1589	25.01	-3.67	49427.320	4.0	81659.500	3.0
310.1680	90.01	-.75	11453.368	0.0	43693.960	0.0
310.1742	9.01	-1.30	266360.600	1.0	298591.200	2.0
310.1776	22.00	-.57	15877.180	2.0	48107.420	2.0
310.1789	19.00	-3.25	0.000	.5	32230.110	1.5
310.1809	9.01	-2.86	266360.600	1.0	298590.500	1.0
310.1810	28.01	-1.52	73903.250	.5	106133.140	1.5
310.1828	25.00	-1.73	34343.900	4.5	66573.600	5.5
310.1837	26.01	-2.59	33466.500	4.5	65696.110	4.5
310.1874	28.00	-.40	3409.925	2.0	35639.148	3.0
310.1883	24.00	-.84	25106.340	3.0	57335.470	4.0
310.1887	26.01	-2.23	31811.870	2.5	64040.960	3.5
310.1910	64.01	-.98	241.973	0.0	32480.175	0.0
310.2046	19.00	-3.55	0.000	.5	32227.440	.5
310.2070	70.01	-.67	32182.351	0.0	64418.890	0.0
310.2123	18.01	-3.17	172829.580	1.5	205056.220	1.5
310.2149	23.01	-1.87	44159.430	2.0	76385.800	3.0
310.2151	26.02	-3.63	84671.870	3.0	116898.220	2.0
310.2261	27.02	-4.06	140358.400	4.5	172583.600	3.5
310.2261	27.02	-4.06	140358.400	4.5	172583.600	3.5
310.2261	27.02	-4.59	140358.400	4.5	172583.600	3.5
310.2263	28.01	-3.99	100592.980	3.5	132818.160	4.5
310.2271	17.01	-3.10	145468.500	1.0	177693.600	0.0
310.2289	23.01	.50	2968.220	4.0	35193.130	5.0
310.2363	20.00	-3.10	15157.901	0.0	47382.048	1.0
310.2402	27.00	-1.29	14036.280	1.5	46260.020	1.5
310.2430	24.00	-3.95	24056.110	5.0	56279.560	4.0
310.2435	9.03	-3.04	460640.600	2.0	492864.000	2.0
310.2499	22.00	-.40	16106.080	4.0	48328.810	4.0
310.2548	26.02	-3.85	89697.520	3.0	121919.740	3.0
310.2550	64.01	.43	8469.040	0.0	40700.591	0.0
310.2560	58.01	-.95	3629.588	0.0	35861.036	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
310.2562	25.01	-2.29	36274.290	2.0	68496.370	1.0
310.2562	24.01	-1.72	38362.560	1.5	70584.640	2.5
310.2585	18.01	-1.85	174409.830	1.5	206631.670	2.5
310.2590	24.00	-3.46	21810.840	1.0	54032.630	2.0
310.2597	26.02	-4.21	181825.670	4.0	214047.380	4.0
310.2633	26.00	-4.29	7985.783	2.0	40207.120	3.0
310.2660	90.01	-.81	6129.972	0.0	38360.381	0.0
310.2661	28.01	-3.03	104298.230	4.5	136519.280	4.5
310.2820	27.00	-3.35	24326.110	3.5	56545.510	2.5
310.2912	23.00	-5.59	2311.370	3.5	34529.810	4.5
310.2936	9.03	-2.00	460640.600	2.0	492858.800	3.0
310.2959	22.01	-3.41	9850.900	.5	42068.850	1.5
310.2964	8.01	-2.18	233544.090	1.5	265762.000	1.5
310.2986	25.01	-1.94	49882.150	4.0	82099.820	4.0
310.3060	75.01	.72	17099.394	0.0	49325.648	0.0
310.3076	22.00	-9.88	6742.757	4.0	38959.499	4.0
310.3245	28.01	-4.99	100010.170	.5	132225.150	1.5
310.3250	73.00	-1.11	0.000	0.0	32224.281	0.0
310.3255	25.02	-4.43	89052.440	3.5	121267.320	2.5
310.3263	9.01	-1.04	266360.600	1.0	298575.400	2.0
310.3281	25.00	-3.08	27201.540	2.5	59416.150	1.5
310.3378	12.02	-2.33	530420.600	1.0	562634.200	1.0
310.3380	58.01	-.04	3548.931	0.0	35771.862	0.0
310.3471	24.01	-.76	34659.480	.5	66872.120	.5
310.3499	25.02	-4.41	100085.200	1.5	132297.550	2.5
310.3629	25.02	-4.87	88880.080	2.5	121091.080	1.5
310.3672	22.01	-1.70	32767.020	3.5	64977.570	3.5
310.3677	27.02	-2.23	139731.000	.5	171941.500	.5
310.3677	27.02	-2.23	139731.000	.5	171941.500	.5
310.3729	25.01	-2.28	49889.860	3.0	82099.820	4.0
310.3736	27.00	-1.22	15184.040	2.5	47393.930	2.5
310.3759	26.00	-3.31	19552.474	1.0	51762.120	2.0
310.3771	22.01	-2.49	30958.700	2.5	63168.230	2.5
310.3796	22.01	.27	15257.530	4.5	47466.800	3.5
310.3812	17.01	-1.92	146330.000	1.0	178539.100	2.0
310.3828	25.01	-4.84	55371.300	3.0	87580.230	4.0
310.3853	26.00	-3.02	18378.187	2.0	50586.857	3.0
310.3855	26.00	-2.11	24574.655	4.0	56783.306	3.0
310.3857	23.00	-6.86	2220.130	2.5	34428.760	1.5
310.3898	28.01	-3.99	105499.050	3.5	137707.260	3.5
310.3925	25.01	-1.45	70497.440	4.0	102705.370	3.0
310.3952	25.00	-1.49	34423.270	3.5	66630.920	4.5
310.3974	25.01	-2.10	53781.700	3.0	85989.120	2.0
310.3985	27.00	-2.59	13795.520	2.5	46002.830	2.5
310.3991	23.00	-1.71	9544.540	.5	41751.780	1.5
310.3991	23.00	-.52	9544.540	.5	41751.780	.5
310.4010	58.01	-.62	3952.218	0.0	36168.609	0.0
310.4039	27.00	-2.46	7442.410	3.5	39649.160	3.5
310.4047	28.00	-.83	26665.903	3.0	58872.570	4.0
310.4120	28.01	-4.79	97273.830	2.5	129479.730	1.5
310.4120	25.01	-2.20	70497.440	4.0	102703.340	4.0
310.4178	17.01	-3.61	146333.800	2.0	178539.100	2.0
310.4240	26.02	-4.01	90423.680	2.0	122628.340	2.0
310.4255	24.01	-1.08	45730.740	2.5	77935.240	2.5
310.4260	24.01	-.71	36272.660	4.5	68477.110	4.5
310.4278	23.01	-2.23	18269.490	1.0	50473.760	1.0
310.4278	25.01	-2.60	33278.390	3.0	65482.660	3.0
310.4313	27.00	-1.83	15774.040	1.5	47977.940	.5
310.4358	18.01	-2.82	172713.800	1.5	204417.230	1.5
310.4396	11.01	-.93	300510.920	1.0	332713.960	0.0
310.4438	25.01	-1.70	39808.140	3.0	72010.750	4.0
310.4448	17.02	-.56	173736.000	.5	205938.500	1.5
310.4574	22.01	-1.04	15265.600	3.5	47466.800	3.5
310.4590	57.01	-1.39	0.000	0.0	32210.372	0.0
310.4604	28.01	-3.97	68131.210	3.5	100332.090	4.5
310.4622	27.02	-4.71	140382.900	3.5	172583.600	3.5
310.4622	27.02	-4.71	140382.900	3.5	172583.600	3.5
310.4650	75.00	-.33	15647.559	0.0	47857.309	0.0
310.4714	24.00	-.70	24833.860	3.0	57033.600	4.0
310.4718	12.01	-1.33	71490.190	2.5	103689.890	2.5
310.4718	12.01	-.03	71490.190	2.5	103689.890	3.5
310.4724	7.01	-2.38	188857.370	2.0	221057.010	2.0
310.4771	24.00	-4.73	20520.920	3.0	52720.070	4.0
310.4792	25.01	-3.22	68496.370	1.0	100695.300	1.0
310.4795	28.01	-3.79	100619.260	4.5	132818.160	4.5
310.4802	12.01	-.19	71491.060	1.5	103689.890	2.5
310.4905	23.01	-.64	16533.000	5.0	48730.760	4.0
310.4966	7.01	-1.20	188857.370	2.0	221054.500	3.0
310.4980	76.00	-.34	13308.491	0.0	45514.818	0.0
310.5038	24.00	-4.89	20523.690	4.0	52720.070	4.0
310.5041	23.00	-3.61	9824.580	2.5	42020.930	3.5
310.5053	25.01	-3.33	68496.370	1.0	100692.600	2.0
310.5062	24.00	-3.42	20523.940	5.0	52720.070	4.0
310.5077	22.01	-.27	9872.870	.5	42068.850	1.5
310.5087	23.00	-1.93	18680.120	5.5	50876.000	4.5
310.5158	25.00	-3.47	33825.490	2.5	66020.630	2.5
310.5163	26.01	-1.62	31364.470	1.5	63559.560	.5
310.5192	26.01	-4.56	33501.320	3.5	65696.110	4.5
310.5210	22.00	-.57	16267.510	5.0	48462.110	5.0
310.5210	11.02	-4.38	374681.400	.5	406876.000	.5
310.5232	25.01	-3.52	49465.130	3.0	81659.500	3.0
310.5272	24.00	-2.74	27223.050	2.0	59417.010	3.0
310.5305	28.01	-3.91	105588.890	4.5	137782.500	4.5
310.5454	24.01	-4.37	54499.700	1.5	86691.770	2.5
310.5455	28.00	-1.45	2216.519	2.0	34408.574	1.0
310.5463	24.00	-2.51	24940.610	2.0	57132.590	1.0
310.5521	26.01	-1.88	66377.370	3.5	98568.750	3.5
310.5547	26.01	-1.66	31368.450	.5	63559.560	.5
310.5562	26.00	-2.92	21038.987	2.0	53229.940	1.0
310.5586	24.00	-.63	24897.550	4.0	57088.250	5.0
310.5654	26.00	-2.35	11976.239	4.0	44166.240	3.0
310.5777	24.00	-.46	27816.880	5.0	60005.600	5.0
310.5799	9.01	-1.09	266360.600	1.0	298549.100	0.0
310.5837	9.01	-.75	266360.600	1.0	298548.700	1.0
310.5880	28.01	-4.97	105588.890	4.5	137776.550	3.5
310.5880	74.00	0.00	19680.435	0.0	51877.429	0.0
310.5881	25.01	-.10	70517.720	3.0	102705.370	3.0
310.5882	18.01	-4.81	186815.960	3.5	219003.600	2.5
310.5924	27.00	-2.34	4142.660	3.5	36329.660	2.5
310.5927	21.01	-1.35	28161.030	3.0	60348.200	4.0
310.5971	22.01	-2.60	32697.940	2.5	64884.650	2.5
310.5972	23.01	-.25	20617.050	2.0	52803.750	1.0
310.5990	76.00	-.89	4113.534	0.0	36309.388	0.0
310.6040	9.01	-1.90	266360.600	1.0	298546.600	2.0
310.6048	28.01	-2.56	103663.500	1.5	135849.410	2.5
310.6059	17.03	-.26	215389.300	1.0	247575.100	1.0
310.6063	25.02	-2.75	176464.780	3.5	208650.540	3.5
310.6076	25.01	-1.16	70517.720	3.0	102703.340	4.0
310.6102	23.00	.01	9824.580	2.5	42009.930	2.5
310.6141	27.00	-2.87	4690.180	2.5	36875.130	1.5
310.6145	9.01	-.06	238323.380	3.0	270508.290	2.0
310.6160	24.00	-4.78	21847.880	2.0	54032.630	2.0
310.6180	63.00	-.28	0.000	0.0	32193.884	0.0
310.6223	22.01	.07	10024.740	2.5	42208.840	2.5
310.6249	29.01	-4.30	116375.470	3.0	148559.300	2.0
310.6279	25.01	-.39	75918.730	2.0	108102.250	3.0
310.6338	25.00	-2.20	27201.540	2.5	59384.450	1.5
310.6363	25.01	-3.03	70497.440	4.0	102680.090	5.0
310.6378	24.00	-1.85	28637.000	3.0	60819.500	3.0
310.6444	25.01	-1.82	55759.270	3.0	87941.080	4.0
310.6458	22.00	-.02	15877.180	2.0	48058.850	1.0
310.6520	62.01	-.98	2177.753	0.0	34368.114	0.0
310.6533	26.00	-2.09	19788.248	4.0	51969.140	3.0
310.6555	26.01	-1.58	30764.460	3.5	62945.120	3.5
310.6580	40.01	.68	7985.094	0.0	40174.833	0.0
310.6629	23.01	-1.72	18293.870	2.0	50473.760	1.0
310.6639	9.01	-1.76	266360.600	1.0	298540.400	1.0
310.6742	25.00	-1.37	34343.900	4.5	66522.620	4.5
310.6790	68.00	-.92	403.288	0.0	32590.851	0.0
310.6795	22.00	-1.22	8492.421	1.0	40670.600	2.0
310.6823	23.01	-.23	20522.140	1.0	52700.030	2.0
310.6832	9.01	-1.29	266360.600	1.0	298538.400	2.0
310.6929	26.00	-4.83	17550.180	3.0	49726.964	4.0
310.6934	24.01	-3.66	54418.080	.5	86594.820	1.5
310.6960	28.01	-2.81	105838.060	3.5	138014.530	2.5
310.6966	22.01	-3.23	20951.770	2.5	53128.170	1.5
310.7003	25.01	-1.28	70527.320	5.0	102703.340	4.0
310.7030	90.01	-.75	6613.917	0.0	38798.994	0.0
310.7035	24.00	-2.99	21856.940	3.0	54032.630	2.0
310.7037	27.00	-2.08	13795.520	2.5	45971.190	3.5
310.7060	23.00	-6.56	2311.370	3.5	34486.800	2.5
310.7102	9.04	-.61	784100.000	.5	816275.000	1.5
310.7148	23.00	-1.66	9824.580	2.5	41999.100	1.5
310.7202	26.02	-4.03	105929.160	3.0	138103.120	4.0
310.7210	73.00	-.80	9598.245	0.0	41781.458	0.0
310.7220	22.00	-2.99	15108.121	3.0	47281.900	3.0
310.7230	74.00	-1.26	3306.958	0.0	35489.963	0.0
310.7357	21.01	-2.77	177.630	3.0	32349.980	3.0
310.7380	76.00	-.46	13953.751	0.0	46135.203	0.0
310.7392	20.00	-2.62	15210.063	1.0	47382.048	1.0
310.7470	58.01	.06	6533.259	0.0	38713.779	0.0
310.7498	25.01	-.89	53781.700	3.0	85952.600	3.0
310.7505	28.01	-4.92	101357.200	4.5	133528.020	3.5
310.7526	21.01	-.24	26081.320	2.0	58251.920	2.0
310.7540	27.00	-1.55	18775.010	.5	50945.470	.5
310.7570	24.01	-.39	38509.070	3.5	70679.220	4.5
310.7574	8.01	-3.70	208346.170	.5	240516.280	1.5
310.7577	24.00	-2.11	25106.340	3.0	57276.420	3.0
310.7710	28.00	-3.43	1332.153	3.0	33500.854	3.0
310.7754	24.01	-3.33	54499.700	1.5	86667.950	1.5
310.7760	70.01	-.34	34198.789	0.0	66376.306	0.0
310.7763	25.00	-3.31	27248.000	1.5	59416.150	1.5
310.7775	25.00	-.02	34250.520	5.5	66418.550	5.5
310.7822	23.02	-1.01	56160.420	2.5	88327.960	3.5
310.7874	25.02	-4.78	146391.300	.5	178558.300	1.5
310.7900	70.01	.18	39844.815	0.0	72020.882	0.0
310.7963	22.00	-6.63	6598.749	2.0	38764.832	3.0
310.7968	26.02	-2.58	89783.590	4.0	121949.620	5.0
310.7982	28.01	-3.45	105588.890	4.5	137754.780	5.5
310.8020	74.00	-1.31	2903.671	0.0	35078.496	0.0
310.8029	27.02	-3.37	140211.600	2.5	172377.000	3.5
310.8059	28.01	-4.75	78955.450	1.5	111120.540	1.5
310.8070	28.01	-4.34	105588.890	4.5	137753.870	4.5
310.8151	18.01	-4.00	158428.030	.5	190592.170	1.5
310.8189	20.02	-3.54	350900.040	2.0	383063.780	3.0
310.8204	27.00	-1.94	14399.280	.5	46562.670	1.5
310.8208	28.00	-1.82	29668.918	3.0	61832.470	4.0
310.8233	9.02	-4.39	432060.640	1.5	464223.930	1.5
310.8290	25.03	-4.50	138123.100	6.0	170285.800	6.0
310.8360	64.01	.04	10727.450	0.0	42896.756	0.0
310.8370	40.00	-.45	4355.506	0.0	36526.708	0.0
310.8426	20.02	-2.29	350900.040	2.0	383061.330	2.0
310.8460	57.01	-1.87	0.000	0.0	32170.271	0.0
310.8463	8.01	-1.08	233544.090	1.5	265705.000	2.5
310.8473	27.00	-3.28	8460.810	2.5	40621.620	1.5
310.8509	21.01	-.60	27841.170	4.0	60001.600	3.0
310.8553	20.00	-.95	15315.943	2.0	47475.915	3.0
310.8585	22.00	-4.59	11639.804	3.0	43799.455	2.0
310.8614	25.01	-1.45	70546.020	4.0	102705.370	3.0
310.8630	25.00	-1.85	27201.540	2.5	59360.720	2.5
310.8630	24.00	-2.63	33934.880	3.0	66094.060	4.0
310.8655	24.01	-1.00	33521.230	3.5	65680.150	4.5
310.8701	23.01	-.63	16421.510	4.0	48579.960	3.0
310.8717	24.00	-3.52	20519.600	6.0	52677.880	7.0
310.8737	24.00	-3.05	25177.390	4.0	57335.470	4.0
310.8788	24.01	-2.22	38269.670	3.5	70427.220	3.5
310.8803	18.01	-3.83	138243.550	1.5	170400.940	2.5
310.8810	25.01	-0.00	70546.020	4.0	102703.340	4.0
310.8810	75.00	.21	14115.066	0.0	46281.715	0.0
310.8855	26.01	-4.51	60270.370	3.5	92427.220	4.5
310.8875	22.01	-1.61	12758.150	2.5	44914.800	1.5
310.8908	24.01	-4.99	54625.760	2.5	86782.070	3.5
310.8926	23.01	-.52	20089.560	1.0	52245.680	2.0
310.8932	28.01	-4.76	100845.410	.5	133001.470	.5
310.8952	26.00	-1.83	19552.474	1.0	51706.330	2.0
310.8960	58.01	.04	8872.327	0.0	41037.424	0.0
310.8980	76.00	-.77	5726.684	0.0	37891.574	0.0
310.9034	9.04	-.21	784361.000	1.5	816516.000	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
310.9038	26.00	-4.11	19912.486	2.0	52067.450	2.0
310.9060	24.01	-3.58	54499.700	1.5	86654.430	2.5
310.9065	23.00	-5.63	2220.130	2.5	34374.810	3.5
310.9120	72.01	-.25	6291.287	0.0	38454.729	0.0
310.9125	28.01	-4.54	105588.890	4.5	137742.950	5.5
310.9195	28.01	-1.92	105861.190	2.5	138014.530	2.5
310.9248	26.00	-3.11	22838.320	2.0	54991.110	1.0
310.9250	25.01	.12	70527.320	5.0	102680.090	5.0
310.9304	24.00	-3.54	21810.840	1.0	53963.050	1.0
310.9343	24.00	-.47	24833.860	3.0	56985.670	3.0
310.9355	26.02	-4.69	83138.230	5.0	115289.910	5.0
310.9372	23.01	-.11	25191.080	2.0	57342.590	2.0
310.9380	76.00	-.42	6049.314	0.0	38210.066	0.0
310.9402	27.02	-4.03	140225.800	3.5	172377.000	3.5
310.9413	25.00	-1.02	30354.210	3.5	62505.290	3.5
310.9488	23.01	-1.42	20617.050	2.0	52767.360	3.0
310.9492	24.00	-3.88	25177.390	4.0	57327.660	5.0
310.9505	27.00	-2.68	14036.280	1.5	46186.410	1.5
310.9508	27.00	-2.03	18775.010	.5	50925.110	1.5
310.9511	20.00	-1.70	15315.943	2.0	47466.014	2.0
310.9555	23.01	-3.20	20242.320	4.0	52391.940	3.0
310.9591	22.00	-2.08	16875.190	2.0	49024.430	3.0
310.9672	26.02	-3.52	186712.020	1.0	218860.430	2.0
310.9710	18.01	-2.12	172829.580	1.5	204977.590	2.5
310.9727	7.01	-1.86	188909.170	1.0	221057.010	2.0
310.9799	24.00	-4.03	24940.610	2.0	57087.700	2.0
310.9827	25.01	-1.73	53805.800	4.0	85952.600	3.0
310.9849	28.01	-2.67	76402.030	2.5	108548.610	1.5
310.9869	28.01	-4.75	100078.780	1.5	132225.150	1.5
310.9920	22.01	-3.64	9850.900	.5	41996.740	.5
310.9989	18.01	-2.47	179931.770	1.5	212076.900	2.5
310.9992	17.01	-1.14	126032.000	2.0	158177.100	1.0
311.0005	27.00	-1.18	16470.600	1.5	48615.560	2.5
311.0020	90.01	-.64	6613.917	0.0	38768.051	0.0
311.0026	26.02	-2.34	90483.590	3.0	122628.340	2.0
311.0063	23.01	-1.48	20622.990	3.0	52767.360	3.0
311.0072	22.01	-.85	12758.150	2.5	44902.420	2.5
311.0114	22.01	-3.46	31300.920	4.5	63444.760	3.5
311.0190	25.01	-1.09	36274.290	2.0	68417.340	2.0
311.0195	26.00	-2.17	20037.815	0.0	52180.820	1.0
311.0201	22.00	-7.48	6556.828	1.0	38699.767	2.0
311.0280	58.01	-.05	3952.218	0.0	36103.664	0.0
311.0292	24.03	-4.31	127218.000	3.5	159360.000	3.5
311.0388	24.00	-4.74	20519.600	6.0	52660.610	6.0
311.0398	18.02	-1.39	211004.850	2.0	243145.760	2.0
311.0399	23.03	.21	223304.600	4.0	255445.500	3.0
311.0436	20.00	-2.88	15315.943	2.0	47456.452	1.0
311.0473	29.01	-2.41	116375.470	3.0	148515.600	4.0
311.0550	44.00	-.53	9033.642	0.0	41182.297	0.0
311.0575	23.00	-3.85	553.020	4.5	32692.090	3.5
311.0612	27.00	-2.55	16195.680	.5	48334.370	1.5
311.0668	22.01	-.80	9930.740	1.5	42068.850	1.5
311.0678	25.00	-.27	27201.540	2.5	59339.550	3.5
311.0699	23.01	.36	2808.760	3.0	34946.550	4.0
311.0728	25.01	-3.15	53597.130	2.0	85734.620	3.0
311.0743	26.00	-4.91	19912.486	2.0	52049.820	2.0
311.0745	24.00	-1.07	28682.180	2.0	60819.500	3.0
311.0745	9.01	-1.24	266453.880	2.0	298591.200	2.0
311.0766	28.01	-4.08	100845.410	.5	132982.510	1.5
311.0808	24.00	-4.06	20523.940	5.0	52660.610	6.0
311.0813	9.01	-2.57	266453.880	2.0	298590.500	1.0
311.0815	26.00	-3.93	21715.735	5.0	53852.330	4.0
311.0817	27.00	-2.36	1809.330	1.5	33945.900	2.5
311.0824	28.01	-4.89	100592.980	3.5	132729.480	2.5
311.0829	25.00	-1.13	27248.000	1.5	59384.450	1.5
311.0833	25.00	-2.93	33825.490	2.5	65961.900	1.5
311.0858	26.02	-3.03	89783.590	4.0	121919.740	3.0
311.0860	75.00	-.11	14115.066	0.0	46260.518	0.0
311.0868	24.00	-.37	24897.550	4.0	57033.600	4.0
311.0870	72.01	-.02	14276.381	0.0	46421.729	0.0
311.0880	40.01	-.73	725.918	0.0	32871.163	0.0
311.0984	24.00	-3.76	27223.050	2.0	59357.900	2.0
311.1037	25.00	-2.97	27281.850	.5	59416.150	1.5
311.1059	25.01	-1.14	70546.020	4.0	102680.090	5.0
311.1090	76.00	-.32	10082.190	0.0	42225.265	0.0
311.1120	74.00	-.36	15324.929	0.0	47467.694	0.0
311.1148	25.00	-2.12	30354.210	3.5	62487.360	2.5
311.1154	17.02	-2.30	216524.600	2.5	248657.700	2.5
311.1170	58.01	-.26	2581.041	0.0	34723.290	0.0
311.1190	64.00	-.15	1693.808	0.0	33835.850	0.0
311.1216	23.02	-1.89	109854.870	3.5	141987.320	3.5
311.1253	25.01	-1.75	36364.300	1.0	68496.370	1.0
311.1276	22.00	.12	15975.590	3.0	48107.420	2.0
311.1328	26.02	-3.41	186791.780	2.0	218923.080	3.0
311.1341	24.00	-4.52	25106.340	3.0	57237.500	4.0
311.1430	63.00	.19	0.000	0.0	32139.563	0.0
311.1450	41.00	-.77	1532.493	0.0	33671.849	0.0
311.1560	75.00	-.33	15647.559	0.0	47785.779	0.0
311.1606	26.02	-2.27	83161.480	4.0	115289.910	5.0
311.1679	26.00	-1.58	20641.110	4.0	52768.780	4.0
311.1810	39.00	-.37	10404.820	0.0	42540.458	0.0
311.1863	23.00	-3.97	9824.580	2.5	41950.350	2.5
311.1905	26.02	-4.56	93512.640	4.0	125637.980	3.0
311.1927	22.00	-2.83	15156.787	4.0	47281.900	3.0
311.1943	24.01	-1.02	33418.110	2.5	65543.060	3.5
311.1943	18.01	-3.33	186815.960	3.5	218940.900	4.5
311.1958	24.01	-1.85	38269.670	3.5	70394.460	4.5
311.2040	39.01	-2.15	0.000	0.0	32133.263	0.0
311.2044	27.02	-3.75	139818.700	3.5	171942.600	4.5
311.2047	22.01	-.98	9872.870	.5	41996.740	.5
311.2071	26.00	-2.99	17726.985	2.0	49850.610	3.0
311.2073	26.00	-1.21	23783.617	5.0	55907.220	5.0
311.2080	90.01	-1.42	6129.972	0.0	38262.822	0.0
311.2120	42.00	-.85	0.000	0.0	32132.437	0.0
311.2197	9.01	-.88	266453.880	2.0	298576.200	3.0
311.2234	23.01	-2.47	44098.460	3.0	76220.400	2.0
311.2234	26.00	-1.87	23783.617	5.0	55905.560	4.0
311.2272	26.02	-2.98	186882.980	3.0	219004.530	4.0
311.2275	9.01	-.61	266453.880	2.0	298575.400	2.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
311.2287	25.02	-4.84	176970.010	5.5	209091.410	5.5
311.2289	25.00	-1.67	33825.490	2.5	65946.870	2.5
311.2334	8.01	-1.39	233544.090	1.5	265665.000	2.5
311.2363	23.01	-4.58	40430.100	4.0	72550.710	4.0
311.2382	28.01	-3.44	104081.040	4.5	136201.460	3.5
311.2425	28.01	-3.73	104646.520	3.5	136766.490	2.5
311.2475	22.00	-1.66	8436.618	0.0	40556.070	1.0
311.2580	28.01	-4.65	105588.890	4.5	137707.260	3.5
311.2652	22.01	-3.17	32767.020	3.5	64884.650	2.5
311.2665	30.02	-2.96	260805.900	2.0	292923.400	3.0
311.2747	24.00	-3.04	24093.160	2.0	56209.810	3.0
311.2758	22.00	-6.39	6842.964	5.0	38959.499	4.0
311.2791	28.02	-3.75	97841.400	2.0	129957.600	1.0
311.2803	24.01	-2.46	38563.150	4.5	70679.220	4.5
311.2812	10.01	-1.16	280700.770	3.5	312816.750	4.5
311.2822	26.00	-1.89	17927.378	1.0	50043.250	1.0
311.2882	22.00	-3.99	12116.394	4.0	44233.650	3.0
311.2890	24.00	-3.06	21847.880	2.0	53963.050	1.0
311.2924	23.00	-1.20	9636.960	1.5	41751.780	.5
311.2924	23.00	-.52	9636.960	1.5	41751.780	1.5
311.2972	24.00	-1.63	25106.340	3.0	57220.670	2.0
311.3023	23.03	.02	223033.000	3.0	255146.800	2.0
311.3044	26.01	-3.31	33466.500	4.5	65580.090	5.5
311.3060	9.01	-.83	266453.880	2.0	298567.300	3.0
311.3063	14.01	-4.12	76665.610	.5	108779.000	1.5
311.3081	27.02	-3.64	139627.200	1.5	171740.400	1.5
311.3081	27.02	-3.64	139627.200	1.5	171740.400	1.5
311.3128	25.00	-1.65	27248.000	1.5	59360.720	2.5
311.3135	18.01	-4.23	186890.950	2.5	219003.600	2.5
311.3140	24.01	-3.56	54625.760	2.5	86738.360	3.5
311.3170	64.01	.12	10566.135	0.0	42687.735	0.0
311.3176	24.01	-1.45	38315.000	2.5	70427.220	3.5
311.3224	26.02	-4.19	157684.300	2.0	189796.030	1.0
311.3227	25.01	-1.66	49882.150	4.0	81993.850	4.0
311.3290	8.01	-4.25	246028.950	3.5	278140.000	2.5
311.3356	25.00	-1.25	34343.900	4.5	66454.270	3.5
311.3468	28.01	-4.58	77736.790	4.5	109846.000	3.5
311.3473	27.00	-.87	13795.520	2.5	45904.680	1.5
311.3482	29.00	-1.57	39038.240	0.0	71156.621	0.0
311.3540	25.00	-3.76	23296.670	3.5	55405.140	2.5
311.3557	23.01	.32	23391.090	5.0	55499.380	5.0
311.3582	24.01	-1.02	45669.540	1.5	77777.580	.5
311.3608	28.01	-4.84	105668.780	2.5	137776.550	3.5
311.3643	28.01	-4.94	101754.800	2.5	133862.210	1.5
311.3719	8.01	-1.79	206786.340	1.5	238892.960	2.5
311.3728	29.01	-3.78	116375.470	3.0	148482.000	3.0
311.3787	21.01	-2.25	28161.030	3.0	60266.950	3.0
311.3791	25.00	-.59	34250.520	5.5	66356.400	4.5
311.3826	26.02	-3.40	84369.920	2.0	116475.440	3.0
311.3884	23.00	-6.14	2424.890	4.5	34529.810	4.5
311.3901	22.00	-3.90	11639.804	3.0	43744.550	4.0
311.3974	25.01	-2.42	49889.860	3.0	81993.850	4.0
311.3978	10.01	-2.39	280700.770	3.5	312804.730	2.5
311.3990	22.00	-7.80	6661.003	3.0	38764.832	3.0
311.4040	46.00	-.41	7662.464	0.0	39775.089	0.0
311.4041	27.02	-4.88	73861.800	1.5	105965.100	2.5
311.4050	58.01	-1.19	1855.123	0.0	33967.645	0.0
311.4050	77.00	-.22	15970.189	0.0	48082.711	0.0
311.4058	26.00	-2.08	12560.933	3.0	44664.061	2.0
311.4060	90.01	-1.00	9517.587	0.0	41630.006	0.0
311.4083	27.00	-2.13	14399.280	.5	46502.150	.5
311.4091	22.00	.26	16106.080	4.0	48208.870	3.0
311.4109	25.00	-1.75	27281.850	.5	59384.450	1.5
311.4122	28.00	-1.49	879.813	2.0	32982.280	1.0
311.4126	24.00	-3.18	27703.840	4.0	59806.270	5.0
311.4129	27.02	-4.93	139627.200	1.5	171729.600	2.5
311.4248	27.00	-2.98	16470.600	1.5	48571.770	.5
311.4260	90.01	-1.12	8549.697	0.0	40660.054	0.0
311.4263	22.00	-7.32	6598.749	2.0	38699.767	2.0
311.4292	26.01	-1.41	31364.470	1.5	63465.190	1.5
311.4340	26.02	-4.25	157684.300	2.0	189784.520	2.0
311.4379	18.01	-4.73	172829.580	1.5	204929.400	.5
311.4410	28.02	-4.68	86646.200	2.0	118745.700	3.0
311.4425	25.00	-1.97	34423.270	3.5	66522.620	4.5
311.4435	25.01	-3.42	55759.270	3.0	87858.510	2.0
311.4456	24.00	-1.56	25177.390	4.0	57276.420	3.0
311.4507	25.01	-3.06	34910.430	4.0	67008.930	3.0
311.4540	92.00	-.62	0.000	0.0	32107.470	0.0
311.4550	77.00	-.39	12985.861	0.0	45093.228	0.0
311.4567	22.00	-1.83	16817.190	1.0	48915.070	2.0
311.4614	22.00	-7.10	6556.828	1.0	38654.230	1.0
311.4678	26.01	-1.73	31368.450	.5	63465.190	1.5
311.4810	76.00	-.34	12663.231	0.0	44767.918	0.0
311.4835	24.01	-3.93	54499.700	1.5	86594.820	1.5
311.4865	9.01	-1.07	266453.880	2.0	298548.700	1.0
311.4910	45.00	-1.56	3226.301	0.0	35329.957	0.0
311.4919	26.02	-3.39	186998.600	4.0	219092.860	5.0
311.5048	22.01	-2.24	9975.920	1.5	42068.850	1.5
311.5050	62.01	-1.62	2177.753	0.0	34279.966	0.0
311.5057	28.01	-3.50	99040.750	1.5	131133.580	2.5
311.5068	9.01	-3.21	266453.880	2.0	298546.600	2.0
311.5088	9.01	-.95	266453.880	2.0	298546.400	3.0
311.5094	9.01	-1.51	266498.740	1.0	298591.200	2.0
311.5162	9.01	-1.55	266498.740	1.0	298590.500	1.0
311.5175	23.01	-3.00	20089.560	1.0	52181.180	1.0
311.5216	27.02	-3.54	140492.400	4.5	172583.600	3.5
311.5216	27.02	-3.54	140492.400	4.5	172583.600	3.5
311.5216	27.02	-3.81	140492.400	4.5	172583.600	3.5
311.5293	24.01	-1.05	33619.130	4.5	65709.530	5.5
311.5330	70.01	-.19	32182.351	0.0	64281.679	0.0
311.5348	26.01	-2.19	33466.500	4.5	65556.340	4.5
311.5459	25.00	-4.12	27201.540	2.5	59290.230	3.5
311.5473	28.01	-4.25	101357.200	4.5	133445.750	4.5
311.5489	26.01	-2.56	31999.120	3.5	64067.500	2.5
311.5515	24.00	-2.70	24897.550	4.0	56985.670	3.0
311.5520	68.00	-1.16	403.288	0.0	32500.659	0.0
311.5579	24.01	-2.34	32836.840	3.5	64924.300	3.5
311.5623	9.04	.07	784771.000	2.5	816858.000	3.5
311.5642	24.01	-.15	42898.120	2.5	74984.930	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
311.5659	26.00	-3.46	24772.019	1.0	56858.650	2.0
311.5662	30.02	-3.41	260805.900	2.0	292892.500	2.0
311.5662	30.02	-4.56	260805.900	2.0	292892.500	3.0
311.5670	9.01	-2.36	266453.880	2.0	298540.400	1.0
311.5672	29.01	-3.53	118163.500	2.0	150250.000	2.0
311.5672	10.01	-.96	281332.550	.5	313419.040	1.5
311.5708	28.01	-2.58	104503.220	2.5	136589.350	3.5
311.5727	8.02	-.59	297557.500	1.0	329643.430	0.0
311.5752	25.00	-.63	30419.610	2.5	62505.290	3.5
311.5825	9.01	-2.22	266453.880	2.0	298538.800	3.0
311.5859	21.01	-3.20	27443.650	2.0	59528.220	3.0
311.5860	73.00	-1.75	1935.780	0.0	34029.648	0.0
311.5864	9.01	-2.13	266453.880	2.0	298538.400	2.0
311.5865	26.00	-2.11	24338.766	3.0	56423.276	4.0
311.6014	23.01	-1.92	20617.050	2.0	52700.030	2.0
311.6048	28.01	-2.25	103663.500	1.5	135746.130	1.5
311.6055	28.01	-3.60	100845.410	.5	132927.970	1.5
311.6100	25.00	-1.62	31001.150	2.5	63083.240	1.5
311.6112	23.01	-1.90	20522.140	1.0	52604.110	1.0
311.6224	18.00	-4.69	93750.639	1.0	125831.450	0.0
311.6278	26.00	-3.93	19757.020	3.0	51837.279	3.0
311.6350	24.00	-4.49	24282.340	4.0	56361.860	5.0
311.6360	22.00	-2.89	15108.121	3.0	47187.540	2.0
311.6360	41.00	-.01	10162.848	0.0	42251.567	0.0
311.6480	76.00	-.17	13953.751	0.0	46041.234	0.0
311.6529	26.00	-4.04	17550.180	3.0	49627.861	4.0
311.6536	28.02	-3.86	79143.300	2.0	111220.900	3.0
311.6574	26.01	-1.45	31387.980	2.5	63465.190	1.5
311.6590	18.01	-3.83	179592.130	2.5	211669.180	2.5
311.6591	23.01	-1.95	20622.990	3.0	52700.030	2.0
311.6628	9.01	-1.43	266498.740	1.0	298575.400	2.0
311.6634	26.00	-1.71	8154.713	1.0	40231.312	2.0
311.6684	10.01	-.94	280768.520	.5	312844.600	1.5
311.6700	70.01	-.37	31779.063	0.0	63864.281	0.0
311.6709	28.00	-.99	25753.578	4.0	57829.405	5.0
311.6734	24.01	-.30	38509.070	3.5	70584.640	2.5
311.6743	27.00	-2.19	16470.600	1.5	48546.070	1.5
311.6750	16.03	-.12	181432.000	.5	213507.400	.5
311.6780	23.01	-2.66	34228.790	3.0	66303.880	3.0
311.6781	10.01	-.84	280768.520	.5	312843.600	.5
311.6785	22.00	-1.55	16961.420	3.0	49036.460	4.0
311.6823	25.00	-.78	34343.900	4.5	66418.550	5.5
311.6828	23.03	-1.02	255146.800	2.0	287221.400	2.0
311.6876	29.01	-4.78	114482.500	2.0	146556.600	3.0
311.6879	24.00	-2.43	33934.880	3.0	66008.950	3.0
311.6879	9.01	-1.12	266516.430	0.0	298590.500	1.0
311.6940	68.00	-1.15	0.000	0.0	32082.748	0.0
311.6950	72.01	-.19	15002.299	0.0	47084.944	0.0
311.6954	24.00	-1.73	33935.650	2.0	66008.950	3.0
311.7048	24.00	-4.01	20519.600	6.0	52591.940	5.0
311.7112	10.01	-3.70	280700.770	3.5	312772.450	2.5
311.7139	28.02	-4.15	97841.400	2.0	129912.800	2.0
311.7142	18.01	-2.02	179592.130	2.5	211663.500	3.5
311.7154	10.01	-1.38	280700.770	3.5	312772.010	3.5
311.7265	17.01	-2.62	146469.000	3.0	178539.100	2.0
311.7291	24.01	-1.34	32854.460	4.5	64924.300	3.5
311.7347	20.02	-2.75	290934.300	0.0	323003.560	1.0
311.7352	24.01	-3.75	32855.090	2.5	64924.300	3.5
311.7406	26.02	-4.89	186791.780	2.0	218860.430	2.0
311.7423	25.01	-1.80	36427.890	0.0	68496.370	1.0
311.7440	73.00	-1.45	1935.780	0.0	34013.382	0.0
311.7444	22.00	-1.74	8602.340	2.0	40670.600	2.0
311.7445	24.00	-4.49	20523.690	4.0	52591.940	5.0
311.7482	26.01	-1.60	66377.370	3.5	98445.240	4.5
311.7494	25.00	-.94	30419.610	2.5	62487.360	2.5
311.7529	24.00	-2.97	27816.880	5.0	59884.270	6.0
311.7540	42.00	.25	24681.201	0.0	56757.774	0.0
311.7580	74.00	-.08	13227.833	0.0	45303.995	0.0
311.7635	26.00	-3.59	7985.783	2.0	40052.080	2.0
311.7654	20.00	-2.40	15315.943	2.0	47382.048	1.0
311.7663	24.01	-3.69	54625.760	2.5	86691.770	2.5
311.7664	22.01	-.31	9930.740	1.5	41996.740	.5
311.7680	90.01	-.90	6613.917	0.0	38689.050	0.0
311.7788	9.01	-.26	237508.920	2.0	269573.640	1.0
311.7788	10.01	-2.73	280700.770	3.5	312765.490	3.5
311.7793	28.01	-4.14	101144.630	3.5	133209.300	2.5
311.7800	70.01	.03	26616.982	0.0	58690.880	0.0
311.7803	25.02	-3.95	144619.190	1.5	176683.760	2.5
311.7878	30.02	-3.16	260878.800	3.0	292942.600	4.0
311.7892	22.00	-1.80	8492.421	1.0	40556.070	1.0
311.7913	23.00	-6.47	2311.370	3.5	34374.810	3.5
311.7937	24.01	-4.78	54444.190	3.5	86507.380	2.5
311.7942	10.01	-.97	280700.770	3.5	312763.910	4.5
311.7955	22.00	-1.00	16961.420	3.0	49024.430	3.0
311.7981	10.01	-1.84	249108.640	3.5	281171.380	2.5
311.7992	24.01	-3.72	54784.670	3.5	86847.300	4.5
311.8011	28.01	-2.51	99040.750	1.5	131103.180	2.5
311.8025	25.02	-2.25	176970.010	5.5	209032.300	5.5
311.8057	24.00	-3.84	24093.160	2.0	56155.120	2.0
311.8087	25.00	-.92	30425.710	1.5	62487.360	2.5
311.8120	76.00	.41	22503.448	0.0	54574.055	0.0
311.8121	22.00	.39	16267.510	5.0	48328.810	4.0
311.8148	24.01	-1.21	33619.130	4.5	65680.150	4.5
311.8153	23.01	-1.85	44159.430	2.0	76220.400	2.0
311.8190	75.00	-.43	11695.340	0.0	43765.227	0.0
311.8237	24.00	-4.89	25177.390	4.0	57237.500	4.0
311.8244	27.00	-3.00	1406.840	2.5	33466.870	3.5
311.8244	26.02	-3.68	119697.640	2.0	151757.670	2.0
311.8285	22.00	-2.46	15877.180	2.0	47936.790	3.0
311.8315	26.01	-4.98	54870.620	2.5	86929.920	3.5
311.8330	76.00	-.09	11292.053	0.0	43360.500	0.0
311.8373	23.01	.22	2687.010	2.0	34745.720	3.0
311.8547	28.00	-1.48	25753.578	4.0	57810.494	4.0
311.8564	26.01	-2.41	67516.370	5.5	99573.110	4.5
311.8584	25.02	-2.37	176695.060	4.5	208751.600	4.5
311.8600	64.01	.01	10808.108	0.0	42873.778	0.0
311.8631	24.01	-.07	19528.380	.5	51584.440	1.5
311.8637	27.00	-3.55	1406.840	2.5	33462.830	2.5
311.8656	30.02	-4.46	260805.900	2.0	292861.700	1.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
311.8666	9.01	-.09	237508.230	3.0	269563.930	2.0
311.8669	27.00	-2.14	14399.280	.5	46454.950	1.5
311.8687	22.00	-7.24	6598.749	2.0	38654.230	1.0
311.8732	26.01	-3.68	33501.320	3.5	65556.340	4.5
311.8733	9.01	-.99	237508.920	2.0	269563.930	2.0
311.8738	28.01	-4.03	101754.800	2.5	133809.760	3.5
311.8750	26.02	-2.76	93388.750	4.0	125443.580	4.0
311.8771	22.01	-4.80	31113.610	3.5	63168.230	2.5
311.8821	22.01	-1.78	8744.270	2.5	40798.370	3.5
311.8924	25.01	-1.69	36364.300	1.0	68417.340	2.0
311.9010	64.00	-.48	483.945	0.0	32545.400	0.0
311.9032	26.00	-4.69	22249.430	3.0	54301.360	4.0
311.9032	26.00	-3.54	22249.430	3.0	54301.360	4.0
311.9086	22.00	-3.80	11531.760	2.0	43583.140	3.0
311.9138	25.00	-4.78	33825.490	2.5	65876.340	3.5
311.9151	27.00	-2.19	16778.160	2.5	48828.870	2.5
311.9186	9.01	-1.52	266498.740	1.0	298549.100	0.0
311.9225	9.01	-1.35	266498.740	1.0	298548.700	1.0
311.9255	24.00	-.17	25038.610	5.0	57088.250	5.0
311.9272	26.02	-3.27	84369.920	2.0	116419.390	2.0
311.9323	23.01	-.66	20343.000	2.0	52391.940	3.0
311.9350	92.01	-.37	5162.081	0.0	37220.042	0.0
311.9428	9.01	-2.40	266498.740	1.0	298546.600	2.0
311.9434	26.00	-4.31	20019.648	1.0	52067.450	2.0
311.9476	24.01	-3.90	38269.670	3.5	70317.040	2.5
311.9479	10.01	-2.37	280797.260	2.5	312844.600	1.5
311.9496	26.00	-1.33	19621.004	5.0	51668.175	4.0
311.9510	90.01	-.66	4113.534	0.0	36169.851	0.0
311.9568	26.01	-2.44	66522.320	2.5	98568.750	3.5
311.9583	26.00	-6.38	11976.239	4.0	44022.518	4.0
311.9590	9.02	-1.97	357479.350	1.5	389525.550	1.5
311.9590	73.00	-.69	10566.135	0.0	42621.629	0.0
311.9594	25.01	-2.98	70657.180	5.0	102703.340	4.0
311.9600	33.00	-.78	18551.230	0.0	50606.622	0.0
311.9667	20.02	-.14	247696.390	1.0	279741.800	2.0
311.9701	24.00	-.03	24940.610	2.0	56985.670	3.0
311.9722	22.00	.61	12118.394	4.0	44163.240	5.0
311.9746	30.02	-2.57	260878.800	3.0	292923.400	4.0
311.9746	30.02	-4.84	260878.800	3.0	292923.400	3.0
311.9757	25.01	-.82	52383.720	4.0	84428.210	5.0
311.9788	28.01	-4.25	25036.380	2.5	57080.550	3.5
311.9793	24.01	-1.38	45669.540	1.5	77713.660	1.5
311.9794	22.01	-.32	10024.740	2.5	42068.850	1.5
311.9796	25.02	-2.21	145643.450	2.5	177687.540	3.5
311.9800	22.00	-5.15	12118.394	4.0	44162.440	4.0
311.9853	17.01	-1.62	126725.100	1.0	158768.600	2.0
311.9892	17.01	-1.62	126743.300	2.0	158786.400	3.0
311.9896	26.01	-4.36	27620.390	2.5	59663.450	1.5
311.9929	9.01	-2.99	266548.480	3.0	298591.200	2.0
311.9940	64.01	-.66	241.973	0.0	32293.871	0.0
311.9941	25.00	-.59	34938.700	4.5	66981.300	3.5
311.9951	22.00	-2.29	15975.590	3.0	48018.080	4.0
311.9968	22.00	-1.39	16817.190	1.0	48859.510	1.0
311.9980	72.00	-1.06	4516.821	0.0	36568.309	0.0
311.9981	24.01	-3.22	54625.760	2.5	86667.950	1.5
312.0015	26.01	-2.61	31999.120	3.5	64040.960	3.5
312.0019	26.00	-3.19	20874.482	3.0	52916.278	2.0
312.0022	26.02	-1.74	89907.850	4.0	121949.620	5.0
312.0022	26.02	-3.62	89907.850	5.0	121949.620	5.0
312.0027	26.00	-4.39	19562.435	4.0	51604.146	3.0
312.0032	9.01	-1.50	266498.740	1.0	298540.400	1.0
312.0065	9.01	.08	237507.650	4.0	269548.970	3.0
312.0067	18.00	-3.91	93750.639	1.0	125791.940	2.0
312.0090	27.00	-1.58	15184.040	2.5	47225.110	3.5
312.0112	25.00	-.55	34463.370	1.5	66504.210	1.5
312.0122	9.01	-.99	237508.230	3.0	269548.970	3.0
312.0180	64.01	-.29	8791.670	0.0	40841.103	0.0
312.0180	74.00	-.89	6129.972	0.0	38179.405	0.0
312.0184	26.02	-4.63	186882.980	3.0	218923.080	3.0
312.0189	9.01	-2.53	237508.920	2.0	269548.970	3.0
312.0206	22.00	-.77	16875.190	2.0	48915.070	2.0
312.0227	9.01	-.56	266498.740	1.0	298538.400	2.0
312.0314	22.00	-6.81	6661.003	3.0	38699.767	2.0
312.0329	25.00	-.51	30354.210	3.5	62392.820	4.5
312.0343	24.01	.13	19631.280	1.5	51669.750	2.5
312.0435	29.00	-1.48	40086.787	0.0	72133.601	0.0
312.0436	26.00	-1.37	19788.248	4.0	51825.758	3.0
312.0580	28.00	-1.54	25753.578	4.0	57789.611	4.0
312.0591	25.01	-1.37	53698.700	2.0	85734.620	3.0
312.0630	10.01	-1.67	280768.520	.5	312804.040	1.5
312.0678	28.01	-2.91	99040.750	1.5	131075.780	1.5
312.0728	23.01	.33	20622.990	3.0	52657.510	4.0
312.0729	22.00	-4.16	11639.804	3.0	43674.310	4.0
312.0740	40.00	0.00	4113.534	0.0	36157.216	0.0
312.0760	77.00	-.65	6291.287	0.0	38334.764	0.0
312.0833	26.02	-3.38	89907.850	4.0	121941.290	4.0
312.0833	26.02	-2.83	89907.850	5.0	121941.290	4.0
312.0860	18.00	-4.30	93750.639	1.0	125783.800	1.0
312.0880	90.00	-1.00	2500.383	0.0	34542.627	0.0
312.0920	73.00	-.96	10888.765	0.0	42930.599	0.0
312.0947	9.01	-2.33	266516.430	0.0	298548.700	1.0
312.0969	8.01	-3.81	208484.240	2.5	240516.280	1.5
312.1039	9.01	-3.59	266548.480	3.0	298579.800	4.0
312.1047	24.01	-.55	35356.060	1.5	67387.300	2.5
312.1071	25.00	-1.53	34423.270	3.5	66454.270	3.5
312.1136	23.01	-.40	3162.800	5.0	35193.130	5.0
312.1190	23.02	-2.39	56529.300	.5	88559.080	1.5
312.1217	23.03	-.14	222794.600	2.0	254824.100	1.0
312.1298	24.01	-3.86	54625.760	2.5	86654.430	2.5
312.1360	75.00	-.07	14518.354	0.0	46555.671	0.0
312.1390	9.01	-3.01	266548.480	3.0	298576.200	3.0
312.1412	27.00	-2.17	0.000	4.5	32027.500	3.5
312.1468	9.01	-4.17	266548.480	3.0	298575.400	2.0
312.1494	18.00	-4.67	93750.639	1.0	125777.300	1.0
312.1559	27.00	-2.34	816.000	3.5	32841.990	4.5
312.1607	22.01	-2.29	0.000	1.5	32025.500	2.5
312.1614	26.01	-4.68	54904.500	3.5	86929.920	3.5
312.1626	17.01	-.96	126743.300	2.0	158766.600	2.0
312.1642	29.01	-2.17	116080.460	3.0	148105.600	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
312.1700	23.01	-3.83	20156.640	0.0	52181.180	1.0
312.1706	23.00	-3.79	8412.940	.5	40437.420	1.5
312.1706	8.02	-.16	297557.500	1.0	329581.980	1.0
312.1755	26.00	-2.85	17927.378	1.0	49951.360	0.0
312.1756	9.01	-1.10	266516.430	0.0	298540.400	1.0
312.1760	45.00	-1.27	3226.301	0.0	35259.513	0.0
312.1767	24.01	-.93	35356.060	1.5	67379.920	1.5
312.1780	77.00	-.05	12985.861	0.0	45018.868	0.0
312.1841	28.01	-3.56	99040.750	1.5	131063.850	.5
312.1859	25.01	-1.82	70657.180	5.0	102680.090	5.0
312.1876	29.01	-3.84	116080.460	3.0	148103.200	3.0
312.1900	68.00	-1.16	0.000	0.0	32031.776	0.0
312.1941	22.00	-6.22	6742.757	4.0	38764.832	3.0
312.1960	23.02	-1.88	56922.500	2.5	88944.380	2.5
312.1964	24.01	-1.86	33521.230	3.5	65543.060	3.5
312.2000	42.01	1.17	26616.982	0.0	58647.732	0.0
312.2034	25.01	-4.47	55696.500	4.0	87717.620	3.0
312.2063	22.01	-1.90	9975.920	1.5	41996.740	.5
312.2079	8.00	-4.06	73768.212	2.0	105788.868	3.0
312.2105	8.00	-4.21	73768.212	2.0	105788.607	2.0
312.2121	8.00	-4.43	73768.212	2.0	105788.443	1.0
312.2141	9.01	-2.30	266548.480	3.0	298568.500	4.0
312.2198	23.01	-2.58	44200.970	1.0	76220.400	2.0
312.2210	7.01	-2.89	189335.160	3.0	221354.470	2.0
312.2258	9.01	-3.04	266548.480	3.0	298567.300	3.0
312.2285	26.01	-4.22	71964.810	2.5	103983.350	3.5
312.2328	26.00	-2.86	24574.655	4.0	56592.760	4.0
312.2363	23.00	-1.49	9636.960	1.5	41654.700	2.5
312.2380	77.00	-.30	13873.093	0.0	45899.944	0.0
312.2397	17.03	-1.21	219454.000	1.0	251471.400	0.0
312.2440	26.02	-4.68	168420.990	2.0	200437.940	2.0
312.2472	23.01	-3.61	32040.760	2.0	64057.390	3.0
312.2517	21.01	-.77	32349.980	3.0	64366.150	2.0
312.2540	24.01	-3.82	53923.570	4.5	85939.500	4.5
312.2625	24.01	-.29	33694.470	5.5	65709.530	5.5
312.2625	8.01	-.77	206877.900	2.5	238892.960	2.5
312.2650	41.00	-1.06	2097.096	0.0	34121.178	0.0
312.2665	26.00	-4.23	21999.132	4.0	54013.780	5.0
312.2665	26.00	-3.88	21999.132	4.0	54013.780	5.0
312.2666	23.00	-5.38	2153.200	1.5	34167.840	2.5
312.2695	18.01	-4.10	179592.130	2.5	211606.470	3.5
312.2757	30.02	-3.03	260878.800	3.0	292892.500	3.0
312.2771	26.00	-4.59	19757.020	3.0	51770.577	3.0
312.2780	79.00	-.57	9114.300	0.0	41137.049	0.0
312.2788	22.00	-2.28	16106.080	4.0	48119.470	5.0
312.2796	28.01	-2.18	98467.250	3.5	130480.550	3.5
312.2874	25.00	-.25	34343.900	4.5	66356.400	4.5
312.2885	26.01	-4.60	60270.370	3.5	92282.760	3.5
312.2895	23.01	.62	23391.090	5.0	55403.380	6.0
312.2904	17.02	-3.79	185838.000	1.5	217850.200	2.5
312.2960	90.01	-.42	6129.972	0.0	38150.875	0.0
312.2973	21.01	-.59	27917.690	1.0	59929.180	2.0
312.2984	25.02	-3.48	144672.380	2.5	176683.760	2.5
312.3003	24.00	-.46	23933.900	4.0	55945.080	5.0
312.3076	22.00	-.53	7255.369	2.0	39265.800	2.0
312.3092	25.02	-3.01	144959.740	4.5	176970.010	5.5
312.3104	26.02	-3.95	84369.920	2.0	116380.070	1.0
312.3109	25.01	-2.49	36274.290	2.0	68284.380	3.0
312.3127	25.01	-.22	46903.260	2.0	78913.170	2.0
312.3145	28.01	-3.59	67031.020	.5	99040.750	1.5
312.3147	22.00	-7.03	6661.003	3.0	38670.710	4.0
312.3160	28.01	-4.92	94729.250	2.5	126738.820	1.5
312.3160	75.00	-.64	15647.559	0.0	47666.412	0.0
312.3177	27.02	-4.64	139731.000	.5	171740.400	1.5
312.3177	27.02	-4.64	139731.000	.5	171740.400	1.5
312.3187	9.03	-2.26	460385.800	1.0	492395.100	2.0
312.3194	26.00	-3.32	19621.004	5.0	51630.230	5.0
312.3232	23.00	-5.92	8578.520	2.5	40587.350	3.5
312.3307	20.01	-2.17	56839.250	1.5	88847.310	2.5
312.3340	26.00	-2.29	19562.435	4.0	51570.160	3.0
312.3365	10.01	-1.32	280797.260	2.5	312804.730	2.5
312.3391	24.01	-4.44	53566.220	3.5	85573.420	3.5
312.3412	28.01	-3.18	103663.500	1.5	135670.490	.5
312.3429	25.00	-2.50	31076.420	1.5	63083.240	1.5
312.3432	10.01	-3.41	280797.260	2.5	312804.040	1.5
312.3440	26.00	-1.59	21715.735	5.0	53722.440	5.0
312.3470	10.01	-.13	306687.290	2.5	338693.680	3.5
312.3497	10.01	-.02	306687.670	3.5	338693.780	4.5
312.3507	10.01	-1.57	306687.670	3.5	338693.680	3.5
312.3515	26.02	-2.50	186998.600	4.0	219004.530	4.0
312.3528	8.02	-.49	370524.200	2.0	402530.000	3.0
312.3539	26.00	-3.00	21999.132	4.0	54004.820	3.0
312.3570	58.01	-.87	4436.164	0.0	36450.814	0.0
312.3655	25.01	-3.36	35004.430	3.0	67008.930	3.0
312.3665	27.01	-5.00	18031.500	2.0	50035.900	3.0
312.3686	25.01	-1.26	49882.150	4.0	81886.330	5.0
312.3700	45.00	-1.45	0.000	0.0	32013.318	0.0
312.3738	28.01	-2.44	98467.250	3.5	130470.900	4.5
312.3742	17.01	-.75	126782.800	3.0	158786.400	3.0
312.3762	22.00	.51	16458.710	6.0	48462.110	5.0
312.3832	28.01	-3.61	100309.290	5.5	132311.980	4.5
312.3895	24.01	-2.40	38315.000	2.5	70317.040	2.5
312.3990	64.01	-.80	241.973	0.0	32292.319	0.0
312.4022	8.01	-1.47	206730.800	.5	238731.540	1.5
312.4023	15.01	-1.38	107923.570	2.0	139924.300	2.0
312.4127	28.00	-4.63	29832.810	3.0	61832.470	4.0
312.4127	9.01	-.04	254701.620	3.0	286701.280	2.0
312.4131	26.00	-4.49	19350.882	5.0	51350.505	4.0
312.4170	44.00	-1.58	2016.438	0.0	34024.939	0.0
312.4183	10.01	-.61	281720.280	1.5	313719.370	2.5
312.4222	24.00	-1.09	28679.430	1.0	60678.120	1.0
312.4227	29.01	-4.78	116643.960	3.0	148642.600	2.0
312.4231	17.01	-1.14	126725.100	1.0	158723.700	1.0
312.4238	25.00	-3.93	34845.260	.5	66843.790	1.5
312.4250	64.01	-1.30	241.973	0.0	32249.655	0.0
312.4270	24.01	-1.13	42986.730	1.5	74984.930	1.5
312.4276	18.01	-4.21	163299.470	2.5	195297.610	1.5
312.4278	9.01	-1.66	266548.480	3.0	298546.600	2.0
312.4297	9.01	-3.30	266548.480	3.0	298546.400	3.0
312.4368	26.00	-4.49	25899.974	4.0	57897.170	5.0
312.4380	90.01	-.56	6129.972	0.0	38136.322	0.0
312.4387	27.02	-3.94	139743.400	2.5	171740.400	1.5
312.4387	27.02	-3.94	139743.400	2.5	171740.400	1.5
312.4412	11.01	.09	299193.750	2.0	331190.490	3.0
312.4412	11.01	.09	299193.750	2.0	331190.490	3.0
312.4491	24.00	-2.32	28682.180	2.0	60678.120	1.0
312.4583	24.00	-2.92	25038.610	5.0	57033.600	4.0
312.4600	9.01	-2.80	266548.480	3.0	298543.300	4.0
312.4605	26.02	-4.42	157684.300	2.0	189679.070	3.0
312.4670	27.02	-4.08	140382.900	3.5	172377.000	3.5
312.4682	18.01	-3.00	179592.130	2.5	211586.110	2.5
312.4736	22.00	-1.76	15877.180	2.0	47870.610	2.0
312.4747	29.01	-3.38	88926.090	0.0	120919.410	1.0
312.4791	24.00	-2.63	28637.000	3.0	60629.870	2.0
312.4793	25.01	-3.73	67910.260	4.0	99903.100	5.0
312.4803	25.01	-3.01	49820.160	2.0	81812.900	2.0
312.4820	32.00	-1.13	7017.204	0.0	39019.047	0.0
312.4946	10.01	-2.37	306687.290	2.5	338678.570	3.5
312.4954	24.01	.31	19798.010	2.5	51789.210	3.5
312.4970	73.00	-1.06	1935.780	0.0	33936.087	0.0
312.4983	10.01	-.58	306687.670	3.5	338678.570	3.5
312.5010	23.01	-.31	19132.690	2.0	51123.310	2.0
312.5015	25.00	-.78	34343.900	4.5	66334.470	3.5
312.5033	26.00	-3.19	12560.933	3.0	44551.325	3.0
312.5040	9.01	-.62	266548.480	3.0	298538.800	3.0
312.5048	24.01	-.43	34659.480	.5	66649.710	1.5
312.5069	28.00	-2.06	25753.578	4.0	57743.596	3.0
312.5079	9.01	-4.32	266548.480	3.0	298538.400	2.0
312.5083	28.01	-3.44	66571.340	2.5	98561.220	2.5
312.5124	9.01	-.31	254716.680	2.0	286706.140	1.0
312.5127	28.01	-2.79	103663.500	1.5	135652.930	1.5
312.5128	9.01	-.07	266548.480	3.0	298537.900	4.0
312.5131	24.00	-4.22	27816.880	5.0	59806.270	5.0
312.5183	20.01	-2.02	56858.460	2.5	88847.310	3.5
312.5183	20.01	-3.32	56858.460	2.5	88847.310	2.5
312.5190	40.01	-.80	4194.191	0.0	36192.246	0.0
312.5216	11.01	-.84	299889.160	1.0	331877.670	1.0
312.5227	25.01	-.44	49291.310	3.0	81279.710	4.0
312.5231	24.01	-3.09	35356.060	1.5	67344.420	2.5
312.5233	25.01	-4.24	67910.260	4.0	99898.600	4.0
312.5263	26.00	-2.19	22249.430	3.0	54237.460	4.0
312.5276	23.01	.08	2604.820	1.0	34592.720	2.0
312.5341	29.01	-3.80	116643.960	3.0	148631.200	3.0
312.5358	23.01	-1.73	20617.050	2.0	52604.110	1.0
312.5398	25.02	-3.93	85077.090	4.5	117063.740	4.5
312.5477	29.01	-4.47	116080.460	3.0	148066.300	2.0
312.5481	23.03	-1.91	255747.600	3.0	287733.400	2.0
312.5481	17.01	-1.82	126782.800	3.0	158768.600	2.0
312.5493	24.01	-1.09	33694.470	5.5	65680.150	4.5
312.5496	9.01	-.65	254723.280	1.0	286708.930	0.0
312.5520	75.00	-1.14	11534.025	0.0	43528.701	0.0
312.5547	22.00	-.39	16817.190	1.0	48802.320	0.0
312.5599	9.01	-.77	254716.680	2.0	286701.280	2.0
312.5604	25.01	-4.97	67910.260	4.0	99894.800	3.0
312.5626	22.00	-.93	16875.190	2.0	48859.510	1.0
312.5641	26.00	-2.21	21999.132	4.0	53983.300	5.0
312.5652	26.00	-3.43	19350.882	5.0	51334.940	4.0
312.5653	26.00	-1.66	7985.783	2.0	39969.830	3.0
312.5660	80.00	.06	39199.555	0.0	71192.798	0.0
312.5684	26.00	-1.34	19390.165	6.0	51373.894	5.0
312.5763	24.01	-1.03	45730.740	2.5	77713.660	1.5
312.5765	30.02	-4.09	260878.800	3.0	292861.700	2.0
312.5769	9.01	-.78	254723.280	1.0	286706.140	1.0
312.5796	8.01	-3.98	208346.170	.5	240328.750	.5
312.5872	9.00	-4.69	116987.394	3.5	148969.200	4.5
312.5887	26.01	-2.08	66463.590	5.5	98445.240	4.5
312.5892	24.00	-1.30	23933.900	4.0	55915.500	4.0
312.5901	28.01	-3.23	66579.710	1.5	98561.220	2.5
312.5915	24.00	-2.23	25106.340	3.0	57087.700	2.0
312.5920	7.01	-2.15	164610.760	1.0	196592.070	1.0
312.5920	40.01	-.67	0.000	0.0	31990.582	0.0
312.5927	29.01	-3.03	116080.460	3.0	148061.700	3.0
312.5960	44.00	-1.28	2016.438	0.0	34006.611	0.0
312.5981	25.01	-3.38	49882.150	4.0	81862.840	4.0
312.6009	17.01	-1.73	126743.300	2.0	158723.700	1.0
312.6010	21.01	-.59	28021.210	2.0	60001.600	3.0
312.6031	28.01	-4.57	101754.800	2.5	133734.980	3.5
312.6035	18.01	-4.32	179592.130	2.5	211572.270	1.5
312.6089	26.01	-2.21	66589.170	4.5	98568.750	3.5
312.6109	29.00	-.35	39038.240	0.0	71026.888	0.0
312.6116	25.00	-3.57	30411.740	.5	62391.050	.5
312.6142	26.00	-1.86	24118.815	4.0	56097.850	3.0
312.6162	24.00	-1.09	28637.000	3.0	60615.840	3.0
312.6199	25.00	-.97	30411.740	.5	62390.200	1.5
312.6199	10.00	-3.84	135888.717	1.0	167867.178	0.0
312.6211	23.01	-.26	2968.220	4.0	34946.550	4.0
312.6244	9.01	-1.94	254723.280	1.0	286701.280	2.0
312.6283	25.01	-3.00	53781.700	3.0	85759.300	4.0
312.6290	72.01	-1.65	4839.451	0.0	36826.247	0.0
312.6297	26.02	-4.59	186882.980	3.0	218860.430	2.0
312.6326	18.02	-3.18	240150.660	0.0	272127.820	1.0
312.6444	7.01	-.17	189335.160	3.0	221311.110	4.0
312.6476	24.00	-4.94	24303.940	3.0	56279.560	4.0
312.6482	27.00	-2.33	16778.160	2.5	48753.720	1.5
312.6519	10.01	-2.55	280797.260	2.5	312772.450	2.5
312.6562	10.01	-.97	280797.260	2.5	312772.010	3.5
312.6580	22.00	-2.40	8492.421	1.0	40466.979	2.0
312.6602	26.01	-3.35	60384.460	.5	92358.800	1.5
312.6700	92.01	-1.23	2258.411	0.0	34241.012	0.0
312.6717	27.00	-.90	16470.600	1.5	48443.760	2.5
312.6735	25.01	-1.68	49889.860	3.0	81862.840	4.0
312.6748	23.01	-3.79	19112.930	4.0	51085.770	3.0
312.6763	26.02	-3.76	83138.230	5.0	115110.920	4.0
312.6780	23.01	-1.65	20280.190	5.0	52252.700	6.0
312.6834	26.00	-3.05	20641.110	4.0	52613.072	5.0
312.6838	25.00	-1.30	34423.270	3.5	66395.190	2.5
312.6917	27.00	-4.17	13795.520	2.5	45766.630	3.5
312.6939	9.01	-3.07	257252.840	0.0	289223.730	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
312.6968	25.00	-3.24	30419.610	2.5	62390.200	1.5
312.7118	24.01	-4.94	54625.760	2.5	86594.820	1.5
312.7200	10.01	-1.14	280797.260	2.5	312765.490	3.5
312.7210	90.01	-.76	9678.902	0.0	41656.288	0.0
312.7247	27.00	-2.09	3482.820	4.5	35450.560	3.5
312.7247	22.00	-2.44	11776.806	4.0	43744.550	4.0
312.7250	64.00	-.53	967.890	0.0	32944.867	0.0
312.7273	28.01	-4.13	99154.810	4.5	131122.280	5.5
312.7274	28.01	-2.61	73893.730	1.5	105861.190	2.5
312.7303	25.00	-1.95	35041.370	3.5	67008.540	2.5
312.7307	28.01	-1.87	103663.500	1.5	135630.630	2.5
312.7341	25.02	-2.99	176683.760	2.5	208650.540	3.5
312.7363	27.00	-2.47	14036.280	1.5	46002.830	2.5
312.7415	28.01	-3.94	76402.030	2.5	108368.050	2.5
312.7421	22.00	-2.44	16267.510	5.0	48233.470	6.0
312.7446	27.00	-4.14	816.000	3.5	32781.710	2.5
312.7482	25.00	-2.51	30425.710	1.5	62391.050	.5
312.7530	41.01	1.28	17341.367	0.0	49315.481	0.0
312.7530	58.01	-.28	3548.931	0.0	35523.045	0.0
312.7559	22.00	-1.29	16875.190	2.0	48839.740	3.0
312.7565	25.00	-1.24	30425.710	1.5	62390.200	1.5
312.7619	28.00	-2.21	26665.903	3.0	58629.840	2.0
312.7648	28.00	-3.03	26665.903	3.0	58629.550	3.0
312.7668	22.00	-1.16	15877.180	2.0	47840.620	3.0
312.7682	26.02	-4.95	168420.990	2.0	200384.280	3.0
312.7760	73.01	.41	9678.902	0.0	41650.665	0.0
312.7779	23.00	-3.74	0.000	1.5	31962.300	.5
312.7816	28.01	-4.20	101247.370	2.5	133209.300	2.5
312.7885	23.00	-3.18	8476.200	1.5	40437.420	1.5
312.7887	22.00	-1.68	15975.590	3.0	47936.790	3.0
312.7892	22.00	-.37	17075.310	4.0	49036.460	4.0
312.7898	7.01	-2.97	189335.160	3.0	221296.240	2.0
312.7927	22.01	-.07	31207.440	2.5	63168.230	2.5
312.7936	30.02	-4.44	260981.900	3.0	292942.600	4.0
312.7948	26.02	-4.91	168477.360	1.0	200437.940	2.0
312.7952	25.01	-1.69	49820.160	2.0	81780.700	3.0
312.7966	18.02	-.98	207233.090	2.0	239193.480	1.0
312.7976	25.01	-2.80	70745.080	3.0	102705.370	3.0
312.7996	28.01	-1.90	103663.500	1.5	135623.590	1.5
312.8079	18.02	-2.59	240291.660	2.0	272250.900	3.0
312.8166	25.01	-2.73	55759.270	3.0	87717.620	3.0
312.8172	25.00	-2.29	31124.950	.5	63083.240	1.5
312.8175	25.01	-2.46	70745.080	3.0	102703.340	4.0
312.8210	12.02	-2.01	530178.200	2.0	562136.100	2.0
312.8239	28.02	-4.28	97996.300	3.0	129953.900	3.0
312.8283	7.01	-2.10	189335.160	3.0	221292.310	3.0
312.8286	23.01	-.90	19166.190	1.0	51123.310	2.0
312.8288	21.01	-.08	27917.690	1.0	59874.790	1.0
312.8354	9.01	-2.89	257267.300	1.0	289223.730	1.0
312.8356	28.01	-2.19	103663.500	1.5	135619.910	1.5
312.8390	77.00	-.41	13873.093	0.0	45838.417	0.0
312.8447	25.02	-3.50	176695.060	4.5	208650.540	3.5
312.8478	28.01	-4.90	106620.530	3.5	138575.690	2.5
312.8533	17.01	-3.88	145468.500	1.0	177423.100	1.0
312.8535	28.01	-2.04	103663.500	1.5	135618.080	2.5
312.8545	24.01	-1.92	38362.560	1.5	70317.040	2.5
312.8560	64.01	-.18	9033.642	0.0	40997.229	0.0
312.8572	30.02	-3.41	260988.400	4.0	292942.600	5.0
312.8598	22.01	.04	31490.820	3.5	63444.760	3.5
312.8618	22.00	-3.29	8602.340	2.0	40556.070	1.0
312.8622	24.01	-4.13	54784.670	3.5	86738.360	3.5
312.8626	22.00	-.33	16961.420	3.0	48915.070	2.0
312.8641	25.01	-.74	53805.800	4.0	85759.300	4.0
312.8666	29.01	-3.98	116080.460	3.0	148033.700	4.0
312.8674	24.01	-.51	19631.280	1.5	51584.440	1.5
312.8682	23.01	-.32	19132.690	2.0	51085.770	3.0
312.8698	25.01	-3.81	53781.700	3.0	85734.620	3.0
312.8701	29.00	-.71	40086.787	0.0	72048.934	0.0
312.8728	28.00	-3.45	15734.018	1.0	47686.625	0.0
312.8760	72.00	-1.77	0.000	0.0	31961.544	0.0
312.8770	39.01	.47	27100.927	0.0	59062.369	0.0
312.8899	26.00	-4.04	12560.933	3.0	44511.795	2.0
312.8940	24.00	-1.64	28679.430	1.0	60629.870	2.0
312.8940	75.00	.22	16534.792	0.0	48494.497	0.0
312.8991	23.00	-5.57	2424.890	4.5	34374.810	3.5
312.9005	27.00	-3.87	4142.660	3.5	36092.440	2.5
312.9011	26.01	-2.58	31999.120	3.5	63948.840	4.5
312.9038	26.02	-2.68	83161.480	4.0	115110.920	4.0
312.9070	22.00	-.38	17075.310	4.0	49024.430	3.0
312.9176	26.00	-4.31	19757.020	3.0	51705.052	2.0
312.9180	40.01	.06	4194.191	0.0	36151.445	0.0
312.9183	22.00	-1.45	8436.618	0.0	40384.580	1.0
312.9208	23.00	-6.02	2220.130	2.5	34167.840	2.5
312.9210	24.00	-1.17	28682.180	2.0	60629.870	2.0
312.9230	76.00	.21	17583.339	0.0	49540.082	0.0
312.9248	17.02	-3.74	216710.400	3.5	248657.700	2.5
312.9299	28.00	-3.08	2216.519	2.0	34163.294	2.0
312.9335	26.00	-2.61	11976.239	4.0	43922.652	3.0
312.9370	11.01	.01	265693.290	1.0	297639.340	2.0
312.9411	22.00	-8.47	6598.749	2.0	38544.380	3.0
312.9454	8.01	-.63	206786.340	1.5	238731.540	1.5
312.9481	27.00	-2.46	15184.040	2.5	47128.960	2.5
312.9528	28.01	-2.00	105838.060	3.5	137782.500	4.5
312.9550	73.00	-.97	9194.957	0.0	41148.433	0.0
312.9580	72.00	-1.87	0.000	0.0	31953.169	0.0
312.9636	22.00	-2.58	11639.804	3.0	43583.140	3.0
312.9640	41.01	-.40	10566.135	0.0	42518.692	0.0
312.9652	28.01	-4.92	106620.530	3.5	138563.710	3.5
312.9667	25.00	-2.26	30411.740	.5	62354.760	1.5
312.9686	28.01	-2.97	104646.520	3.5	136589.350	3.5
312.9760	40.01	-.43	241.973	0.0	32193.305	0.0
312.9816	30.02	-3.31	260981.900	3.0	292923.400	4.0
312.9857	24.00	-1.80	23933.900	4.0	55874.980	5.0
312.9930	39.01	.64	27342.899	0.0	59292.495	0.0
312.9943	24.00	-3.13	31987.060	4.0	63927.270	5.0
312.9950	73.00	-1.14	5565.369	0.0	37514.761	0.0
312.9960	64.01	-.28	9356.272	0.0	41305.562	0.0
312.9970	25.00	-3.18	35041.370	3.5	66981.300	3.5
313.0025	26.00	-3.95	23051.744	0.0	54991.110	1.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
313.0042	28.01	-4.62	103025.580	2.5	134964.780	1.5
313.0071	12.02	-1.87	532725.700	2.0	564664.600	2.0
313.0111	28.01	-2.13	105838.060	3.5	137776.550	3.5
313.0140	27.02	-4.46	140645.400	3.5	172583.600	3.5
313.0157	22.00	-1.06	15975.590	3.0	47913.610	4.0
313.0187	26.00	-3.64	28819.966	5.0	60757.680	4.0
313.0261	23.01	-.28	2808.760	3.0	34745.720	3.0
313.0308	8.01	-4.83	208392.270	1.5	240328.750	.5
313.0330	58.01	-.20	4194.191	0.0	36139.705	0.0
313.0355	27.01	-4.17	24074.600	2.0	56010.600	2.0
313.0376	22.00	-2.68	11531.760	2.0	43467.550	2.0
313.0404	28.01	-2.57	103663.500	1.5	135599.000	.5
313.0439	25.00	-1.62	30419.610	2.5	62354.760	1.5
313.0453	30.02	-4.17	260988.400	4.0	292923.400	4.0
313.0478	26.00	-3.10	28819.966	5.0	60754.710	4.0
313.0544	24.01	-.48	42986.730	1.5	74920.800	.5
313.0549	25.01	-.97	52373.180	3.0	84307.200	4.0
313.0556	26.01	-4.37	30388.550	4.5	62322.500	3.5
313.0568	23.00	-1.51	9824.580	2.5	41758.410	3.5
313.0580	73.00	.07	11130.738	0.0	43073.701	0.0
313.0585	24.00	-1.73	28682.180	2.0	60615.840	3.0
313.0600	4.01	.00	0.000	0.0	31942.759	0.0
313.0637	25.00	-1.07	34423.270	3.5	66356.400	4.5
313.0660	9.01	-2.80	257290.840	2.0	289223.730	1.0
313.0730	28.01	-4.21	101258.010	1.5	133190.190	1.5
313.0765	25.00	-3.17	34463.370	1.5	66395.190	2.5
313.0790	41.01	.38	3468.273	0.0	35409.093	0.0
313.0790	45.00	-1.86	3387.616	0.0	35328.436	0.0
313.0791	22.01	-1.07	93.940	2.5	32025.500	2.5
313.0810	64.01	-.16	9275.615	0.0	41216.231	0.0
313.0836	18.00	-2.91	93143.800	2.0	125074.900	2.0
313.0851	26.02	-3.28	93512.640	4.0	125443.580	4.0
313.0870	58.01	-.63	0.000	0.0	31940.004	0.0
313.0888	18.02	-3.31	240257.590	1.0	272188.160	2.0
313.0962	23.01	-4.19	34228.790	3.0	66158.600	4.0
313.0996	7.01	-3.14	166610.760	1.0	196540.230	0.0
313.1015	25.01	-1.38	49291.310	3.0	81220.580	3.0
313.1037	25.00	-2.44	30425.710	1.5	62354.760	1.5
313.1059	25.01	-2.68	53805.800	4.0	85734.620	3.0
313.1062	18.00	-3.78	93143.800	2.0	125072.600	1.0
313.1070	90.01	-1.69	0.000	0.0	31937.964	0.0
313.1110	40.00	-.40	4113.534	0.0	36051.090	0.0
313.1120	76.00	.53	14760.326	0.0	46697.780	0.0
313.1144	22.00	-5.00	6742.757	4.0	38670.710	4.0
313.1212	24.00	-.00	25106.340	3.0	57033.600	4.0
313.1218	23.00	-.42	9824.580	2.5	41751.780	1.5
313.1260	69.01	-.17	0.000	0.0	31936.026	0.0
313.1336	27.01	-4.24	17771.500	3.0	49697.500	4.0
313.1345	21.01	-2.55	27602.320	3.0	59528.220	3.0
313.1352	24.00	-2.27	21856.940	3.0	53782.770	4.0
313.1385	26.01	-3.55	30764.460	3.5	62689.960	2.5
313.1454	26.00	-4.44	19912.486	2.0	51837.279	3.0
313.1454	25.01	-4.84	35004.430	3.0	66929.220	2.0
313.1485	26.02	-3.45	186998.600	4.0	218923.080	3.0
313.1486	28.01	-2.32	68154.310	1.5	100078.780	1.5
313.1525	28.00	-2.16	25753.578	4.0	57677.649	5.0
313.1538	24.01	-1.28	33694.470	5.5	65618.410	6.5
313.1539	24.01	-1.55	33619.130	4.5	65543.060	3.5
313.1550	80.00	-.04	39199.555	0.0	71132.623	0.0
313.1572	26.02	-4.83	198333.560	2.0	230257.150	2.0
313.1583	25.01	-1.77	52383.720	4.0	84307.200	4.0
313.1626	25.01	-2.77	49889.860	3.0	81812.900	2.0
313.1674	28.01	-3.25	101247.370	2.5	133169.920	3.5
313.1702	28.00	-1.27	26665.903	3.0	58588.168	3.0
313.1715	26.01	-1.85	32909.870	5.5	64832.000	4.5
313.1810	72.00	.42	10485.478	0.0	42415.895	0.0
313.1825	27.00	-2.53	14036.280	1.5	45957.290	.5
313.1830	80.00	-.04	39199.555	0.0	71129.768	0.0
313.1916	26.02	-4.41	198337.060	3.0	230257.150	2.0
313.1990	28.01	-2.05	98561.220	2.5	130480.550	3.5
313.2011	18.02	-1.81	211004.850	2.0	242923.960	1.0
313.2030	68.00	-1.23	0.000	0.0	31928.174	0.0
313.2036	24.01	.45	20024.180	3.5	51943.040	4.5
313.2070	40.00	.02	4355.506	0.0	36283.273	0.0
313.2106	24.01	-3.15	38509.070	3.5	70427.220	3.5
313.2141	18.02	-3.88	240150.660	0.0	272068.450	1.0
313.2145	26.01	-4.98	60441.050	1.5	92358.800	1.5
313.2148	23.00	-4.60	2112.320	.5	34030.040	1.5
313.2189	10.01	-1.69	249108.640	3.5	281025.940	2.5
313.2212	27.00	-2.08	816.000	3.5	32733.070	3.5
313.2268	28.02	-3.38	97996.300	3.0	129912.800	2.0
313.2287	25.00	-.89	34938.700	4.5	66855.000	4.5
313.2317	18.00	-3.57	93143.800	2.0	125059.800	2.0
313.2336	28.01	-3.70	105838.060	3.5	137753.870	4.5
313.2380	28.01	-2.02	105861.190	2.5	137776.550	3.5
313.2382	29.01	-4.82	116643.960	3.0	148559.300	2.0
313.2409	25.00	-2.22	27201.540	2.5	59116.600	2.5
313.2445	26.02	-4.37	198333.560	2.0	230248.260	1.0
313.2513	9.04	-.51	784361.000	1.5	816275.000	1.5
313.2514	26.00	-.92	25899.974	4.0	57813.970	3.0
313.2587	23.01	-1.20	23391.090	5.0	55304.340	4.0
313.2590	42.00	.16	0.000	0.0	31922.467	0.0
313.2590	58.01	-.57	2339.068	0.0	34261.535	0.0
313.2640	73.00	-.96	3871.561	0.0	35793.518	0.0
313.2669	23.00	-5.11	2153.200	1.5	34065.610	2.5
313.2710	22.00	-1.56	16106.080	4.0	48018.080	4.0
313.2725	25.01	-2.81	49820.160	2.0	81732.000	1.0
313.2785	23.01	-1.65	20242.320	4.0	52153.550	5.0
313.2788	25.00	-.21	34423.270	3.5	66334.470	3.5
313.2821	24.00	.14	25177.390	4.0	57088.250	5.0
313.2847	30.02	-3.78	260981.900	3.0	292892.500	3.0
313.2859	8.02	-.03	297557.500	1.0	329467.980	2.0
313.2864	28.01	-3.78	23108.280	2.5	55018.710	2.5
313.2880	44.00	-.36	10566.135	0.0	42485.647	0.0
313.3047	26.01	-1.74	31364.470	1.5	63273.030	2.5
313.3080	41.00	-.20	8711.012	0.0	40628.486	0.0
313.3090	64.01	-1.39	0.000	0.0	31917.372	0.0
313.3090	77.00	-1.41	5726.684	0.0	37644.056	0.0
313.3105	21.01	.11	28021.210	2.0	59929.180	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
313.3111	23.00	-4.96	2220.130	2.5	34128.040	3.5
313.3138	22.00	-.43	16817.190	1.0	48724.830	1.0
313.3170	48.00	-.89	30488.543	0.0	62405.100	0.0
313.3177	29.01	-4.53	116080.460	3.0	147987.700	2.0
313.3186	22.00	-1.35	16817.190	1.0	48724.340	2.0
313.3191	24.01	-3.13	54784.670	3.5	86691.770	2.5
313.3220	23.00	-3.98	2112.320	.5	34019.120	1.5
313.3230	40.00	-.41	5000.766	0.0	36916.712	0.0
313.3240	28.01	-4.77	99844.130	3.5	131750.730	3.5
313.3320	77.00	.34	6291.287	0.0	38206.316	0.0
313.3327	23.01	-.45	2687.010	2.0	34592.720	2.0
313.3330	58.01	-.07	5887.999	0.0	37802.927	0.0
313.3395	28.01	-4.92	104081.040	4.5	135986.060	3.5
313.3420	92.01	-1.48	2258.411	0.0	34172.422	0.0
313.3430	25.00	-3.04	31001.150	2.5	62905.810	2.5
313.3480	40.01	.32	7662.464	0.0	39575.864	0.0
313.3500	72.01	.51	41538.623	0.0	73451.819	0.0
313.3550	73.00	-1.09	9920.875	0.0	41833.562	0.0
313.3571	28.01	-3.46	104298.230	4.5	136201.460	3.5
313.3620	90.01	-.78	9517.587	0.0	41429.561	0.0
313.3625	23.01	-1.23	20343.000	2.0	52245.680	2.0
313.3733	26.01	-2.75	60270.370	3.5	92171.950	4.5
313.3839	24.00	-1.38	32097.360	6.0	63997.860	6.0
313.3850	64.01	.35	8791.670	0.0	40701.302	0.0
313.3890	69.01	-.67	0.000	0.0	31909.225	0.0
313.3890	73.01	-.44	5242.739	0.0	37151.964	0.0
313.3890	74.00	-.18	13711.778	0.0	45621.003	0.0
313.3960	26.00	-3.42	19562.435	4.0	51461.707	4.0
313.3976	24.00	-.66	27223.050	2.0	59122.150	3.0
313.4020	75.00	-.07	15647.559	0.0	47555.460	0.0
313.4025	26.02	-3.59	109570.840	2.0	141469.450	1.0
313.4031	25.01	-3.19	49882.150	4.0	81780.700	3.0
313.4065	10.01	-.82	274364.570	2.5	306262.770	1.5
313.4075	26.00	-3.17	19562.435	4.0	51460.530	3.0
313.4101	28.00	-.36	1713.080	1.0	33610.916	2.0
313.4111	26.00	-1.89	7728.058	3.0	39625.784	4.0
313.4133	28.00	-3.63	13521.352	2.0	45418.858	2.0
313.4133	22.00	-1.04	11776.806	4.0	43674.310	4.0
313.4134	10.01	-1.24	280947.100	1.5	312844.600	1.5
313.4147	26.00	-4.52	8154.713	1.0	40052.080	2.0
313.4158	26.01	-4.96	54870.620	2.5	86767.870	2.5
313.4207	7.01	-.66	189335.160	3.0	221231.920	4.0
313.4211	25.01	-3.08	35004.430	3.0	66901.140	2.0
313.4232	18.02	-2.23	240291.660	2.0	272188.160	2.0
313.4232	10.01	-1.80	280947.100	1.5	312843.600	.5
313.4246	26.01	-1.10	66672.390	3.5	98568.750	3.5
313.4290	28.01	-2.20	66571.340	2.5	98467.250	3.5
313.4297	24.01	-.44	35610.500	4.5	67506.340	5.5
313.4301	18.00	-3.13	93143.800	2.0	125039.600	1.0
313.4312	26.02	-3.70	109570.840	2.0	141466.530	3.0
313.4329	8.01	-.69	206730.800	.5	238626.320	.5
313.4366	18.01	-1.73	173347.830	1.5	205242.970	.5
313.4377	22.00	-2.46	15975.590	3.0	47870.610	2.0
313.4408	26.00	-4.78	21715.735	5.0	53610.440	4.0
313.4431	22.00	-6.53	6556.828	1.0	38451.298	2.0
313.4448	26.00	-4.78	20874.482	3.0	52768.780	4.0
313.4507	13.01	-4.96	106918.200	1.0	138811.900	2.0
313.4608	28.01	-3.17	71770.830	2.5	103663.500	1.5
313.4612	27.00	-3.61	13795.520	2.5	45688.150	2.5
313.4618	28.00	-2.78	30922.763	5.0	62815.340	5.0
313.4634	26.00	-2.03	21999.132	4.0	53891.540	3.0
313.4659	22.00	-1.12	8492.421	1.0	40384.580	1.0
313.4672	25.01	-1.13	53781.700	3.0	85673.720	4.0
313.4714	25.01	-2.26	82136.200	4.0	114027.800	4.0
313.4720	72.01	-.60	2984.328	0.0	34885.104	0.0
313.4725	7.01	-1.67	189335.160	3.0	221226.650	3.0
313.4788	25.01	-2.75	49889.860	3.0	81780.700	3.0
313.4812	25.01	-1.40	82136.200	4.0	114026.800	5.0
313.4823	24.00	-2.05	27597.220	3.0	59487.710	4.0
313.4828	8.01	-.03	207002.520	3.5	238892.960	2.5
313.4861	25.01	-3.44	82136.200	4.0	114026.300	3.0
313.4868	23.02	-2.09	56669.050	1.5	88559.080	1.5
313.4920	25.00	-3.28	23296.670	3.5	55186.170	2.5
313.4922	23.01	.48	20363.220	6.0	52252.700	6.0
313.4943	14.02	-2.99	225526.330	3.0	257415.600	2.0
313.4943	14.02	-3.90	225526.330	3.0	257415.600	3.0
313.4964	26.01	-3.06	60441.050	1.5	92330.100	2.5
313.4972	24.00	-1.65	24056.110	5.0	55945.080	5.0
313.4976	18.03	-3.14	257348.890	1.5	289237.820	1.5
313.5001	25.01	-2.27	52379.380	2.0	84268.060	1.0
313.5030	64.01	-1.06	241.973	0.0	32139.594	0.0
313.5044	22.00	-.96	16106.080	4.0	47994.320	5.0
313.5170	39.01	-1.69	1371.178	0.0	33267.375	0.0
313.5179	23.00	-3.63	8412.940	.5	40299.810	.5
313.5195	23.03	-1.12	225804.100	2.0	257690.800	3.0
313.5228	28.01	-3.63	101144.630	3.5	133031.000	4.5
313.5324	24.01	.06	38509.070	3.5	70394.460	4.5
313.5336	28.00	-2.50	30922.763	5.0	62808.030	6.0
313.5349	27.00	-3.66	8460.810	2.5	40345.950	2.5
313.5358	26.01	-1.09	31387.980	2.5	63273.030	2.5
313.5482	11.01	-.38	266285.360	0.0	298169.140	1.0
313.5487	25.01	-3.33	55696.500	4.0	87580.230	4.0
313.5514	25.01	-1.57	82144.340	3.0	114027.800	4.0
313.5522	22.00	-5.18	6661.003	3.0	38544.380	3.0
313.5569	26.01	-1.98	66411.700	6.5	98294.600	5.5
313.5661	25.01	-2.12	82144.340	3.0	114026.300	3.0
313.5703	15.01	-2.01	107923.570	2.0	139805.100	3.0
313.5716	24.01	-.32	35707.660	5.5	67589.060	6.5
313.5736	25.01	-2.25	34761.810	5.0	66643.010	4.0
313.5740	24.00	-1.86	28637.000	3.0	60518.160	3.0
313.5740	24.00	-2.18	28637.000	3.0	60518.160	3.0
313.5746	13.01	-1.53	106918.200	1.0	138799.300	0.0
313.5790	10.01	-2.08	249839.630	.5	281720.280	1.5
313.5809	25.01	-3.14	82144.340	3.0	114024.800	2.0
313.5815	10.01	-3.22	219130.780	2.5	251011.180	2.5
313.5861	26.00	-1.84	19788.248	4.0	51668.175	4.0
313.5874	30.02	-4.87	260981.900	3.0	292861.700	2.0
313.5878	28.01	-3.80	68965.650	1.5	100845.410	.5
313.5890	42.00	.22	23955.283	0.0	55844.157	0.0
313.5890	73.00	-.44	9598.245	0.0	41487.119	0.0
313.5894	24.01	-1.85	73485.600	3.5	105365.200	4.5
313.5920	24.00	-1.44	25106.340	3.0	56985.670	3.0
313.5950	16.02	-.89	173191.730	2.0	205070.750	3.0
313.5967	10.01	-1.68	274364.570	2.5	306243.420	2.5
313.6019	22.00	-.29	16961.420	3.0	48839.740	3.0
313.6019	20.00	-1.70	15157.901	0.0	47036.225	1.0
313.6079	26.00	-2.36	19350.882	5.0	51228.595	5.0
313.6112	25.02	-3.18	144817.680	3.5	176695.060	4.5
313.6116	22.00	-2.52	8492.421	1.0	40369.760	0.0
313.6121	26.00	-4.23	21038.987	2.0	52916.278	2.0
313.6165	23.00	-4.78	2153.200	1.5	34030.040	1.5
313.6220	90.00	-.42	4920.109	0.0	36805.627	0.0
313.6235	26.02	-3.93	97041.380	3.0	128917.510	2.0
313.6256	26.02	-4.88	168780.100	5.0	200656.020	6.0
313.6257	23.03	-2.37	256251.700	4.0	288127.600	4.0
313.6323	25.01	-1.76	82151.070	2.0	114026.300	3.0
313.6349	28.01	-3.79	104081.040	4.5	135956.010	5.5
313.6460	42.00	0.00	16615.449	0.0	48698.527	0.0
313.6471	25.01	-2.14	82151.070	2.0	114024.800	2.0
313.6476	10.01	-4.30	219648.440	1.5	251522.120	1.5
313.6480	18.01	-3.93	173347.830	1.5	205221.470	1.5
313.6507	23.01	.39	20280.190	5.0	52153.550	5.0
313.6537	26.02	-2.23	83237.860	3.0	115110.920	4.0
313.6560	44.00	-.68	7985.094	0.0	39867.156	0.0
313.6567	28.01	-3.75	104646.520	3.5	136519.280	4.5
313.6599	25.01	-3.14	82151.070	2.0	114023.500	1.0
313.6667	24.01	-.42	19798.010	2.5	51669.750	2.5
313.6677	29.01	-2.94	116643.960	3.0	148515.600	4.0
313.6678	23.00	-3.42	8715.720	3.5	40587.350	3.5
313.6707	22.01	-4.00	8710.470	1.5	40581.800	2.5
313.6720	58.01	-.28	4194.191	0.0	36074.627	0.0
313.6725	27.00	-2.12	0.000	4.5	31871.150	3.5
313.6750	42.00	.13	23390.681	0.0	55270.812	0.0
313.6750	70.01	-.41	32908.268	0.0	64788.399	0.0
313.6815	18.02	-2.82	240257.390	1.0	272127.820	1.0
313.6830	90.00	-1.33	0.000	0.0	31879.318	0.0
313.6832	25.02	-4.19	84981.630	3.5	116851.690	3.5
313.6854	23.01	-1.61	30306.400	3.0	62176.240	4.0
313.6917	28.01	-2.94	105838.060	3.5	137707.260	3.5
313.6920	25.01	-4.61	43850.420	2.0	75719.590	1.0
313.6929	25.01	-1.99	82155.720	1.0	114024.800	2.0
313.6930	64.00	-.36	0.000	0.0	31878.301	0.0
313.6960	40.00	-.19	5000.766	0.0	36878.763	0.0
313.6970	41.00	-1.14	1129.205	0.0	33007.100	0.0
313.6971	28.01	-3.59	105838.060	3.5	137706.710	2.5
313.6976	25.00	-1.24	27248.000	1.5	59116.600	2.5
313.6996	27.00	-1.39	14036.280	1.5	45904.080	1.5
313.7043	25.01	-3.72	53805.800	4.0	85673.720	4.0
313.7057	25.01	-2.30	82155.720	1.0	114023.500	1.0
313.7099	24.01	-2.53	42986.730	1.5	74854.080	.5
313.7139	24.00	-3.67	28637.000	3.0	60503.940	4.0
313.7200	25.00	-2.94	35114.980	2.5	66981.300	3.5
313.7224	25.02	-3.27	144817.680	3.5	176683.760	2.5
313.7239	23.01	-2.35	30267.460	2.0	62133.390	3.0
313.7240	23.00	-3.78	2153.200	1.5	34019.120	1.5
313.7286	26.01	-2.47	54902.420	1.5	86767.870	2.5
313.7297	25.01	-2.30	82158.160	0.0	114023.500	1.0
313.7300	64.00	-.36	0.000	0.0	31874.542	0.0
313.7325	27.00	-1.64	1809.330	1.5	33674.380	2.5
313.7327	22.00	-2.02	15975.590	3.0	47840.620	3.0
313.7361	28.01	-2.61	67694.640	2.5	99559.330	2.5
313.7366	22.00	-2.15	8602.340	2.0	40466.979	2.0
313.7385	28.00	-1.82	26665.903	3.0	58530.360	3.0
313.7422	24.01	-2.20	38563.150	4.5	70427.220	3.5
313.7440	73.01	0.00	9598.245	0.0	41471.364	0.0
313.7452	27.00	-1.29	16470.600	1.5	48334.370	1.5
313.7458	23.00	-5.51	2112.320	.5	33976.020	1.5
313.7491	26.01	-4.84	54904.500	3.5	86767.870	2.5
313.7492	28.01	-4.46	104081.040	4.5	135944.400	3.5
313.7510	72.00	-.34	10485.478	0.0	42357.886	0.0
313.7525	26.02	-3.71	90483.590	3.0	122346.610	3.0
313.7529	25.02	-3.56	85200.760	5.5	117063.740	4.5
313.7546	24.01	-1.45	33521.230	3.5	65384.040	4.5
313.7550	26.00	-2.56	22249.430	3.0	54112.203	2.0
313.7600	58.01	-.62	3306.958	0.0	35178.452	0.0
313.7630	18.01	-1.59	158730.210	2.5	190592.170	1.5
313.7710	45.00	-1.44	3387.616	0.0	35257.993	0.0
313.7750	27.00	-1.43	14399.280	.5	46260.020	1.5
313.7859	23.02	-3.20	109854.870	3.5	141714.500	2.5
313.7861	11.01	-.26	299889.160	1.0	331748.770	1.0
313.7861	11.01	-.26	299889.160	1.0	331748.770	1.0
313.7883	24.00	-3.27	24056.110	5.0	55915.500	4.0
313.7892	24.00	-3.57	30787.300	1.0	62646.600	2.0
313.7931	23.00	-4.14	8578.520	2.5	40437.420	1.5
313.8056	10.01	-1.01	280947.100	1.5	312804.730	2.5
313.8058	23.01	.14	30318.630	4.0	62176.240	4.0
313.8092	26.00	-4.03	28819.966	5.0	60677.230	5.0
313.8118	28.01	-2.86	68735.980	2.5	100592.980	3.5
313.8124	10.01	-1.55	280947.100	1.5	312804.040	1.5
313.8170	23.00	-5.96	2311.370	3.5	34167.840	2.5
313.8183	25.01	-1.93	49291.310	3.0	81147.650	2.0
313.8196	24.00	-1.36	25177.390	4.0	57033.600	4.0
313.8210	26.01	-1.02	66589.170	4.5	98445.240	4.5
313.8223	25.00	-2.83	23549.200	2.5	55405.140	2.5
313.8231	28.01	-2.05	68154.310	1.5	100010.170	.5
313.8300	58.01	-.93	3629.588	0.0	35493.973	0.0
313.8309	10.01	-2.20	280989.530	1.5	312844.600	1.5
313.8312	24.00	.38	31048.000	7.0	62903.030	6.0
313.8340	24.00	-2.28	31987.060	4.0	63841.810	4.0
313.8373	27.00	-2.43	20500.710	1.5	52355.120	.5
313.8374	23.00	-5.65	2112.320	.5	33966.720	.5
313.8390	26.02	-3.99	198338.620	4.0	230192.860	3.0
313.8402	26.00	-4.06	12560.933	3.0	44415.057	4.0
313.8407	10.01	-2.76	280989.530	1.5	312843.600	.5
313.8443	24.00	-1.45	31049.330	6.0	62903.030	6.0
313.8450	8.01	-.27	206877.900	2.5	238731.540	1.5
313.8456	21.01	-.62	28021.210	2.0	59874.790	1.0
313.8503	17.02	-3.77	174093.800	1.5	205946.900	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
313.8511	26.01	-8.22	22637.190	4.5	54490.200	3.5
313.8521	26.01	-1.75	72130.440	4.5	103983.350	3.5
313.8557	22.00	-5.60	6598.749	2.0	38451.298	2.0
313.8572	25.01	-2.70	49427.320	4.0	81279.710	4.0
313.8591	28.00	-2.52	26665.903	3.0	58518.110	4.0
313.8610	24.00	-4.86	24056.110	5.0	55908.120	6.0
313.8615	22.00	-1.43	16267.510	5.0	48119.470	5.0
313.8680	40.01	-.24	725.918	0.0	32586.445	0.0
313.8710	64.00	-.50	483.945	0.0	32344.168	0.0
313.8720	42.01	.74	25891.064	0.0	57751.185	0.0
313.8827	28.01	-4.61	74283.330	.5	106133.140	1.5
313.8843	22.00	-.17	16875.190	2.0	48724.830	1.0
313.8850	23.00	-6.78	8476.200	1.5	40325.770	2.5
313.8865	28.01	-1.42	103663.500	1.5	135512.920	2.5
313.8880	27.00	-3.19	16467.900	4.5	48317.170	3.5
313.8892	22.00	-.38	16875.190	2.0	48724.340	2.0
313.8944	26.00	-3.91	24574.655	4.0	56423.276	4.0
313.9017	18.01	-.38	155043.070	2.5	186890.950	2.5
313.9037	24.00	-3.42	31055.350	5.0	62903.030	6.0
313.9075	17.01	-3.09	127726.900	1.0	159574.200	2.0
313.9091	26.00	-3.42	19757.020	3.0	51604.146	3.0
313.9142	26.01	-4.94	60270.370	3.5	92116.980	4.5
313.9195	28.01	-3.30	105861.190	2.5	137707.260	3.5
313.9249	26.02	-4.59	170310.600	3.0	202156.130	2.0
313.9254	23.00	-6.30	2220.130	2.5	34065.610	2.5
313.9261	18.01	-1.61	174409.830	1.5	206255.230	2.5
313.9306	23.00	-2.01	9544.540	.5	41389.490	1.5
313.9330	17.02	-.26	174093.800	1.5	205938.500	1.5
313.9365	25.00	-2.28	34938.700	4.5	66783.050	3.5
313.9390	78.00	-1.40	725.918	0.0	32579.240	0.0
313.9450	25.00	-4.05	35165.050	1.5	67008.540	2.5
313.9470	25.01	-3.93	38901.800	4.0	70745.080	3.0
313.9482	28.01	-4.98	101366.140	2.5	133209.300	2.5
313.9554	28.01	-4.28	99844.130	3.5	131686.560	4.5
313.9560	92.01	-.45	4678.136	0.0	36529.733	0.0
313.9592	26.00	-4.63	19912.486	2.0	51754.534	1.0
313.9598	26.00	-3.49	19788.248	4.0	51630.230	5.0
313.9650	72.01	-.90	6291.287	0.0	38141.971	0.0
313.9652	26.00	-1.19	19350.882	5.0	51192.320	4.0
313.9674	24.01	-2.65	35607.600	3.5	67448.820	4.5
313.9737	21.01	.33	28161.030	3.0	60001.600	3.0
313.9739	23.01	.30	20242.320	4.0	52082.880	4.0
313.9790	75.00	-.50	17180.052	0.0	49029.316	0.0
313.9795	8.01	-.66	206786.340	1.5	238626.320	.5
313.9800	40.00	-.30	5000.766	0.0	36849.928	0.0
313.9832	25.01	-.82	47073.560	3.0	78913.170	2.0
313.9853	27.02	-4.65	139627.200	1.5	171466.600	2.5
313.9853	27.02	-4.65	139627.200	1.5	171466.600	2.5
313.9859	25.01	-2.94	49820.160	2.0	81659.500	3.0
313.9861	22.00	-.87	16267.510	5.0	48106.830	6.0
313.9889	26.02	-3.75	119697.640	2.0	151536.680	1.0
313.9900	24.01	-1.45	33418.110	2.5	65257.030	3.5
313.9915	28.01	-1.68	98822.550	6.5	130661.320	5.5
313.9940	75.00	-.71	15082.956	0.0	46930.698	0.0
313.9942	27.00	-1.91	816.000	3.5	32654.500	2.5
313.9960	24.01	-2.33	35610.500	4.5	67448.820	4.5
313.9973	23.01	-3.88	20343.000	2.0	52181.180	1.0
313.9975	24.01	-1.39	38269.670	3.5	70107.830	4.5
313.9977	27.00	-1.03	15774.040	1.5	47612.180	1.5
313.9987	29.01	-4.27	116643.960	3.0	148482.000	3.0
314.0037	22.01	-2.72	8744.270	2.5	40581.800	2.5
314.0042	26.01	-2.89	60445.280	2.5	92282.760	3.5
314.0050	27.00	-2.51	16778.160	2.5	48615.560	2.5
314.0064	26.02	-3.15	119697.640	2.0	151534.900	2.0
314.0140	26.02	-2.96	119697.640	2.0	151534.130	3.0
314.0172	18.02	-3.20	240291.660	2.0	272127.820	1.0
314.0173	28.01	-4.90	100475.820	3.5	132311.980	4.5
314.0190	24.00	-2.62	28682.180	2.0	60518.160	3.0
314.0190	24.00	-2.23	28682.180	2.0	60518.160	3.0
314.0199	24.01	.05	38563.150	4.5	70399.040	5.5
314.0233	28.00	-4.08	30979.789	4.0	62815.340	5.0
314.0270	90.00	-.68	2823.013	0.0	34667.409	0.0
314.0310	76.00	-.14	15082.956	0.0	46926.946	0.0
314.0312	29.00	-.99	39038.240	0.0	70882.210	0.0
314.0355	10.01	-.69	274409.110	3.5	306243.420	2.5
314.0376	27.02	-4.63	138970.500	1.5	170804.600	1.5
314.0386	26.00	-.79	26140.164	3.0	57974.160	2.0
314.0407	25.02	-3.07	145643.450	2.5	177477.230	2.5
314.0410	77.00	-.54	12824.546	0.0	44667.522	0.0
314.0500	41.01	.21	12743.888	0.0	44585.951	0.0
314.0562	28.01	-3.52	74300.930	1.5	106133.140	1.5
314.0651	24.01	-2.60	38563.150	4.5	70394.460	4.5
314.0681	26.01	-.91	66463.590	5.5	98294.600	5.5
314.0710	22.00	-2.29	16106.080	4.0	47936.790	3.0
314.0715	27.00	-1.67	16195.680	.5	48026.340	.5
314.0760	72.01	-.37	12017.970	0.0	43857.397	0.0
314.0768	23.00	-2.20	9824.580	2.5	41654.700	2.5
314.0786	20.00	-1.34	15210.063	1.0	47040.007	2.0
314.0787	22.00	-8.39	6742.757	4.0	38572.692	5.0
314.0789	24.00	-2.82	32097.360	6.0	63927.270	5.0
314.0804	28.01	-2.16	103663.500	1.5	135493.260	1.5
314.0841	25.00	-2.95	31076.420	1.5	62905.610	2.5
314.0920	70.01	.17	28633.420	0.0	60471.225	0.0
314.0958	26.02	-3.37	109570.840	2.0	141399.040	2.0
314.0969	18.01	-2.59	173393.380	2.5	205221.470	1.5
314.0970	44.00	-.55	9033.642	0.0	40870.941	0.0
314.1003	22.00	-3.27	11639.804	3.0	43467.550	2.0
314.1003	22.00	-5.40	6842.964	5.0	38670.710	4.0
314.1077	23.01	-.98	30306.400	3.0	62133.390	3.0
314.1120	66.01	-.92	0.000	0.0	31835.778	0.0
314.1130	68.00	-.69	403.288	0.0	32238.965	0.0
314.1159	20.00	-1.82	15210.063	1.0	47036.225	1.0
314.1188	22.00	-8.23	6842.964	5.0	38668.832	6.0
314.1193	26.02	-4.29	150654.900	3.0	182480.720	2.0
314.1214	15.01	-1.62	106001.990	1.0	137827.600	1.0
314.1239	10.01	-2.29	280947.100	1.5	312772.450	2.5
314.1295	24.01	-2.11	35569.020	2.5	67393.800	3.5
314.1298	10.01	-1.92	276276.850	1.5	308101.610	1.5
314.1331	10.01	-.30	276276.850	1.5	308101.270	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
314.1340	28.01	-4.72	104503.220	2.5	136327.550	1.5
314.1368	28.01	-3.90	101366.140	2.5	133190.190	1.5
314.1380	75.00	-.60	11534.025	0.0	43367.168	0.0
314.1411	23.00	-4.85	8476.200	1.5	40299.810	.5
314.1420	74.00	-.48	12098.628	0.0	43931.366	0.0
314.1488	23.01	-.72	20980.920	2.0	52803.750	1.0
314.1489	23.00	-6.34	2153.200	1.5	33976.020	1.5
314.1505	24.00	-4.36	23386.350	3.0	55209.010	4.0
314.1516	37.00	-7.86	0.000	0.0	31831.765	0.0
314.1530	30.02	-2.94	221052.200	4.0	252874.600	3.0
314.1536	22.00	-.47	7255.369	2.0	39077.713	1.0
314.1584	37.00	-8.14	0.000	0.0	31831.076	0.0
314.1667	22.00	.50	17215.440	5.0	49036.460	4.0
314.1669	25.01	-4.99	55115.800	2.0	86936.800	2.0
314.1673	25.01	-2.83	55759.270	3.0	87580.230	4.0
314.1720	70.01	-.19	34360.104	0.0	66189.802	0.0
314.1774	24.01	-2.17	42898.120	2.5	74718.050	1.5
314.1788	24.00	-3.24	27597.220	3.0	59417.010	3.0
314.1821	25.00	-3.47	23549.200	2.5	55368.660	1.5
314.1840	50.00	-.79	17018.737	0.0	48847.220	0.0
314.1840	90.01	-.67	7259.177	0.0	39087.660	0.0
314.1879	24.00	-1.31	24056.110	5.0	55874.980	5.0
314.1881	26.00	-3.79	21038.987	2.0	52857.840	1.0
314.1900	10.01	-2.52	281025.940	2.5	312844.600	1.5
314.1937	24.01	-1.45	35569.020	2.5	67387.300	2.5
314.1978	22.00	-3.62	15156.787	4.0	46974.650	5.0
314.2008	23.01	-.40	30267.460	2.0	62085.020	2.0
314.2092	6.00	-4.38	88061.280	1.0	119878.000	1.0
314.2096	23.00	-5.00	2311.370	3.5	34128.040	3.5
314.2184	23.01	-.32	23391.090	5.0	55206.870	5.0
314.2204	26.01	-2.12	67516.370	5.5	99331.950	4.5
314.2221	26.01	-4.65	13474.430	2.5	45289.840	1.5
314.2242	10.01	-1.48	280989.530	1.5	312804.730	2.5
314.2264	28.00	-3.27	15609.861	2.0	47424.830	1.0
314.2285	23.01	-1.79	30318.630	4.0	62133.390	3.0
314.2303	25.01	-1.13	49465.130	3.0	81279.710	4.0
314.2310	10.01	-1.56	280989.530	1.5	312804.040	1.5
314.2310	58.01	-.91	967.890	0.0	32791.612	0.0
314.2396	25.00	-1.27	35041.370	3.5	66855.000	4.5
314.2407	23.00	-7.04	2153.200	1.5	33966.720	.5
314.2444	29.00	-.57	40086.787	0.0	71909.152	0.0
314.2445	26.00	-2.48	19757.020	3.0	51570.160	3.0
314.2486	28.01	-4.67	101357.200	4.5	133169.920	3.5
314.2488	23.01	.27	17910.980	4.0	49723.680	4.0
314.2514	23.00	-4.87	8412.940	.5	40225.380	1.5
314.2535	27.00	-4.20	24733.280	2.5	56545.510	2.5
314.2643	28.00	-3.82	27414.893	2.0	59226.030	1.0
314.2666	24.01	-.59	35569.020	2.5	67379.920	1.5
314.2671	18.02	-3.63	240257.590	1.0	272068.450	1.0
314.2671	25.00	-1.84	23296.670	3.5	55107.520	3.5
314.2716	19.01	-1.23	183208.400	1.0	215018.800	1.0
314.2760	57.01	-1.38	1371.178	0.0	33190.343	0.0
314.2764	23.00	-4.84	2220.130	2.5	34030.040	1.5
314.2779	9.02	-.42	384358.540	.5	416168.300	1.5
314.2810	46.00	.27	24923.174	0.0	56741.833	0.0
314.2891	26.00	-1.47	18378.187	2.0	50186.814	2.0
314.2900	64.01	-.29	9356.272	0.0	41174.020	0.0
314.2908	26.00	-2.56	20874.482	3.0	52682.930	2.0
314.2925	24.00	-2.76	25177.390	4.0	56985.670	3.0
314.2952	26.00	-3.00	24574.655	4.0	56382.664	5.0
314.2956	24.01	-1.35	38509.070	3.5	70317.040	2.5
314.2960	73.01	0.00	9678.902	0.0	41496.043	0.0
314.2999	22.00	-1.85	16106.080	4.0	47913.610	4.0
314.3040	25.01	-3.40	38720.200	6.0	70527.320	5.0
314.3117	22.00	-3.25	11776.806	4.0	43583.140	3.0
314.3130	64.01	-.46	4758.794	0.0	36574.214	0.0
314.3156	22.00	-4.90	0.000	2.0	31805.940	2.0
314.3165	23.02	-3.25	110181.470	2.5	141987.320	3.5
314.3229	25.00	-1.23	34343.900	4.5	66149.100	3.5
314.3243	26.00	-3.72	0.000	4.0	31805.059	3.0
314.3336	22.00	-.78	16458.710	6.0	48262.830	7.0
314.3391	26.02	-3.89	84671.870	3.0	116475.440	3.0
314.3433	24.00	-1.66	30858.820	2.0	62661.960	3.0
314.3478	23.01	-.87	20280.190	5.0	52082.880	4.0
314.3494	26.02	-4.21	157982.000	3.0	189784.520	2.0
314.3583	22.00	-7.12	6742.757	4.0	38544.380	3.0
314.3662	24.01	-1.37	33619.130	4.5	65419.950	5.5
314.3676	22.01	-2.79	8997.690	3.5	40798.370	3.5
314.3720	10.01	-.95	251522.120	1.5	283322.350	1.5
314.3740	22.01	-1.07	225.470	3.5	32025.500	2.5
314.3813	27.00	-2.79	5075.830	1.5	36875.130	1.5
314.3830	25.00	-3.39	34938.700	4.5	66737.820	3.5
314.3843	23.00	-3.96	2220.130	2.5	34019.120	1.5
314.3874	24.01	-1.98	35707.660	5.5	67506.340	5.5
314.3895	18.01	-2.82	172335.520	2.5	204133.980	2.5
314.3936	28.01	-1.74	103663.500	1.5	135461.550	2.5
314.3979	26.00	-.29	25899.974	4.0	57697.590	4.0
314.4024	28.01	-3.89	68281.620	.5	100078.780	1.5
314.4112	25.00	-2.26	35041.370	3.5	66837.640	2.5
314.4162	26.02	-3.99	87901.870	3.0	119697.640	2.0
314.4184	26.02	-4.30	84671.870	3.0	116467.410	4.0
314.4260	44.00	.14	14599.011	0.0	46402.997	0.0
314.4277	28.00	-2.75	28068.091	4.0	59862.690	5.0
314.4404	24.00	-3.74	23163.270	0.0	54956.590	1.0
314.4410	25.01	-2.66	49427.320	4.0	81220.580	3.0
314.4424	16.02	-1.20	172785.770	1.0	204578.890	2.0
314.4433	28.01	-4.39	99340.550	3.5	131133.580	2.5
314.4449	24.00	-2.67	21847.880	2.0	53640.740	3.0
314.4466	25.01	-.70	72010.750	4.0	103803.440	3.0
314.4475	15.04	-3.18	435100.400	1.5	466893.000	2.5
314.4475	15.04	-4.14	435100.400	1.5	466893.000	1.5
314.4479	26.00	-3.71	19912.486	2.0	51705.052	2.0
314.4495	25.02	-3.31	144672.380	2.5	176464.780	3.5
314.4516	26.00	-2.54	12968.552	2.0	44760.739	1.0
314.4525	24.02	-4.69	65890.900	3.0	97683.000	3.0
314.4538	23.00	-2.66	9636.960	1.5	41428.930	2.5
314.4546	25.00	-2.23	33825.490	2.5	65617.370	3.5
314.4600	58.01	-.41	2581.041	0.0	34381.588	0.0
314.4680	8.04	-.11	580826.000	0.0	612625.738	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
314.4700	23.01	-.85	20363.220	6.0	52153.550	5.0
314.4703	22.00	-6.93	6661.003	3.0	38451.298	2.0
314.4734	22.01	-2.40	907.960	1.5	32697.940	2.5
314.4749	26.01	-1.58	31483.200	3.5	63273.030	2.5
314.4870	25.00	-1.31	24779.320	1.5	56567.930	1.5
314.4890	26.00	-2.43	24118.815	4.0	55907.220	5.0
314.4913	26.00	-2.85	19621.004	5.0	51409.180	4.0
314.4923	26.00	-4.44	19562.435	4.0	51350.505	4.0
314.4952	24.00	-1.83	30858.820	2.0	62646.600	2.0
314.5000	64.01	-.31	1129.205	0.0	32925.707	0.0
314.5016	27.00	-3.02	14399.280	.5	46186.410	1.5
314.5054	26.00	-1.14	24118.815	4.0	55905.560	4.0
314.5060	70.01	-.19	34602.076	0.0	66397.972	0.0
314.5070	77.00	.49	28310.790	0.0	60106.585	0.0
314.5085	23.01	-.70	20980.920	2.0	52767.360	3.0
314.5086	24.01	-1.75	19798.010	2.5	51584.440	1.5
314.5107	28.00	-4.52	0.000	4.0	31786.210	3.0
314.5109	23.00	-6.04	0.000	1.5	31786.190	.5
314.5129	6.00	-4.43	88092.010	1.0	119878.000	1.0
314.5189	28.01	-4.36	104503.220	2.5	136288.600	2.5
314.5280	58.01	-.25	2581.041	0.0	34374.713	0.0
314.5285	28.01	-3.56	99340.550	3.5	131124.960	3.5
314.5320	72.01	-1.57	0.000	0.0	31793.267	0.0
314.5330	23.01	-1.60	2808.760	3.0	34592.720	2.0
314.5339	24.00	-3.14	27703.840	4.0	59487.710	4.0
314.5346	24.00	-2.25	21856.940	3.0	53640.740	3.0
314.5351	23.01	-1.78	3162.800	5.0	34946.550	4.0
314.5395	24.01	-4.68	35610.500	4.5	67393.800	3.5
314.5400	41.01	.36	8227.067	0.0	40019.526	0.0
314.5403	22.01	-2.68	983.800	2.5	32767.020	3.5
314.5433	10.01	-.92	280989.530	1.5	312772.450	2.5
314.5450	26.00	-3.21	19757.020	3.0	51539.770	2.0
314.5498	27.00	-.95	16195.680	.5	47977.940	.5
314.5500	22.00	-1.16	8602.340	2.0	40384.580	1.0
314.5520	64.01	.27	9033.642	0.0	40824.888	0.0
314.5525	24.00	-1.45	24940.610	2.0	56722.600	1.0
314.5560	92.01	-.40	5484.711	0.0	37275.553	0.0
314.5565	25.02	-3.54	176970.010	5.5	208751.600	4.5
314.5630	24.00	.24	31049.330	6.0	62830.260	5.0
314.5630	90.00	-1.34	0.000	0.0	31790.134	0.0
314.5677	25.01	-2.03	34761.810	5.0	66542.260	5.0
314.5698	11.01	-.95	299889.160	1.0	331669.400	2.0
314.5698	11.01	-.95	299889.160	1.0	331669.400	2.0
314.5701	28.00	-1.95	1332.153	3.0	33112.368	3.0
314.5734	25.00	-1.68	24788.050	2.5	56567.930	1.5
314.5752	24.01	-.21	35607.600	3.5	67387.300	2.5
314.5777	29.01	-4.26	116326.160	3.0	148105.600	4.0
314.5842	10.01	-1.66	281025.940	2.5	312804.730	2.5
314.5859	23.01	-1.14	30306.400	3.0	62085.020	2.0
314.5901	18.01	-3.95	172335.520	2.5	204113.710	1.5
314.5910	10.01	-2.94	281025.940	2.5	312804.040	1.5
314.5969	23.01	-1.53	2968.220	4.0	34745.720	3.0
314.5984	25.01	-2.75	49882.150	4.0	81659.500	3.0
314.6015	29.01	-2.23	116326.160	3.0	148103.200	3.0
314.6020	18.03	-2.65	257348.890	1.5	289125.880	.5
314.6040	18.02	-2.42	240291.660	2.0	272068.450	1.0
314.6040	90.01	-.65	6129.972	0.0	37915.963	0.0
314.6104	23.01	-3.48	32040.760	2.0	63816.900	3.0
314.6116	25.01	-2.43	34910.430	4.0	66686.450	3.0
314.6128	23.03	-.58	255445.500	3.0	287221.400	2.0
314.6160	69.01	-.61	8711.012	0.0	40495.791	0.0
314.6176	26.02	-3.91	119982.260	1.0	151757.670	2.0
314.6177	24.01	-2.63	35569.020	2.5	67344.420	2.5
314.6223	25.01	-1.50	52653.270	4.0	84428.210	5.0
314.6226	24.00	-1.45	31055.350	5.0	62830.260	5.0
314.6228	23.01	-.41	20617.050	2.0	52391.940	3.0
314.6230	58.01	-.76	5081.424	0.0	36865.496	0.0
314.6241	22.00	-1.30	16458.710	6.0	48233.470	6.0
314.6244	28.01	-3.19	99340.550	3.5	131115.280	4.5
314.6257	25.02	-3.73	85077.090	4.5	116851.690	3.5
314.6327	28.00	-.85	27414.893	2.0	59188.780	3.0
314.6330	24.01	-2.92	36101.820	3.5	67875.680	3.5
314.6410	58.01	-.28	2339.068	0.0	34121.321	0.0
314.6426	18.01	-3.35	155043.070	2.5	186815.960	3.5
314.6430	26.01	-2.49	66672.390	3.5	98445.240	4.5
314.6464	26.00	-2.22	19562.435	4.0	51334.940	4.0
314.6477	28.01	-4.46	105981.500	4.5	137753.870	4.5
314.6506	28.01	-4.63	105439.850	1.5	137211.930	.5
314.6641	25.01	-3.41	53597.130	2.0	85367.850	2.0
314.6717	11.01	-1.22	300107.710	2.0	331877.670	1.0
314.6748	25.01	-3.89	49889.860	3.0	81659.500	3.0
314.6748	26.01	-3.59	30388.550	4.5	62158.190	4.5
314.6816	23.01	-.86	20622.990	3.0	52391.940	3.0
314.6821	29.00	-.83	40086.787	0.0	71864.889	0.0
314.6880	64.01	.09	9275.615	0.0	41053.122	0.0
314.6896	21.01	-.64	28161.030	3.0	59929.180	2.0
314.6919	23.01	.16	34228.790	3.0	65996.700	3.0
314.6919	27.00	-2.77	16778.160	2.5	48546.070	1.5
314.6990	23.03	-1.99	226521.600	0.0	258288.800	1.0
314.7026	18.01	-2.88	158167.710	1.5	189934.550	.5
314.7057	27.00	-1.46	1406.840	2.5	33173.360	3.5
314.7086	24.01	-2.53	36101.820	3.5	67868.050	2.5
314.7108	29.01	-3.42	118484.000	3.0	150250.000	2.0
314.7190	24.01	-2.54	35569.020	2.5	67334.200	3.5
314.7190	62.01	-1.11	2661.698	0.0	34436.075	0.0
314.7195	25.01	-2.92	70940.240	2.0	102705.370	3.0
314.7204	24.01	-.57	20024.180	3.5	51789.210	3.5
314.7216	24.01	-.71	33619.130	4.5	65384.040	4.5
314.7264	22.00	.24	17075.310	4.0	48839.740	3.0
314.7267	25.01	-3.31	59537.400	4.0	91301.800	5.0
314.7271	9.01	-2.10	235150.580	2.0	266914.930	3.0
314.7292	26.00	-.75	21999.132	4.0	53763.280	3.0
314.7326	26.02	-4.56	150654.900	3.0	182418.700	4.0
314.7350	42.00	.36	16696.107	0.0	48468.868	0.0
314.7370	73.00	-.38	13227.833	0.0	45000.392	0.0
314.7397	26.02	-3.27	117521.910	4.0	149285.000	3.0
314.7402	25.01	-2.43	49291.310	3.0	81054.350	2.0
314.7414	22.00	-.05	16961.420	3.0	48724.340	2.0
314.7428	9.01	-2.25	235150.580	2.0	266913.350	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
314.7442	28.01	-4.82	99340.550	3.5	131103.180	2.5
314.7492	25.01	-3.50	49517.580	5.0	81279.710	4.0
314.7496	26.00	-4.16	24335.764	2.0	56097.850	3.0
314.7502	26.00	-3.65	22838.320	2.0	54600.350	3.0
314.7525	9.01	-2.47	235150.580	2.0	266912.370	1.0
314.7559	28.01	-4.42	105981.500	4.5	137742.950	5.5
314.7636	24.00	-1.22	27597.220	3.0	59357.900	2.0
314.7672	25.01	-1.85	49291.310	3.0	81051.620	3.0
314.7676	28.01	-4.89	98467.250	3.5	130227.520	2.5
314.7688	26.00	-2.37	28604.610	2.0	60364.760	3.0
314.7710	10.00	-3.27	135888.717	1.0	167648.640	2.0
314.7723	28.00	-3.15	13521.352	2.0	45281.152	3.0
314.7794	26.00	-1.00	24338.766	3.0	56097.850	3.0
314.7819	24.01	-2.81	35610.500	4.5	67369.330	5.5
314.7840	28.01	-4.25	98467.250	3.5	130225.870	3.5
314.7887	26.01	-4.82	46967.470	2.5	78725.610	1.5
314.7891	23.03	-.40	255463.300	2.0	287221.400	2.0
314.7899	24.00	-1.98	24833.860	3.0	56591.880	2.0
314.7901	17.01	-2.38	121499.000	2.0	153257.000	2.0
314.7960	23.03	-2.59	234121.800	0.0	265879.200	1.0
314.8040	73.00	-.63	9194.957	0.0	40960.754	0.0
314.8050	22.01	-1.15	0.000	1.5	31756.500	1.5
314.8088	15.01	-1.95	106001.990	1.0	137758.100	0.0
314.8110	23.00	-7.32	2220.130	2.5	33976.020	1.5
314.8154	25.01	-1.57	49465.130	3.0	81220.580	3.0
314.8160	26.00	-3.93	22249.430	3.0	54004.820	3.0
314.8168	28.01	-3.39	101246.160	.5	133001.470	.5
314.8182	25.00	-1.02	18402.460	2.5	50157.630	3.5
314.8202	28.01	-2.69	68735.980	2.5	100490.950	1.5
314.8206	18.01	-3.91	170400.940	2.5	202155.860	2.5
314.8248	9.03	-3.27	460640.600	2.0	492395.100	2.0
314.8272	22.00	-2.32	15220.390	5.0	46974.650	5.0
314.8274	23.00	-5.97	2311.370	3.5	34065.610	2.5
314.8333	29.00	-1.98	41538.623	0.0	73301.464	0.0
314.8391	24.00	-3.44	31009.000	3.0	62762.060	4.0
314.8408	26.00	-1.91	19621.004	5.0	51373.694	5.0
314.8410	72.00	-.59	6533.259	0.0	38295.323	0.0
314.8422	28.01	-3.39	99340.550	3.5	131093.300	4.5
314.8441	24.00	-.04	23933.900	4.0	55686.460	5.0
314.8443	23.00	-2.53	9636.960	1.5	41389.490	1.5
314.8460	58.01	-.60	3548.931	0.0	35310.491	0.0
314.8461	26.00	-4.20	19350.882	5.0	51103.237	5.0
314.8474	25.00	-3.77	31001.150	2.5	62753.370	2.5
314.8556	29.01	-3.43	118991.500	4.0	150742.900	3.0
314.8611	10.00	-3.19	135888.717	1.0	167639.561	1.0
314.8638	22.00	-2.28	16267.510	5.0	48018.080	4.0
314.8650	58.01	-.35	7017.204	0.0	38776.847	0.0
314.8680	10.01	-.63	281720.280	1.5	313470.420	2.5
314.8727	23.01	-.76	44098.460	3.0	75848.130	3.0
314.8752	27.00	-2.86	16467.900	4.5	48217.320	3.5
314.8776	23.00	-3.52	8476.200	1.5	40225.380	1.5
314.8820	40.00	-.29	4355.506	0.0	36113.434	0.0
314.8850	25.00	-.59	34138.880	6.5	65887.310	5.5
314.8868	28.01	-1.85	98467.250	3.5	130215.500	4.5
314.8940	26.02	-4.09	84671.870	3.0	116419.390	2.0
314.8967	23.00	-3.48	8578.520	2.5	40325.770	2.5
314.9041	10.01	-2.88	281025.940	2.5	312772.450	2.5
314.9084	10.01	-1.22	281025.940	2.5	312772.010	3.5
314.9091	24.01	-1.77	35607.600	3.5	67353.600	4.5
314.9150	69.01	-2.18	0.000	0.0	31754.600	0.0
314.9190	9.04	-.58	784771.000	2.5	816516.000	2.5
314.9205	24.00	-2.43	24200.230	6.0	55945.080	5.0
314.9218	26.01	-2.40	72238.630	2.5	103983.350	3.5
314.9265	11.01	-.41	268766.670	1.0	300510.920	1.0
314.9305	27.00	-2.04	1406.840	2.5	33150.680	1.5
314.9379	24.01	-2.47	35610.500	4.5	67353.600	4.5
314.9397	29.01	-2.88	119039.680	2.0	150782.600	2.0
314.9409	27.01	-3.50	24267.800	1.0	56010.600	2.0
314.9430	58.01	-.84	4436.164	0.0	36187.941	0.0
314.9492	26.00	-1.42	23783.617	5.0	55525.580	5.0
314.9508	29.00	-1.61	41538.623	0.0	73289.614	0.0
314.9520	25.00	-1.16	35041.370	3.5	66783.050	3.5
314.9524	28.01	-2.05	98467.250	3.5	130208.890	3.5
314.9529	29.01	-3.08	85388.770	2.0	117130.360	2.0
314.9548	27.02	-1.70	140200.100	1.5	171941.500	.5
314.9548	27.02	-1.70	140200.100	1.5	171941.500	.5
314.9560	14.03	.38	218266.860	.5	250008.140	1.5
314.9571	24.01	-3.36	35707.660	5.5	67448.820	4.5
314.9673	29.01	-3.42	116326.160	3.0	148066.300	2.0
314.9702	28.01	-2.01	68735.980	2.5	100475.820	3.5
314.9721	28.01	-2.94	98467.250	3.5	130206.900	4.5
314.9731	10.01	-2.37	281025.940	2.5	312765.490	3.5
314.9767	22.01	-6.06	20891.880	3.5	52631.070	3.5
314.9812	24.01	-.90	33418.110	2.5	65156.840	2.5
314.9850	74.01	.34	13066.518	0.0	44814.062	0.0
314.9866	7.01	-.93	189335.160	3.0	221073.350	4.0
314.9917	25.00	-2.96	23719.520	1.5	55457.200	.5
314.9942	25.01	-1.08	53805.800	4.0	85543.230	5.0
314.9944	18.01	-2.00	179931.770	1.5	211669.180	2.5
314.9961	28.01	-4.23	105499.050	3.5	137236.280	3.5
315.0002	24.01	-2.74	35607.600	3.5	67344.420	2.5
315.0049	28.01	-3.81	101246.160	.5	132982.510	1.5
315.0053	23.00	-5.66	8578.520	2.5	40314.830	3.5
315.0070	69.01	-1.11	8711.012	0.0	40456.338	0.0
315.0103	24.01	-.84	33521.230	3.5	65257.030	3.5
315.0151	25.02	-3.87	144959.740	4.5	176695.060	4.5
315.0169	28.01	-3.47	101247.370	2.5	132982.510	1.5
315.0194	26.00	-4.33	20019.648	1.0	51754.534	1.0
315.0228	22.00	-3.43	16106.080	4.0	47840.620	3.0
315.0262	28.01	-4.85	100490.950	1.5	132225.150	1.5
315.0263	29.01	-2.42	116371.410	4.0	148105.600	4.0
315.0276	7.01	-1.62	189335.160	3.0	221069.220	3.0
315.0423	25.01	-2.75	34910.430	4.0	66643.010	4.0
315.0501	29.01	-3.97	116371.410	4.0	148103.200	3.0
315.0516	18.01	-2.84	163299.470	2.5	195031.120	2.5
315.0548	24.01	-2.70	42986.730	1.5	74718.050	1.5
315.0583	25.01	-3.39	32787.600	4.0	64518.570	5.0
315.0609	25.00	-2.84	23549.200	2.5	55279.910	1.5
315.0610	77.00	-.99	5726.684	0.0	37466.569	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
315.0638	24.00	-3.10	21810.840	1.0	53541.250	2.0
315.0662	29.01	-3.10	88362.030	2.0	120092.200	2.0
315.0682	22.00	-3.74	15108.121	3.0	46838.090	4.0
315.0690	44.00	-.87	7985.094	0.0	39724.173	0.0
315.0706	22.00	-9.41	6842.964	5.0	38572.692	5.0
315.0749	20.00	-1.06	15315.943	2.0	47045.241	3.0
315.0757	26.00	-1.69	28819.966	5.0	60549.180	5.0
315.0797	25.00	-1.95	35114.980	2.5	66843.790	1.5
315.0823	28.01	-4.13	68281.620	.5	100010.170	.5
315.0850	73.00	-1.19	9194.957	0.0	40932.425	0.0
315.0897	23.01	-4.51	44657.990	2.0	76385.800	3.0
315.0996	22.00	-1.85	16267.510	5.0	47994.320	5.0
315.1017	24.01	-2.04	35607.600	3.5	67334.200	3.5
315.1033	29.01	-1.87	108014.660	3.0	139741.100	3.0
315.1080	92.01	-1.39	1693.808	0.0	33428.959	0.0
315.1093	25.00	-1.92	34423.270	3.5	66149.100	3.5
315.1100	28.01	-4.66	105981.500	4.5	137707.260	3.5
315.1101	22.00	-4.55	0.000	2.0	31725.750	1.0
315.1128	24.01	-3.06	33694.470	5.5	65419.950	5.5
315.1130	58.01	-.52	5081.424	0.0	36816.072	0.0
315.1137	10.01	-1.62	249445.990	2.5	281171.380	2.5
315.1160	75.00	-.34	19357.805	0.0	51092.150	0.0
315.1225	26.00	-2.58	12560.933	3.0	44285.436	2.0
315.1268	20.00	-1.82	15315.943	2.0	47040.007	2.0
315.1305	24.01	-3.41	35610.500	4.5	67334.200	3.5
315.1310	25.01	-4.93	66686.450	3.0	98410.100	2.0
315.1321	23.01	-.53	20522.140	1.0	52245.680	2.0
315.1344	26.00	-1.94	21999.132	4.0	53722.440	5.0
315.1355	27.02	-3.31	139743.400	2.5	171466.600	2.5
315.1355	27.02	-3.31	139743.400	2.5	171466.600	2.5
315.1360	45.00	-.35	14679.669	0.0	46412.000	0.0
315.1404	27.02	-2.67	73286.000	4.5	105008.700	3.5
315.1408	25.00	-1.15	35114.980	2.5	66837.640	2.5
315.1461	23.01	-4.55	36425.070	4.0	68147.200	4.0
315.1488	7.01	-3.75	189335.160	3.0	221057.010	2.0
315.1592	25.00	-1.12	30354.210	3.5	62075.020	2.5
315.1630	23.02	-2.02	56160.420	2.5	87880.850	2.5
315.1630	72.00	-.58	8872.327	0.0	40601.940	0.0
315.1640	75.00	-.04	14115.066	0.0	45844.578	0.0
315.1644	20.00	-3.00	15315.943	2.0	47036.225	1.0
315.1738	7.01	-1.46	189335.160	3.0	221054.500	3.0
315.1761	23.01	-1.21	20980.920	2.0	52700.030	2.0
315.1769	28.01	-3.51	103663.500	1.5	135382.530	1.5
315.1773	28.00	-3.42	15609.861	2.0	47328.850	2.0
315.1843	26.01	-.75	66411.700	6.5	98129.980	6.5
315.1858	6.00	-4.53	88159.870	0.0	119878.000	1.0
315.1867	26.00	-3.98	415.932	3.0	32133.977	2.0
315.1870	41.00	-.75	2097.096	0.0	33824.293	0.0
315.1886	29.01	-3.42	118532.150	2.0	150250.000	2.0
315.1921	28.02	-2.08	103306.100	3.0	135023.600	3.0
315.1957	28.01	-2.69	98467.250	3.5	130184.390	2.5
315.1990	27.02	-3.79	140225.800	3.5	171942.600	4.5
315.2070	76.00	-.66	10969.423	0.0	42694.607	0.0
315.2100	28.02	-3.41	98238.200	4.0	129953.900	3.0
315.2100	62.01	-.98	2984.328	0.0	34709.210	0.0
315.2119	12.02	-1.54	530420.600	1.0	562136.100	2.0
315.2122	27.00	-2.29	18389.570	1.5	50105.050	1.5
315.2137	22.01	-3.01	8710.470	1.5	40425.800	1.5
315.2149	29.01	-3.32	116388.000	2.0	148103.200	3.0
315.2160	41.01	.92	20970.955	0.0	52695.233	0.0
315.2227	24.01	-.54	35356.060	1.5	67070.480	1.5
315.2255	22.01	-1.11	983.800	2.5	32697.940	2.5
315.2351	24.00	-1.28	27703.840	4.0	59417.010	3.0
315.2359	22.00	-1.99	16875.190	2.0	48588.280	3.0
315.2520	25.00	-1.48	24779.320	1.5	56490.790	2.5
315.2543	22.00	-1.97	16961.420	3.0	48672.660	4.0
315.2598	26.02	-3.63	83237.860	3.0	114948.550	3.0
315.2600	45.00	-1.48	5565.369	0.0	37285.219	0.0
315.2615	18.01	-2.23	174409.830	1.5	206120.350	2.5
315.2616	25.02	-4.11	84981.630	3.5	116692.140	2.5
315.2670	76.00	-.35	10082.190	0.0	41801.336	0.0
315.2820	42.01	1.06	26375.009	0.0	58092.646	0.0
315.2876	24.00	-1.34	24200.230	6.0	55908.120	6.0
315.2911	29.01	-1.36	116326.160	3.0	148033.700	4.0
315.2960	72.00	-.47	13953.751	0.0	45669.980	0.0
315.2960	74.00	-.29	16292.819	0.0	48009.048	0.0
315.2969	28.01	-2.09	74300.930	1.5	106007.890	2.5
315.2994	24.00	.23	31055.350	5.0	62762.060	4.0
315.3041	25.01	-2.47	32787.600	4.0	64493.830	4.0
315.3045	26.00	-2.11	23783.617	5.0	55489.810	6.0
315.3110	24.00	-1.58	30965.460	3.0	62671.000	4.0
315.3121	26.01	-1.53	66589.170	4.5	98294.600	5.5
315.3170	70.01	-.64	33311.556	0.0	65025.672	0.0
315.3195	26.00	-3.07	19757.020	3.0	51461.707	4.0
315.3273	25.01	-4.79	82136.200	4.0	113840.100	5.0
315.3312	26.00	-2.33	19757.020	3.0	51460.530	3.0
315.3341	29.01	-3.21	119039.680	2.0	150742.900	3.0
315.3346	28.00	-1.53	27414.893	2.0	59118.060	2.0
315.3348	23.00	-4.69	2424.890	4.5	34128.040	3.5
315.3363	30.02	-2.50	233610.400	2.0	265313.400	2.0
315.3388	25.00	-1.18	24788.050	2.5	56490.790	2.5
315.3411	10.00	-3.10	135888.717	1.0	167591.233	2.0
315.3460	22.00	-2.17	16817.190	1.0	48519.210	2.0
315.3472	28.01	-3.94	101144.630	3.5	132846.530	3.5
315.3493	9.01	.25	227228.420	1.0	258930.110	2.0
315.3544	27.00	-3.17	23611.780	5.5	55312.960	4.5
315.3600	22.00	-2.51	8602.340	2.0	40302.950	3.0
315.3610	76.00	.03	12663.231	0.0	44372.922	0.0
315.3622	25.02	-4.94	100001.300	2.5	131701.690	1.5
315.3680	10.01	-1.02	281720.280	1.5	313420.090	2.5
315.3692	27.00	-5.31	0.000	4.5	31699.690	4.5
315.3785	10.01	-2.13	281720.280	1.5	313419.040	1.5
315.3790	75.00	-.47	11695.340	0.0	43403.222	0.0
315.3820	44.00	-.57	7985.094	0.0	39692.674	0.0
315.3836	28.01	-4.72	104503.220	2.5	136201.460	3.5
315.3953	26.02	-3.75	157982.000	3.0	189679.070	3.0
315.3958	18.01	-3.82	163299.470	2.5	194996.490	1.5
315.4009	24.00	-2.69	30965.460	3.0	62661.960	3.0
315.4014	25.00	-2.94	35041.370	3.5	66737.820	3.5
315.4017	22.00	-2.12	17075.310	4.0	48771.730	5.0
315.4021	24.01	-1.70	33521.230	3.5	65217.610	4.5
315.4073	25.01	-4.98	82144.340	3.0	113840.200	4.0
315.4094	24.01	-2.09	34659.480	.5	66355.130	1.5
315.4105	29.01	-3.22	108014.660	3.0	139710.200	2.0
315.4108	26.00	-2.82	12968.552	2.0	44664.061	2.0
315.4196	26.01	-.45	30388.550	4.5	62083.170	4.5
315.4203	22.01	-1.18	907.960	1.5	32602.510	1.5
315.4296	18.01	-2.76	174409.830	1.5	206103.450	1.5
315.4300	90.01	-1.23	1451.835	0.0	33154.590	0.0
315.4318	12.02	-.31	532971.200	3.0	564664.600	2.0
315.4321	24.00	-2.33	21847.880	2.0	53541.250	2.0
315.4348	17.02	-4.19	186220.000	.5	217913.100	1.5
315.4385	28.01	-4.15	100619.260	4.5	132311.980	4.5
315.4388	26.00	-2.65	17550.180	3.0	49242.872	3.0
315.4407	26.00	-3.29	17550.180	3.0	49242.680	2.0
315.4422	9.02	-.15	384493.060	1.5	416185.420	2.5
315.4435	25.00	-1.83	34938.700	4.5	66630.920	4.5
315.4469	28.01	-2.63	98969.440	5.5	130661.320	5.5
315.4491	26.00	-3.47	19912.486	2.0	51604.146	3.0
315.4510	58.01	-.59	2581.041	0.0	34281.685	0.0
315.4550	77.00	-.55	12824.546	0.0	44524.789	0.0
315.4575	28.00	-1.91	15734.018	1.0	47424.830	1.0
315.4627	29.01	-3.56	116371.410	4.0	148061.700	3.0
315.4699	24.01	-2.88	33694.470	5.5	65384.040	4.5
315.4740	77.00	-.41	10485.478	0.0	42183.811	0.0
315.4770	90.01	-.59	6613.917	0.0	38311.949	0.0
315.4786	23.01	-1.70	44159.430	2.0	75848.130	3.0
315.4786	27.00	-.63	15184.040	2.5	46872.740	3.5
315.4794	10.01	-1.86	249108.640	3.5	280797.260	2.5
315.4802	25.00	-2.07	24802.250	3.5	56490.790	2.5
315.4950	21.01	-2.41	27841.170	4.0	59528.220	3.0
315.5092	25.00	-3.70	23719.520	1.5	55405.140	2.5
315.5100	74.00	-.13	18147.942	0.0	49842.658	0.0
315.5101	25.01	-4.79	32787.600	4.0	64473.130	3.0
315.5114	26.00	-4.12	20019.648	1.0	51705.052	2.0
315.5131	26.02	-4.53	89783.590	4.0	121468.820	5.0
315.5131	26.02	-4.83	181772.590	6.0	213457.820	7.0
315.5154	24.00	.06	24056.110	5.0	55741.110	6.0
315.5170	70.01	-.42	32182.351	0.0	63876.364	0.0
315.5201	24.01	-2.71	38269.670	3.5	69954.200	2.5
315.5223	24.00	-2.79	21856.940	3.0	53541.250	2.0
315.5250	73.01	-.57	6775.232	0.0	38468.442	0.0
315.5253	24.00	-.88	27176.220	1.0	58860.230	2.0
315.5289	26.00	-2.51	19621.004	5.0	51304.650	4.0
315.5353	24.03	-4.83	127218.000	3.5	158901.000	2.5
315.5400	3.01	-.85	559501.000	0.0	591192.703	0.0
315.5401	25.01	-2.85	49465.130	3.0	81147.650	2.0
315.5410	23.01	-.48	17910.980	4.0	49593.410	5.0
315.5410	92.01	-1.39	1693.808	0.0	33385.411	0.0
315.5451	25.01	-2.98	35004.430	3.0	66686.450	3.0
315.5472	28.01	-3.58	101246.160	.5	132927.970	1.5
315.5472	24.00	-4.91	23305.010	2.0	54986.820	3.0
315.5500	22.01	-4.72	8744.270	2.5	40425.800	1.5
315.5522	22.00	-2.55	15156.787	4.0	46838.090	4.0
315.5538	24.00	-2.16	30965.460	3.0	62646.600	2.0
315.5592	28.01	-3.83	101247.370	2.5	132927.970	1.5
315.5630	22.01	-1.42	9118.150	4.5	40798.370	3.5
315.5640	42.01	.52	28875.392	0.0	60564.685	0.0
315.5665	26.01	-9.09	22810.330	3.5	54490.200	3.5
315.5665	26.01	-9.10	22810.330	3.5	54490.200	2.5
315.5669	25.00	-1.63	30354.210	3.5	62034.040	3.5
315.5670	40.01	.19	7420.492	0.0	39109.484	0.0
315.5671	22.01	-1.26	1087.210	3.5	32767.020	3.5
315.5690	58.01	.03	4436.164	0.0	36124.955	0.0
315.5710	28.01	-4.14	99442.860	4.5	131122.280	5.5
315.5722	22.01	-7.58	20951.770	2.5	52631.070	3.5
315.5744	28.01	-4.65	104298.230	4.5	135977.310	4.5
315.5778	25.00	-.91	35165.050	1.5	66843.790	1.5
315.5780	45.00	-.61	9114.300	0.0	40802.187	0.0
315.5791	26.00	-2.59	19390.165	6.0	51068.770	5.0
315.5821	29.01	-3.02	116388.000	2.0	148066.300	2.0
315.5866	26.02	-4.01	105895.350	1.0	137573.200	0.0
315.5910	22.01	-1.38	31490.820	3.5	63168.230	2.5
315.5920	23.00	-2.77	8476.200	1.5	40153.510	2.5
315.5949	26.01	-2.34	30388.550	4.5	62065.570	3.5
315.5953	26.00	-2.79	17550.180	3.0	49227.160	3.0
315.5956	25.00	-4.13	31076.420	1.5	62753.370	2.5
315.5958	26.01	-2.17	54870.620	2.5	86547.550	2.5
315.5999	23.00	-4.30	18438.070	4.5	50114.590	5.5
315.6126	9.02	-1.14	384493.060	1.5	416168.300	1.5
315.6175	24.00	-2.78	24200.230	6.0	55874.980	5.0
315.6230	23.03	-.93	222794.600	2.0	254468.800	2.0
315.6250	76.00	.12	5081.424	0.0	36764.592	0.0
315.6269	26.00	-.59	26140.164	3.0	57813.970	3.0
315.6280	29.01	-1.77	116388.000	2.0	148061.700	3.0
315.6297	28.01	-4.69	101144.630	3.5	132818.160	4.5
315.6298	26.01	-4.53	54870.620	2.5	86544.140	1.5
315.6327	10.01	-3.30	281171.380	2.5	312844.600	1.5
315.6390	25.00	-1.30	35165.050	1.5	66837.640	2.5
315.6407	28.01	-4.62	99442.860	4.5	131115.280	4.5
315.6436	25.01	-2.76	35004.430	3.0	66676.560	2.0
315.6459	26.00	-1.92	24118.815	4.0	55790.720	3.0
315.6479	23.03	-2.25	226617.100	1.0	258288.800	1.0
315.6510	42.00	-.82	11775.998	0.0	43456.557	0.0
315.6519	12.02	-1.60	530962.900	0.0	562634.200	1.0
315.6530	64.01	-.28	564.603	0.0	32244.961	0.0
315.6560	78.00	-.62	10082.190	0.0	41762.247	0.0
315.6566	24.00	-1.54	27816.880	5.0	59487.710	4.0
315.6621	25.01	-4.97	73385.150	1.0	105055.430	2.0
315.6629	29.00	-3.27	13227.833	0.0	44907.197	0.0
315.6630	72.00	-.54	4516.821	0.0	36196.175	0.0
315.6652	28.01	-4.82	101258.010	1.5	132927.970	1.5
315.6733	25.01	-3.14	53698.700	2.0	85367.850	2.0
315.6760	73.01	.04	11775.998	0.0	43454.048	0.0
315.6780	76.00	.86	23310.023	0.0	54987.872	0.0
315.6841	25.00	-1.13	35114.980	2.5	66783.050	3.5
315.6877	23.00	-2.47	9824.580	2.5	41492.290	3.5
315.7000	40.01	-.49	4194.191	0.0	35869.832	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
315.7008	26.01	-1.72	66463.590	5.5	98129.980	6.5
315.7017	28.01	-3.28	98561.220	2.5	130227.520	2.5
315.7027	25.01	-3.01	62564.700	1.0	94230.900	2.0
315.7031	26.00	-1.76	19562.435	4.0	51228.595	5.0
315.7087	27.00	-1.25	16778.160	2.5	48443.760	2.5
315.7141	26.00	-2.08	18378.187	2.0	50043.250	1.0
315.7145	27.00	-3.09	23855.620	4.5	55520.640	3.5
315.7169	28.01	-2.56	101247.370	2.5	132912.150	2.5
315.7182	28.01	-3.02	98561.220	2.5	130225.870	3.5
315.7240	76.00	.59	23310.023	0.0	54983.257	0.0
315.7311	18.01	-2.97	161048.640	1.5	192712.000	1.5
315.7348	23.00	-5.24	8715.720	3.5	40378.700	4.5
315.7350	69.01	-.86	161.315	0.0	31833.445	0.0
315.7366	24.02	-3.48	69780.900	1.0	101443.700	2.0
315.7390	22.01	-1.91	93.940	2.5	31756.500	1.5
315.7402	26.00	-3.05	23783.617	5.0	55446.060	4.0
315.7417	29.01	-3.19	116371.410	4.0	148033.700	4.0
315.7441	21.01	-3.76	26081.320	2.0	57743.370	3.0
315.7446	26.00	-1.73	21999.132	4.0	53661.130	3.0
315.7461	28.01	-4.65	104298.230	4.5	135960.080	4.5
315.7479	24.01	-1.47	35707.660	5.5	67369.330	5.5
315.7513	18.02	-.75	207532.150	1.0	239193.480	1.0
315.7530	37.00	-2.91	0.000	0.0	31670.325	0.0
315.7570	22.00	-2.44	16458.710	6.0	48119.470	5.0
315.7615	25.01	-1.45	73395.120	3.0	105055.430	2.0
315.7661	22.00	-2.80	170.132	3.0	31829.972	4.0
315.7662	23.01	-1.42	44098.460	3.0	75758.290	2.0
315.7699	25.01	-3.37	73395.970	2.0	105055.430	2.0
315.7741	23.01	-2.47	20522.140	1.0	52181.180	1.0
315.7750	25.00	-1.00	34845.260	.5	66504.210	1.5
315.7775	25.01	-1.77	62572.200	2.0	94230.900	2.0
315.7805	25.00	-.74	34250.520	5.5	65908.920	4.5
315.7820	40.00	-.05	4355.506	0.0	36022.922	0.0
315.7867	28.01	-3.42	104298.230	4.5	135956.010	5.5
315.7878	26.00	-2.96	19912.486	2.0	51570.160	3.0
315.7898	23.01	-.81	17910.980	4.0	49568.450	3.0
315.7906	29.01	-1.57	116371.410	4.0	148028.800	5.0
315.7957	28.01	-3.96	101357.200	4.5	133014.080	5.5
315.7960	73.01	-.46	5242.739	0.0	36908.751	0.0
315.8023	24.01	-1.40	35356.060	1.5	67012.280	2.5
315.8103	25.00	-2.25	30419.610	2.5	62075.020	2.5
315.8157	26.02	-3.43	105906.230	2.0	137561.100	1.0
315.8160	42.00	-.24	0.000	0.0	31664.007	0.0
315.8207	26.00	-3.55	19912.486	2.0	51566.860	1.0
315.8210	18.01	-3.15	179931.770	1.5	211586.110	2.5
315.8230	28.01	-4.29	101258.010	1.5	132912.150	2.5
315.8251	25.01	-3.10	52653.270	4.0	84307.200	4.0
315.8259	37.00	-3.51	0.000	0.0	31663.014	0.0
315.8290	28.01	-3.43	68735.980	2.5	100389.520	2.5
315.8294	27.00	-4.55	1809.330	1.5	33462.830	2.5
315.8310	75.00	-.44	11695.340	0.0	43357.843	0.0
315.8312	26.01	-4.66	31811.870	2.5	63465.190	1.5
315.8361	23.02	-3.07	109854.870	3.5	141507.700	3.5
315.8457	27.00	-3.01	14036.280	1.5	45688.150	2.5
315.8517	24.00	-2.23	24940.610	2.0	56591.880	2.0
315.8537	25.02	-3.50	144619.190	1.5	176270.250	2.5
315.8630	64.00	-.25	161.315	0.0	31820.610	0.0
315.8658	24.01	-4.95	53923.570	4.5	85573.420	3.5
315.8682	29.01	-1.75	110084.290	1.0	141733.900	2.0
315.8712	25.00	-3.04	30425.710	1.5	62075.020	2.5
315.8718	26.02	-3.86	105895.350	1.0	137544.600	2.0
315.8729	25.00	-2.88	23719.520	1.5	55368.660	1.5
315.8757	26.00	-3.61	19552.474	1.0	51201.330	2.0
315.8770	27.00	-1.48	816.000	3.5	32464.730	4.5
315.8831	22.00	-2.02	16458.710	6.0	48106.830	6.0
315.8844	25.01	-4.91	69044.610	2.0	100692.600	2.0
315.8853	27.02	-3.68	139818.700	3.5	171466.600	2.5
315.8853	27.02	-3.68	139818.700	3.5	171466.600	2.5
315.8869	20.01	.25	25191.510	.5	56839.250	1.5
315.8876	28.01	-3.75	98561.220	2.5	130208.890	3.5
315.8884	25.02	-3.87	100054.100	.5	131701.690	1.5
315.8890	44.00	-.74	9033.642	0.0	40690.332	0.0
315.8933	25.02	-3.85	144817.680	3.5	176464.780	3.5
315.8957	23.00	-3.36	8578.520	2.5	40225.380	1.5
315.8984	25.02	-3.38	144619.190	1.5	176265.780	1.5
315.9015	26.00	-1.31	23783.617	5.0	55429.890	5.0
315.9033	22.00	-3.35	16267.510	5.0	47913.610	4.0
315.9048	24.01	-2.28	35707.660	5.5	67353.600	4.5
315.9050	73.00	-.83	12179.286	0.0	43834.372	0.0
315.9051	28.01	-3.46	67694.640	2.5	99340.550	3.5
315.9070	90.01	-1.10	8952.985	0.0	40607.871	0.0
315.9072	30.02	-1.42	233610.400	2.0	265256.100	3.0
315.9078	26.00	-2.32	26874.534	5.0	58520.180	4.0
315.9085	24.01	-1.96	20024.180	3.5	51669.750	2.5
315.9129	26.01	-3.53	54902.420	1.5	86547.550	2.5
315.9150	77.00	-.12	12824.546	0.0	44478.630	0.0
315.9180	74.00	-.42	13711.778	0.0	45365.562	0.0
315.9220	25.01	-4.10	38901.800	4.0	70546.020	4.0
315.9231	22.00	-6.41	6556.828	1.0	38200.940	0.0
315.9240	22.00	-1.77	16875.190	2.0	48519.210	2.0
315.9248	26.00	-3.57	21038.987	2.0	52682.930	2.0
315.9249	14.00	-4.85	48020.074	1.0	79664.000	1.0
315.9293	25.01	-4.71	69044.610	2.0	100688.100	3.0
315.9302	25.01	-.89	62587.500	3.0	94230.900	2.0
315.9321	26.01	-3.96	33466.500	4.5	65109.710	3.5
315.9336	23.00	-3.69	8476.200	1.5	40119.260	2.5
315.9337	26.01	-2.78	54904.500	3.5	86547.550	2.5
315.9364	23.01	-.86	19132.690	2.0	50775.470	2.0
315.9431	26.00	-2.61	22249.430	3.0	53891.540	3.0
315.9434	28.01	-3.89	104646.520	3.5	136288.600	2.5
315.9452	25.01	-3.81	53805.800	4.0	85447.700	5.0
315.9470	26.01	-3.66	54902.420	1.5	86544.140	1.5
315.9502	25.01	-4.44	59537.400	4.0	91178.800	4.0
315.9516	28.00	-3.51	1332.153	3.0	32973.414	4.0
315.9535	11.01	-1.63	300107.710	2.0	331748.770	1.0
315.9535	11.01	-1.63	300107.710	2.0	331748.770	1.0
315.9579	24.00	-2.69	23512.000	1.0	55152.630	2.0
315.9591	18.01	-3.39	179931.770	1.5	211572.270	1.5
315.9657	27.00	-2.19	1809.330	1.5	33449.180	.5
315.9674	27.00	-2.77	4690.180	2.5	36329.860	2.5
315.9721	24.01	-1.38	38315.000	2.5	69954.200	2.5
315.9783	25.01	-1.97	35004.430	3.0	66643.010	4.0
315.9794	26.02	-2.81	182408.910	3.0	214047.380	4.0
315.9804	26.02	-3.62	105906.230	2.0	137544.600	2.0
315.9808	25.00	-2.70	23818.870	.5	55457.200	.5
315.9820	72.00	-1.03	2339.068	0.0	33986.440	0.0
315.9851	24.01	-1.79	33619.130	4.5	65257.030	3.5
315.9920	44.00	-.91	2016.438	0.0	33662.809	0.0
315.9923	24.00	-1.59	27223.050	2.0	58860.230	2.0
315.9939	10.01	-3.33	249695.530	1.5	281332.550	.5
315.9944	25.00	-1.92	23549.200	2.5	55186.170	2.5
315.9953	25.01	-2.18	32856.950	3.0	64493.830	4.0
315.9962	25.00	-1.02	34250.520	5.5	65887.310	5.5
315.9983	23.02	-3.03	56922.500	2.5	88559.080	1.5
316.0012	28.01	-5.06	24788.200	1.5	56424.490	1.5
316.0040	28.01	-4.02	98561.220	2.5	130197.230	1.5
316.0047	29.00	-1.59	41538.623	0.0	73183.722	0.0
316.0060	22.00	-4.09	170.132	3.0	31805.940	2.0
316.0080	24.01	-1.69	33521.230	3.5	65156.840	2.5
316.0089	25.01	-4.67	73385.150	1.0	105020.670	1.0
316.0151	25.00	-.59	34938.700	4.5	66573.600	5.5
316.0193	26.00	-1.02	26339.682	2.0	57974.160	2.0
316.0262	24.01	-2.70	38269.670	3.5	69903.460	3.5
316.0269	26.02	-1.66	188109.320	0.0	219743.040	1.0
316.0306	10.01	-2.57	281171.380	2.5	312804.730	2.5
316.0338	26.00	-2.47	19390.165	6.0	51023.190	6.0
316.0340	68.00	-1.03	403.288	0.0	32045.453	0.0
316.0375	10.01	-2.66	281171.380	2.5	312804.040	1.5
316.0458	25.01	-3.19	34910.430	4.0	66542.260	5.0
316.0479	25.00	-3.14	31001.150	2.5	62632.770	3.5
316.0523	26.01	-2.22	72352.170	3.5	103983.350	3.5
316.0595	26.02	-3.84	182379.860	5.0	214010.320	5.0
316.0606	24.00	-1.17	24056.110	5.0	55686.460	5.0
316.0631	23.00	-4.38	18302.270	3.5	49932.370	4.5
316.0652	26.00	-.07	19562.435	4.0	51192.320	4.0
316.0690	64.01	-1.14	564.603	0.0	32203.264	0.0
316.0700	8.02	-2.76	370900.600	2.0	402530.000	3.0
316.0767	23.01	-2.34	18269.490	1.0	49898.220	2.0
316.0772	26.02	-3.48	182418.700	4.0	214047.380	4.0
316.0777	23.01	-1.54	20617.050	2.0	52245.680	2.0
316.0810	29.01	-3.42	116388.000	2.0	148016.300	1.0
316.0912	26.00	-2.63	19912.486	2.0	51539.770	2.0
316.0954	22.00	-1.57	16961.420	3.0	48588.280	3.0
316.1000	7.04	-.04	678297.000	0.0	709932.558	0.0
316.1025	22.00	-3.76	12118.394	4.0	43744.550	4.0
316.1041	25.00	-.89	18531.640	3.5	50157.630	3.5
316.1051	25.02	-3.32	145643.450	2.5	177269.340	1.5
316.1088	25.01	-3.77	38901.800	4.0	70527.320	5.0
316.1148	11.01	-2.22	268766.670	1.0	300391.590	0.0
316.1170	25.01	-2.03	73395.970	2.0	105020.670	1.0
316.1198	22.01	-.75	907.960	1.5	32532.380	.5
316.1210	25.01	-3.12	49427.320	4.0	81051.620	3.0
316.1230	23.02	-1.15	56256.750	1.5	87880.850	2.5
316.1321	23.01	-2.07	20980.920	2.0	52604.110	1.0
316.1323	28.01	-3.95	98561.220	2.5	130184.390	2.5
316.1356	25.00	-2.08	35114.980	2.5	66737.820	3.5
316.1370	64.01	-.13	1855.123	0.0	33486.979	0.0
316.1371	23.01	-2.83	20622.990	3.0	52245.680	2.0
316.1371	18.01	-.83	161089.310	.5	192712.000	1.5
316.1373	26.00	-2.91	12560.933	3.0	44183.607	2.0
316.1440	17.01	-3.65	121635.000	3.0	153257.000	2.0
316.1440	76.00	.31	18954.517	0.0	50585.672	0.0
316.1450	27.02	-4.64	71623.100	6.5	103245.000	5.5
316.1458	18.01	-1.36	163506.450	3.5	195128.270	4.5
316.1461	28.01	-2.20	101247.370	2.5	132869.160	3.5
316.1547	26.00	-3.68	19788.248	4.0	51409.180	4.0
316.1590	12.02	-1.58	530178.200	2.0	561798.700	3.0
316.1647	25.01	-4.18	32836.400	1.0	64456.330	2.0
316.1651	27.00	-1.42	15774.040	1.5	47393.930	2.5
316.1662	22.01	-3.73	8710.470	1.5	40330.250	.5
316.1692	28.01	-1.76	100309.290	5.5	131928.770	4.5
316.1730	76.00	-.87	8630.355	0.0	40258.609	0.0
316.1769	22.01	-.56	983.800	2.5	32602.510	1.5
316.1870	22.00	-3.49	15220.390	5.0	46836.090	4.0
316.1877	6.00	-4.46	88260.370	2.0	119878.000	1.0
316.1910	22.00	-2.67	15108.121	3.0	46725.420	3.0
316.1941	26.00	-1.71	19350.882	5.0	50967.873	6.0
316.1977	26.01	-3.32	13673.210	1.5	45289.840	1.5
316.1991	25.02	-4.40	100085.200	1.5	131701.690	1.5
316.1996	23.01	-4.16	32040.760	2.0	63657.200	2.0
316.2022	25.01	-4.01	32856.950	3.0	64473.130	3.0
316.2048	25.01	-3.52	38901.800	4.0	70517.720	3.0
316.2096	26.02	-3.01	105929.160	3.0	137544.600	2.0
316.2117	26.02	-4.94	168780.100	5.0	200395.330	5.0
316.2150	62.01	-1.42	2177.753	0.0	33801.806	0.0
316.2197	25.00	-2.19	30419.610	2.5	62034.040	3.5
316.2211	25.01	-3.66	32858.840	2.0	64473.130	3.0
316.2218	25.01	-4.53	68284.380	3.0	99898.600	4.0
316.2300	28.01	-4.06	99418.610	3.5	131032.010	2.5
316.2359	28.01	-4.55	98561.220	2.5	130174.030	1.5
316.2427	26.01	-4.57	54870.620	2.5	86482.750	3.5
316.2440	23.00	-5.65	9824.580	2.5	41436.580	3.5
316.2440	24.01	-1.62	32836.840	3.5	64448.840	2.5
316.2506	26.02	-2.05	188131.700	1.0	219743.040	1.0
316.2510	26.00	-4.46	21999.132	4.0	53610.440	4.0
316.2528	11.01	-1.28	299889.160	1.0	331500.290	2.0
316.2567	22.01	-.39	1087.210	3.5	32697.940	2.5
316.2598	25.01	-4.64	68284.380	3.0	99894.800	3.0
316.2610	72.01	.40	12017.970	0.0	43637.424	0.0
316.2635	23.00	-4.93	8715.720	3.5	40325.770	2.5
316.2640	25.01	-4.16	62572.200	2.0	94182.200	3.0
316.2712	23.01	-.37	19166.190	1.0	50775.470	2.0
316.2720	73.00	-.81	9920.875	0.0	41539.229	0.0
316.2802	26.01	-1.20	33501.320	3.5	65109.710	3.5
316.2830	90.01	-.67	9678.902	0.0	41296.156	0.0
316.3028	23.01	-.92	19132.690	2.0	50738.820	1.0
316.3093	26.01	-3.22	13474.430	2.5	45079.910	2.5
316.3110	26.00	-3.51	12560.933	3.0	44166.240	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
316.3130	73.00	-.53	9920.875	0.0	41535.131	0.0
316.3206	23.01	-3.72	18293.870	2.0	49898.220	2.0
316.3206	23.00	-3.32	9824.580	2.5	41428.930	2.5
316.3236	11.01	-2.06	300107.710	2.0	331711.750	3.0
316.3236	11.01	-2.06	300107.710	2.0	331711.750	3.0
316.3249	24.01	-3.49	32844.920	1.5	64448.840	2.5
316.3339	24.01	-2.68	36272.660	4.5	67875.680	3.5
316.3373	26.02	-4.34	182444.700	3.0	214047.380	4.0
316.3390	72.00	-.82	10404.820	0.0	42016.477	0.0
316.3400	41.01	.18	2984.328	0.0	34595.885	0.0
316.3420	74.00	.22	15002.299	0.0	46613.656	0.0
316.3528	23.00	-.37	18513.460	4.5	50114.590	5.5
316.3530	28.00	-3.17	13521.352	2.0	45122.460	1.0
316.3534	10.01	-1.86	281171.380	2.5	312772.450	2.5
316.3539	18.01	-2.87	172816.210	.5	204417.230	1.5
316.3578	10.01	-2.74	281171.380	2.5	312772.010	3.5
316.3594	24.00	-4.99	23386.350	3.0	54986.820	3.0
316.3601	26.02	-4.00	188142.640	2.0	219743.040	1.0
316.3671	29.01	-2.41	116388.000	2.0	147987.700	2.0
316.3703	25.01	-4.97	32856.950	3.0	64456.330	2.0
316.3725	28.01	-3.68	101247.370	2.5	132846.530	3.5
316.3730	23.00	-5.47	8715.720	3.5	40314.830	3.5
316.3731	11.01	-.62	299193.750	2.0	330792.850	2.0
316.3731	11.01	-.62	299193.750	2.0	330792.850	2.0
316.3754	24.00	.21	24200.230	6.0	55799.100	7.0
316.3755	23.01	-.98	44159.430	2.0	75758.290	2.0
316.3765	26.02	-4.20	105929.160	3.0	137527.920	4.0
316.3765	24.01	-1.36	38509.070	3.5	70107.830	4.5
316.3790	70.01	-.24	33311.556	0.0	64919.216	0.0
316.3793	24.01	-3.24	33619.130	4.5	65217.610	4.5
316.3820	73.00	-.94	9194.957	0.0	40802.318	0.0
316.3855	25.02	-4.15	144672.380	2.5	176270.250	2.5
316.3863	26.01	-2.85	31364.470	1.5	62962.260	1.5
316.3875	26.02	-4.60	182412.650	4.0	214010.320	5.0
316.3893	25.01	-4.29	32858.840	2.0	64456.330	2.0
316.3900	42.00	-.03	16534.792	0.0	48141.354	0.0
316.3906	25.00	-1.32	34423.270	3.5	66020.630	2.5
316.3907	22.00	-1.37	17075.310	4.0	48672.660	4.0
316.3913	24.01	-.95	34659.480	.5	66256.770	.5
316.3974	28.01	-4.28	100332.090	4.5	131928.770	4.5
316.4092	25.01	-3.81	48317.850	4.0	79913.350	4.0
316.4123	27.00	-3.78	17233.680	3.5	48828.870	2.5
316.4133	23.01	-3.27	22273.540	1.0	53868.630	2.0
316.4150	58.01	-.30	2339.068	0.0	33943.132	0.0
316.4159	28.00	-3.10	15734.018	1.0	47328.850	2.0
316.4172	25.01	-4.36	62587.500	3.0	94182.200	3.0
316.4186	26.02	-2.83	182379.860	5.0	213974.420	6.0
316.4231	10.01	-1.27	281171.380	2.5	312765.490	3.5
316.4261	26.01	-3.22	31368.450	.5	62962.260	1.5
316.4267	24.01	-2.33	32855.090	2.5	64448.840	2.5
316.4302	25.02	-3.69	144672.380	2.5	176265.780	1.5
316.4310	40.01	.24	5726.684	0.0	37329.150	0.0
316.4429	10.01	-.91	249108.640	3.5	280700.770	3.5
316.4440	74.00	-.35	13227.833	0.0	44829.001	0.0
316.4479	24.01	-.92	38362.560	1.5	69954.200	2.5
316.4480	90.01	-1.04	6613.917	0.0	38214.686	0.0
316.4481	26.02	-2.90	182418.700	4.0	214010.320	5.0
316.4520	75.00	-.24	14921.641	0.0	46522.010	0.0
316.4530	42.00	-.54	11372.710	0.0	42972.979	0.0
316.4534	23.00	-3.75	18198.080	2.5	49789.170	3.5
316.4593	24.02	-4.12	66027.800	4.0	97618.300	5.0
316.4604	20.00	-2.90	15157.901	0.0	46748.283	1.0
316.4610	76.00	-.20	15082.956	0.0	46682.426	0.0
316.4664	10.01	-.59	276511.820	.5	308101.610	1.5
316.4676	26.02	-2.78	83358.880	2.0	114948.550	3.0
316.4688	25.00	-1.55	35041.370	3.5	66630.920	4.5
316.4721	25.01	-2.83	49465.130	3.0	81054.350	2.0
316.4764	25.01	-.86	72247.380	3.0	103836.170	2.0
316.4787	28.01	-3.72	24835.930	.5	56424.490	1.5
316.4797	24.01	-1.78	38315.000	2.5	69903.460	3.5
316.4830	23.01	-1.24	8841.970	3.0	40430.100	4.0
316.4833	23.03	-.80	254468.800	2.0	286056.900	3.0
316.4870	69.01	-1.10	8872.327	0.0	40469.201	0.0
316.4994	26.02	-4.57	198606.370	2.0	230192.860	3.0
316.4994	25.01	-3.74	49465.130	3.0	81051.620	3.0
316.5000	26.00	-.83	19562.435	4.0	51148.870	3.0
316.5029	25.01	-3.18	53781.700	3.0	85367.850	2.0
316.5031	24.01	-2.62	42898.120	2.5	74484.250	2.5
316.5079	26.00	-2.80	19788.248	4.0	51373.894	5.0
316.5092	8.01	-.78	234402.480	1.5	265988.000	2.5
316.5159	28.01	-4.88	101144.630	3.5	132729.480	2.5
316.5162	26.00	-1.78	17550.180	3.0	49135.003	3.0
316.5185	24.00	-1.53	31106.370	4.0	62690.960	5.0
316.5200	70.01	-.37	35650.624	0.0	67244.204	0.0
316.5233	22.01	-2.42	8997.690	3.5	40581.800	2.5
316.5252	25.00	-.71	34938.700	4.5	66522.620	4.5
316.5291	18.01	-2.67	163299.470	2.5	194883.000	3.5
316.5367	26.00	-4.28	12968.552	2.0	44551.325	3.0
316.5380	74.00	.16	17986.627	0.0	49578.411	0.0
316.5444	25.01	-1.63	39808.140	3.0	71390.140	3.0
316.5450	40.01	-.03	7985.094	0.0	39576.179	0.0
316.5452	18.02	-1.84	211563.830	1.0	243145.760	2.0
316.5502	28.00	-3.07	204.786	3.0	31786.210	3.0
316.5565	27.02	-4.51	138774.700	2.5	170355.500	2.5
316.5616	25.01	-4.65	48333.060	5.0	79913.350	4.0
316.5620	90.01	-1.30	6936.547	0.0	38525.935	0.0
316.5650	10.01	-1.12	249445.990	2.5	281025.940	2.5
316.5685	22.01	-3.48	20891.880	3.5	52471.480	2.5
316.5698	14.03	-.32	218428.670	1.5	250008.140	1.5
316.5710	14.03	.63	218428.670	1.5	250008.020	2.5
316.5730	72.00	-1.00	6533.259	0.0	38121.550	0.0
316.5820	26.01	-1.90	54904.500	3.5	86482.750	3.5
316.5853	26.00	-2.00	19757.020	3.0	51334.940	4.0
316.5880	12.01	-1.81	80619.500	.5	112197.160	1.5
316.5883	28.00	-2.36	27414.893	2.0	58992.520	2.0
316.5891	23.01	-.72	19161.270	0.0	50738.820	1.0
316.5940	26.00	-3.38	19788.248	4.0	51365.300	3.0
316.5946	9.03	-.48	519341.000	0.0	550918.000	1.0
316.5954	26.01	-.24	67516.370	5.5	99093.290	5.5
316.5970	25.01	-1.80	39813.380	2.0	71390.140	3.0
316.5970	40.01	-.09	1290.520	0.0	32876.416	0.0
316.5976	27.01	-4.03	17771.500	3.0	49348.200	4.0
316.6090	90.01	-1.21	4436.164	0.0	36020.863	0.0
316.6147	23.00	-1.87	8578.520	2.5	40153.510	2.5
316.6181	10.01	-4.08	219947.460	.5	251522.120	1.5
316.6218	26.01	-4.72	31387.980	2.5	62962.260	1.5
316.6221	28.01	-2.29	99559.330	2.5	131133.580	2.5
316.6240	26.00	-.66	19757.020	3.0	51331.090	2.0
316.6240	58.01	-.58	2500.383	0.0	34083.586	0.0
316.6260	40.01	-.23	6371.944	0.0	37954.947	0.0
316.6384	23.01	-1.60	19166.190	1.0	50738.820	1.0
316.6418	26.01	-.95	68000.820	4.5	99573.110	4.5
316.6437	26.00	-1.32	20641.110	4.0	52213.207	3.0
316.6510	76.00	.95	23310.023	0.0	54890.533	0.0
316.6531	18.01	-3.54	187589.230	2.5	219160.400	2.5
316.6580	26.00	-3.38	17726.985	2.0	49297.660	1.0
316.6610	58.01	-.73	2581.041	0.0	34160.553	0.0
316.6670	26.01	-2.95	13474.430	2.5	45044.210	1.5
316.6738	25.03	-4.87	137930.100	5.0	169499.200	5.0
316.6753	26.01	-3.70	47674.780	1.5	79243.730	1.5
316.6785	22.00	-3.56	15156.787	4.0	46725.420	3.0
316.6832	25.00	-1.02	24788.050	2.5	56356.210	3.5
316.6836	26.01	-2.93	67000.630	2.5	98568.750	3.5
316.6969	26.00	-1.97	24338.766	3.0	55905.560	4.0
316.7086	28.01	-2.42	99559.330	2.5	131124.960	3.5
316.7099	25.01	-4.79	55371.300	3.0	86936.800	2.0
316.7147	25.00	-.91	34343.900	4.5	65908.920	4.5
316.7158	23.00	-4.31	9824.580	2.5	41389.490	1.5
316.7160	75.00	-.73	16534.792	0.0	48108.820	0.0
316.7186	24.00	-2.60	31106.370	4.0	62671.000	4.0
316.7200	64.00	-.56	967.890	0.0	32541.520	0.0
316.7230	58.01	-.22	9517.587	0.0	41090.918	0.0
316.7237	23.01	-2.16	20617.050	2.0	52181.180	1.0
316.7239	12.02	-.70	532725.700	2.0	564289.800	1.0
316.7320	58.01	-.92	3952.218	0.0	35524.651	0.0
316.7409	23.01	-4.47	44657.990	2.0	76220.400	2.0
316.7423	23.01	-.14	30613.970	4.0	62176.240	4.0
316.7442	24.00	-2.84	27163.200	0.0	58725.280	1.0
316.7467	28.01	-4.96	101366.140	2.5	132927.970	1.5
316.7470	18.01	-2.44	163299.470	2.5	194861.270	2.5
316.7481	11.01	-1.74	300107.710	2.0	331669.400	2.0
316.7481	11.01	-1.74	300107.710	2.0	331669.400	2.0
316.7502	23.01	.35	34228.790	3.0	65790.280	4.0
316.7518	25.01	-1.11	72306.810	2.0	103868.140	1.0
316.7530	73.00	-1.29	5968.656	0.0	37538.996	0.0
316.7554	26.02	-4.67	89907.850	4.0	121468.820	5.0
316.7554	26.02	-3.65	89907.850	5.0	121468.820	5.0
316.7555	22.00	-5.54	6598.749	2.0	38159.710	3.0
316.7576	10.00	-4.20	135888.717	1.0	167449.464	1.0
316.7592	25.01	-1.89	52373.180	3.0	83933.770	3.0
316.7612	25.00	-2.36	23719.520	1.5	55279.910	1.5
316.7660	23.00	-.50	18372.460	3.5	49932.370	4.5
316.7681	27.02	-4.10	140382.900	3.5	171942.600	4.5
316.7751	9.03	-.13	519539.000	1.0	551098.000	2.0
316.7782	26.00	-2.10	17550.180	3.0	49108.876	4.0
316.7799	8.01	-.64	234402.480	1.5	265961.000	2.5
316.7820	25.00	-2.45	23549.200	2.5	55107.520	3.5
316.7848	26.01	-.66	30764.460	3.5	62322.500	3.5
316.7851	27.00	-3.28	14399.280	.5	45957.290	.5
316.7872	26.01	-2.80	46967.470	2.5	78525.270	2.5
316.7873	22.00	-1.99	16961.420	3.0	48519.210	2.0
316.7909	26.00	-1.09	26140.164	3.0	57697.590	4.0
316.7920	23.01	-1.66	44200.970	1.0	75758.290	2.0
316.7926	25.00	-2.99	34463.370	1.5	66020.630	2.5
316.7938	26.01	-2.19	31387.980	2.5	62945.120	3.5
316.8024	22.00	-1.17	17215.440	5.0	48771.730	5.0
316.8032	27.00	-1.32	16778.160	2.5	48334.370	1.5
316.8047	25.01	-3.10	72247.380	3.0	103803.440	3.0
316.8051	23.01	-1.52	44159.430	2.0	75715.450	1.0
316.8061	22.00	.33	12118.394	4.0	43674.310	4.0
316.8079	27.00	-1.66	16470.600	1.5	48026.340	.5
316.8088	26.02	-3.63	119982.260	1.0	151537.910	0.0
316.8094	24.00	-2.47	31106.370	4.0	62661.960	3.0
316.8122	23.01	-1.19	8640.210	2.0	40195.520	3.0
316.8128	26.00	-1.74	23192.486	2.0	54747.740	1.0
316.8180	73.01	.76	15647.559	0.0	47211.422	0.0
316.8180	77.00	-.25	12985.861	0.0	44549.724	0.0
316.8211	26.02	-3.30	119982.260	1.0	151536.680	1.0
316.8214	25.01	-1.23	52379.380	2.0	83933.770	3.0
316.8257	25.00	-1.27	24802.250	3.5	56356.210	3.5
316.8280	76.00	-.04	15082.956	0.0	46645.823	0.0
316.8370	75.00	.39	16212.162	0.0	47774.132	0.0
316.8386	26.02	-2.97	188013.400	4.0	219566.080	3.0
316.8390	26.02	-3.43	119982.260	1.0	151534.900	2.0
316.8390	72.00	.18	10404.820	0.0	41966.591	0.0
316.8511	22.01	-.20	1215.580	4.5	32767.020	3.5
316.8520	44.00	.06	11372.710	0.0	42933.186	0.0
316.8527	28.01	-1.50	104503.220	2.5	136054.500	1.5
316.8570	26.01	-9.64	22939.350	2.5	54490.200	2.5
316.8650	25.01	-3.75	52383.720	4.0	83933.770	3.0
316.8676	25.00	-4.63	23818.870	.5	55368.660	1.5
316.8729	25.01	-4.59	52718.800	0.0	84268.060	1.0
316.8750	24.00	-2.31	27176.220	1.0	58725.280	1.0
316.8820	69.01	-1.10	8872.327	0.0	40429.815	0.0
316.8852	26.00	-2.38	19912.486	2.0	51460.530	3.0
316.8880	77.00	-.54	6291.287	0.0	37848.178	0.0
316.8904	25.01	-2.12	72320.620	1.0	103868.140	1.0
316.8925	28.01	-3.77	104503.220	2.5	136050.530	2.5
316.8929	23.00	-3.58	8578.520	2.5	40125.790	3.5
316.8935	26.00	-3.24	20019.648	1.0	51566.860	1.0
316.8942	12.01	-2.51	80650.020	1.5	112197.160	1.5
316.8953	12.01	-1.55	80650.020	1.5	112197.060	2.5
316.9045	28.01	-4.34	73893.730	1.5	105439.850	1.5
316.9050	25.01	-1.78	72322.070	0.0	103868.140	1.0
316.9060	26.02	-2.86	188109.580	3.0	219655.550	2.0
316.9060	70.01	-.02	32908.268	0.0	64463.366	0.0
316.9084	26.00	-3.34	28819.966	5.0	60365.700	6.0
316.9111	26.02	-4.53	168780.100	5.0	200325.560	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP.	JUP
316.9180	58.01	.10	5565.369	0.0	37119.273	0.0
316.9190	24.01	-.77	38563.150	4.5	70107.830	4.5
316.9203	8.01	-.31	234454.450	2.5	265999.000	3.5
316.9225	23.01	-2.48	18353.890	3.0	49898.220	2.0
316.9243	26.02	-4.32	89697.520	3.0	121241.670	4.0
316.9256	6.00	-3.09	88333.980	0.0	119878.000	1.0
316.9273	28.01	-2.15	99559.330	2.5	131103.180	2.5
316.9304	10.01	-2.76	249445.990	2.5	280989.530	1.5
316.9317	25.00	-1.61	34343.900	4.5	65887.310	5.5
316.9320	90.01	-1.10	6129.972	0.0	37682.482	0.0
316.9330	26.00	-2.05	27166.804	4.0	58710.090	3.0
316.9334	26.00	-4.81	12968.552	2.0	44511.795	2.0
316.9464	26.02	-3.29	93412.930	2.0	124954.880	1.0
316.9571	24.00	-1.48	24200.230	6.0	55741.110	6.0
316.9579	26.00	-2.90	19562.435	4.0	51103.237	5.0
316.9585	23.00	-2.76	8578.520	2.5	40119.260	2.5
316.9602	24.00	-3.73	20523.690	4.0	52064.270	4.0
316.9627	24.00	-2.80	20523.940	5.0	52064.270	4.0
316.9630	27.02	-3.34	140200.100	1.5	171740.400	1.5
316.9630	27.02	-3.34	140200.100	1.5	171740.400	1.5
316.9668	18.01	-.38	155351.030	1.5	186890.950	2.5
316.9681	29.00	-.69	41538.623	0.0	73087.539	0.0
316.9751	19.01	-1.25	163237.000	1.0	194776.100	0.0
316.9759	27.00	-1.51	16778.160	2.5	48317.170	3.5
316.9795	26.02	-3.71	158257.370	1.0	189796.030	1.0
316.9816	28.01	-4.42	67880.160	2.5	99418.610	3.5
316.9839	20.00	-2.42	15210.063	1.0	46748.283	1.0
316.9859	24.01	-1.84	42898.120	2.5	74436.140	2.5
316.9880	62.01	-.79	2177.753	0.0	33724.689	0.0
316.9915	25.01	-1.66	36274.290	2.0	67811.750	3.0
316.9941	26.02	-4.43	198655.660	3.0	230192.860	3.0
317.0101	22.00	-3.61	16458.710	6.0	47994.320	5.0
317.0160	6.02	-.83	311721.000	0.0	343265.149	0.0
317.0200	74.00	-1.76	2903.671	0.0	34447.422	0.0
317.0210	23.01	-1.48	30641.710	3.0	62176.240	4.0
317.0210	62.01	-1.42	2177.753	0.0	33721.405	0.0
317.0290	73.00	.08	12179.286	0.0	43722.142	0.0
317.0309	8.01	-1.74	234454.450	2.5	265988.000	2.5
317.0335	26.01	-2.54	13673.210	1.5	45206.490	.5
317.0350	42.00	-.09	0.000	0.0	31542.259	0.0
317.0360	23.02	-2.05	110181.470	2.5	141714.500	2.5
317.0402	21.01	-1.51	26081.320	2.0	57613.940	2.0
317.0420	25.00	-.88	34343.900	4.5	65876.340	3.5
317.0420	90.01	-1.27	7259.177	0.0	38800.739	0.0
317.0454	28.02	-4.71	82172.900	3.0	113705.000	4.0
317.0504	29.02	-4.59	89045.900	3.5	120577.500	2.5
317.0610	8.01	-1.26	234454.450	2.5	265985.000	3.5
317.0637	23.00	-.65	18258.890	2.5	49789.170	3.5
317.0712	28.00	-2.24	15609.861	2.0	47139.392	2.0
317.0730	25.01	-1.88	72306.810	2.0	103836.170	2.0
317.0763	25.01	-2.75	73385.150	1.0	104914.180	0.0
317.0773	23.00	-.25	18680.120	5.5	50209.050	6.5
317.0786	27.02	-3.32	140211.600	2.5	171740.400	1.5
317.0786	27.02	-3.32	140211.600	2.5	171740.400	1.5
317.0800	25.01	-.95	52383.720	4.0	83912.380	5.0
317.0812	28.01	-2.31	99132.780	5.5	130661.320	5.5
317.0845	28.01	-1.88	104503.220	2.5	136031.430	2.5
317.0926	22.00	-2.46	386.874	4.0	31914.277	5.0
317.0952	26.02	-3.99	158257.370	1.0	189784.520	2.0
317.1090	64.01	-1.28	1129.205	0.0	32664.103	0.0
317.1096	24.01	-1.79	42898.120	2.5	74423.840	3.5
317.1115	8.01	-2.67	234402.480	1.5	265928.000	1.5
317.1175	24.00	-3.78	27597.220	3.0	59122.150	3.0
317.1260	90.00	-1.30	0.000	0.0	31533.208	0.0
317.1284	26.02	-1.31	188131.700	1.0	219655.550	2.0
317.1300	23.00	-3.25	8476.200	1.5	39999.890	2.5
317.1309	25.00	-2.34	34423.270	3.5	65946.870	2.5
317.1345	26.00	-3.75	11976.239	4.0	43499.485	4.0
317.1350	26.00	-4.08	24574.655	4.0	56097.850	3.0
317.1355	24.01	-3.93	33694.470	5.5	65217.610	4.5
317.1360	71.00	-.94	0.000	0.0	31532.213	0.0
317.1370	92.01	-.98	5162.081	0.0	36694.195	0.0
317.1406	18.01	-1.95	163299.470	2.5	194822.100	3.5
317.1457	23.00	-4.09	8412.940	.5	39935.070	1.5
317.1528	18.02	-2.83	240150.660	0.0	271672.080	1.0
317.1581	28.01	-4.11	105439.850	1.5	136960.750	2.5
317.1591	28.01	-4.15	98467.250	3.5	129988.050	2.5
317.1610	58.01	-.27	2581.041	0.0	34110.769	0.0
317.1639	18.02	-.17	207673.160	0.0	239193.480	1.0
317.1659	26.00	-3.02	20019.648	1.0	51539.770	2.0
317.1663	29.00	-1.66	44522.951	0.0	76052.152	0.0
317.1670	28.01	-2.02	105439.850	1.5	136959.860	2.5
317.1680	90.01	-.87	11453.368	0.0	42982.400	0.0
317.1700	22.01	-4.76	20951.770	2.5	52471.480	2.5
317.1729	23.01	-2.21	30613.970	4.0	62133.390	3.0
317.1771	10.03	-2.33	641908.000	.5	673427.000	1.5
317.1812	19.01	-1.37	183208.400	1.0	214727.000	0.0
317.1843	25.00	-2.47	34250.520	5.5	65768.810	4.5
317.1899	24.00	-2.06	23933.900	4.0	55451.640	3.0
317.1996	26.02	-4.28	105906.230	2.0	137423.000	3.0
317.2028	28.01	-3.19	99559.330	2.5	131075.780	1.5
317.2030	42.01	.18	17260.709	0.0	48786.262	0.0
317.2033	26.00	-2.31	19788.248	4.0	51304.650	4.0
317.2068	24.01	-.42	35356.060	1.5	66872.120	.5
317.2085	26.00	-2.74	17726.985	2.0	49242.872	3.0
317.2104	26.00	-2.33	17726.985	2.0	49242.680	2.0
317.2117	25.00	-3.02	34938.700	4.5	66454.270	3.5
317.2119	25.01	-1.37	72320.620	1.0	103836.170	2.0
317.2131	28.01	-1.99	105439.850	1.5	136955.280	.5
317.2173	25.01	-4.09	39808.140	3.0	71323.150	2.0
317.2227	23.01	-1.22	44200.970	1.0	75715.450	1.0
317.2290	26.00	-1.40	22249.430	3.0	53763.280	3.0
317.2300	58.01	-1.09	2581.041	0.0	34103.911	0.0
317.2301	27.00	-2.83	20500.710	1.5	52014.450	1.5
317.2331	25.00	-2.85	31001.150	2.5	62514.590	2.5
317.2370	42.00	-.41	16615.449	0.0	48137.623	0.0
317.2376	27.02	-4.44	71873.700	5.5	103386.700	4.5
317.2379	22.00	-1.98	17075.310	4.0	48588.280	3.0
317.2385	26.02	-2.25	188142.640	2.0	219655.550	2.0
317.2452	29.01	-4.76	117130.360	2.0	148642.600	2.0
317.2463	29.01	-3.58	113302.800	4.0	144814.930	3.0
317.2471	10.01	-.91	281332.550	.5	312844.600	1.5
317.2510	41.00	-1.43	1129.205	0.0	32649.988	0.0
317.2530	26.02	-4.54	93392.450	3.0	124903.920	2.0
317.2572	10.01	-3.24	281332.550	.5	312843.600	.5
317.2597	24.00	-3.61	20520.920	3.0	52031.720	3.0
317.2607	28.02	-3.57	82194.300	5.0	113705.000	4.0
317.2660	69.00	-.60	0.000	0.0	31519.293	0.0
317.2697	22.00	-4.50	16267.510	5.0	47777.320	5.0
317.2701	25.01	-2.62	39813.380	2.0	71323.150	2.0
317.2708	12.01	-2.00	80619.500	.5	112129.200	.5
317.2715	24.00	-3.97	31393.400	5.0	62903.030	6.0
317.2732	22.00	-1.91	7255.369	2.0	38764.832	3.0
317.2740	42.01	.24	15566.901	0.0	47085.399	0.0
317.2830	69.01	-.68	161.315	0.0	31678.919	0.0
317.2859	18.01	-1.60	161048.640	1.5	192556.840	2.5
317.2870	73.00	-.66	11130.738	0.0	42647.945	0.0
317.2876	24.00	-2.84	20523.690	4.0	52031.720	3.0
317.2936	25.01	-1.33	37811.570	1.0	69319.010	0.0
317.2940	72.00	-.25	4516.821	0.0	36033.333	0.0
317.2946	27.00	-1.87	16470.600	1.5	47977.940	.5
317.2959	22.01	-3.44	20951.770	2.5	52458.980	1.5
317.2979	21.01	-2.51	28021.210	2.0	59528.220	3.0
317.3025	8.01	-1.48	234454.450	2.5	265961.000	2.5
317.3028	18.01	-2.69	158428.030	.5	189934.550	.5
317.3029	28.01	-2.82	99154.810	4.5	130661.320	5.5
317.3060	39.01	.81	28230.132	0.0	59745.452	0.0
317.3061	24.01	-3.77	33418.110	2.5	64924.300	3.5
317.3090	75.00	-.61	13711.778	0.0	45226.800	0.0
317.3141	27.00	-1.87	14399.280	.5	45904.680	1.5
317.3200	41.01	.44	14679.669	0.0	46193.598	0.0
317.3200	76.00	-.28	13308.491	0.0	44822.420	0.0
317.3282	9.04	-1.54	784771.000	2.5	816275.000	1.5
317.3381	28.01	-4.19	101366.140	2.5	132869.160	3.5
317.3391	26.00	-1.55	23244.826	1.0	54747.740	1.0
317.3430	90.00	-.95	2823.013	0.0	34334.658	0.0
317.3455	25.01	-1.65	52373.180	3.0	83875.460	4.0
317.3460	24.00	-2.22	27223.050	2.0	58725.280	1.0
317.3466	25.01	-2.93	49820.160	2.0	81322.330	1.0
317.3538	28.01	-4.57	98969.440	5.5	130470.900	4.5
317.3538	24.01	-.90	35569.020	2.5	67070.480	1.5
317.3545	27.00	-2.63	15184.040	2.5	46685.430	1.5
317.3573	10.01	-1.61	249445.990	2.5	280947.100	1.5
317.3590	73.00	-1.48	0.000	0.0	31510.056	0.0
317.3600	29.01	-2.17	117130.360	2.0	148631.200	3.0
317.3605	26.00	-1.34	23110.925	3.0	54611.720	2.0
317.3610	63.01	-2.15	0.000	0.0	31509.858	0.0
317.3667	26.00	-3.77	17726.985	2.0	49227.160	3.0
317.3764	28.01	-4.83	102742.740	1.5	134241.960	.5
317.3815	22.00	-5.44	6661.003	3.0	38159.710	3.0
317.3833	25.00	-1.19	34463.370	1.5	65961.900	1.5
317.3930	76.01	.74	7823.779	0.0	39330.460	0.0
317.3935	24.01	-3.92	42986.730	1.5	74484.250	2.5
317.4018	25.00	-2.69	31076.420	1.5	62573.110	1.5
317.4025	25.01	-2.45	72306.810	2.0	103803.440	3.0
317.4030	25.01	-2.42	39826.570	1.0	71323.150	2.0
317.4071	23.01	-1.02	19166.190	1.0	50662.360	0.0
317.4082	26.02	-1.73	90423.680	2.0	121919.740	3.0
317.4133	27.00	-.95	21780.470	5.5	53276.020	4.5
317.4158	24.01	-3.75	54444.190	3.5	85939.500	4.5
317.4185	24.00	-3.87	20517.400	2.0	52012.440	2.0
317.4190	90.01	-1.64	1774.465	0.0	33278.565	0.0
317.4210	26.00	-.92	26479.366	1.0	57974.160	2.0
317.4306	26.02	-3.06	105929.160	3.0	137423.000	3.0
317.4342	28.01	-3.45	107082.210	2.5	138575.690	2.5
317.4399	10.01	-2.69	249839.630	.5	281332.550	.5
317.4441	23.03	-1.19	226796.300	2.0	258288.800	1.0
317.4469	25.01	-4.39	36274.290	2.0	67766.510	2.0
317.4517	25.01	-2.48	52383.720	4.0	83875.460	4.0
317.4523	23.01	-1.22	30641.710	3.0	62133.390	3.0
317.4540	24.00	-3.10	20520.920	3.0	52012.440	2.0
317.4593	26.02	-4.02	93412.930	2.0	124903.920	2.0
317.4610	75.00	-.30	14518.354	0.0	46018.286	0.0
317.4780	75.00	.31	26939.612	0.0	58437.858	0.0
317.4905	27.00	-.99	15184.040	2.5	46671.940	2.5
317.4917	24.01	-3.86	55023.300	2.5	86511.080	1.5
317.4991	29.01	-3.19	88605.160	1.0	120092.200	2.0
317.5005	23.00	-4.88	18302.270	3.5	49789.170	3.5
317.5005	17.01	-2.33	146330.000	1.0	177816.900	2.0
317.5032	15.01	-1.64	107923.570	2.0	139410.200	2.0
317.5050	50.00	-.31	3387.616	0.0	34883.183	0.0
317.5066	26.01	-2.10	38164.240	2.5	69650.540	2.5
317.5073	24.00	-2.59	24200.230	6.0	55686.460	5.0
317.5088	11.01	-.95	300391.590	0.0	331877.670	1.0
317.5099	23.00	-5.00	8476.200	1.5	39962.170	2.5
317.5110	52.00	-.03	23068.051	0.0	54563.023	0.0
317.5130	24.00	-3.63	20517.400	2.0	52003.060	1.0
317.5131	25.00	-1.68	34423.270	3.5	65908.920	4.5
317.5143	24.00	-1.58	25106.340	3.0	56591.880	2.0
317.5156	17.01	-3.56	147053.700	2.0	178539.100	2.0
317.5277	15.04	.16	272961.100	.5	304445.300	1.5
317.5290	24.01	-2.86	55023.300	2.5	86507.380	2.5
317.5348	25.00	-.91	34463.370	1.5	65946.870	2.5
317.5388	17.01	-1.22	146333.800	2.0	177816.900	2.0
317.5415	28.01	-2.43	104503.220	2.5	135986.060	3.5
317.5432	25.01	-2.89	48317.850	4.0	79800.520	4.0
317.5439	26.00	-.22	19350.882	5.0	50833.485	5.0
317.5489	28.01	-3.89	101247.370	2.5	132729.480	2.5
317.5496	28.01	-4.13	99418.610	3.5	130900.650	2.5
317.5575	25.00	-.90	35041.370	3.5	66522.620	4.5
317.5608	24.00	-1.89	23512.000	1.0	54992.930	2.0
317.5611	25.01	-3.39	59537.400	4.0	91018.300	3.0
317.5635	22.01	-.82	31113.610	3.5	62594.270	4.5
317.5662	28.01	-3.68	101366.140	2.5	132846.530	3.5
317.5698	23.01	-2.31	36425.070	4.0	67905.100	3.0
317.5701	28.01	-4.94	104503.220	2.5	135983.220	1.5
317.5716	25.00	-.86	34938.700	4.5	66418.550	5.5
317.5720	90.01	-.47	6613.917	0.0	38102.839	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
317.5738	25.00	-2.25	33825.490	2.5	65305.130	3.5
317.5745	25.01	-4.99	69215.730	1.0	100695.300	1.0
317.5776	9.02	-1.87	413143.860	3.5	444623.120	3.5
317.5780	41.01	.22	10566.135	0.0	42054.462	0.0
317.5784	12.01	-1.70	80650.020	1.5	112129.200	.5
317.5865	26.01	-2.65	72130.440	4.5	103608.820	4.5
317.5911	23.01	-3.11	22273.540	1.0	53751.460	1.0
317.5967	26.00	-1.87	23270.374	0.0	54747.740	1.0
317.6105	9.03	.14	519890.000	2.0	551366.000	3.0
317.6120	10.01	-1.60	249695.530	1.5	281171.380	2.5
317.6190	25.01	-4.93	68417.340	2.0	99892.500	2.0
317.6278	26.00	-.91	26339.682	2.0	57813.970	3.0
317.6286	28.00	-3.22	15734.018	1.0	47208.228	1.0
317.6290	73.00	-.89	5968.656	0.0	37451.927	0.0
317.6311	29.01	-4.05	114511.440	1.0	145985.400	2.0
317.6327	23.03	-1.93	255747.600	3.0	287221.400	2.0
317.6331	25.02	-4.56	177269.340	1.5	208743.100	2.5
317.6352	8.01	-3.79	234454.450	2.5	265928.000	1.5
317.6360	26.00	-1.77	21038.987	2.0	52512.460	1.0
317.6466	26.00	-4.93	18378.187	2.0	49850.610	3.0
317.6500	90.01	-1.41	6210.629	0.0	37691.819	0.0
317.6560	23.00	-3.18	8412.940	.5	39884.430	1.5
317.6560	10.01	-1.08	281332.550	.5	312804.040	1.5
317.6562	28.01	-3.77	101258.010	1.5	132729.480	2.5
317.6590	74.00	-1.40	1613.150	0.0	33093.448	0.0
317.6696	21.01	-2.39	26081.320	2.0	57551.460	1.0
317.6800	58.01	.09	8307.725	0.0	39785.942	0.0
317.6808	28.01	-4.09	101740.270	3.5	133209.300	2.5
317.6860	72.01	-.69	4839.451	0.0	36317.074	0.0
317.6862	27.02	-3.63	73540.200	3.5	105008.700	3.5
317.6933	24.02	-4.59	65890.900	3.0	97358.700	4.0
317.6967	25.01	-2.03	48333.060	5.0	79800.520	4.0
317.7049	25.00	-2.24	23719.520	1.5	55186.170	2.5
317.7140	58.01	-.87	4436.164	0.0	35911.012	0.0
317.7170	90.01	-1.35	6613.917	0.0	38088.468	0.0
317.7186	26.02	-4.79	93388.750	4.0	124854.040	3.0
317.7241	22.00	-4.31	12118.394	4.0	43583.140	3.0
317.7247	26.01	-2.90	31364.470	1.5	62829.160	.5
317.7248	23.00	-4.44	8412.940	.5	39877.620	.5
317.7285	24.00	-2.55	24897.550	4.0	56361.860	5.0
317.7460	69.01	-.90	8711.012	0.0	40182.691	0.0
317.7514	26.00	-4.95	19757.020	3.0	51219.059	3.0
317.7526	26.01	-.88	31483.200	3.5	62945.120	3.5
317.7535	23.01	-5.11	18269.490	1.0	49731.320	2.0
317.7560	26.00	-4.18	12560.933	3.0	44022.518	4.0
317.7580	77.00	-.58	7017.204	0.0	38487.694	0.0
317.7603	26.01	-3.34	31811.870	2.5	63273.030	2.5
317.7615	25.00	-2.46	23818.870	.5	55279.910	1.5
317.7623	28.01	-4.19	101357.200	4.5	132818.160	4.5
317.7649	26.01	-2.54	31368.450	.5	62829.160	.5
317.7662	24.00	-.52	24056.110	5.0	55516.690	6.0
317.7695	23.01	-2.42	30673.140	2.0	62133.390	3.0
317.7710	75.00	-.39	11534.025	0.0	43003.228	0.0
317.7731	23.01	-4.97	20622.990	3.0	52082.880	4.0
317.7772	28.01	-2.71	105439.850	1.5	136899.340	2.5
317.7793	28.00	-4.21	27580.411	5.0	59039.693	4.0
317.7834	23.00	-2.97	8476.200	1.5	39935.070	1.5
317.7865	26.02	-2.58	188013.400	4.0	219471.970	4.0
317.7900	42.00	-.02	16615.449	0.0	48082.770	0.0
317.7913	24.01	-4.62	32603.730	2.5	64061.820	1.5
317.7942	29.01	-3.86	110084.290	1.0	141542.100	2.0
317.7953	26.02	-1.74	90483.590	3.0	121941.290	4.0
317.7989	27.00	-1.78	23855.620	4.5	55312.960	4.5
317.8001	22.00	-2.13	17215.440	5.0	48672.660	4.0
317.8006	26.00	-.32	19350.882	5.0	50808.053	4.0
317.8060	76.00	-.88	4113.534	0.0	35579.271	0.0
317.8074	26.02	-2.70	188109.580	3.0	219566.080	3.0
317.8090	40.01	.02	7662.464	0.0	39127.904	0.0
317.8120	62.01	-1.19	1451.835	0.0	32916.978	0.0
317.8144	26.02	-4.32	198737.050	4.0	230192.860	3.0
317.8160	73.00	-1.08	5565.369	0.0	37030.116	0.0
317.8230	26.00	-4.25	24335.764	2.0	55790.720	3.0
317.8337	28.02	-3.15	81686.900	6.0	113140.800	5.0
317.8383	27.00	-1.41	21920.090	4.5	53373.530	3.5
317.8420	25.00	-.89	34423.270	3.5	65876.340	3.5
317.8430	72.00	-.33	14437.696	0.0	45899.770	0.0
317.8433	28.01	-3.08	100475.820	3.5	131928.770	4.5
317.8498	24.00	-2.50	31377.960	4.0	62830.260	5.0
317.8502	25.00	-.80	18705.370	4.5	50157.630	3.5
317.8529	17.01	-3.84	126725.100	1.0	158177.100	1.0
317.8533	26.00	-2.53	24338.766	3.0	55790.720	3.0
317.8610	75.00	-.18	14921.641	0.0	46381.933	0.0
317.8631	24.01	-2.74	51789.210	3.5	83240.200	4.5
317.8642	22.01	-.70	30958.700	2.5	62409.580	3.5
317.8676	25.01	-4.91	39813.380	2.0	71263.920	1.0
317.8690	27.02	-4.66	139818.700	3.5	171269.100	4.5
317.8711	27.02	-3.62	140492.400	4.5	171942.600	4.5
317.8718	25.00	-.63	34423.270	3.5	65873.400	2.5
317.8737	26.00	-4.43	29356.780	2.0	60806.720	3.0
317.8750	58.01	-1.00	3306.958	0.0	34765.865	0.0
317.8790	24.01	-.92	42986.730	1.5	74436.140	2.5
317.8917	25.00	-3.70	31124.950	.5	62573.110	1.5
317.8957	26.00	-2.19	19621.004	5.0	51068.770	5.0
317.8992	28.01	-3.84	103653.030	3.5	135100.450	3.5
317.9049	11.01	-1.16	299193.750	2.0	330640.600	1.0
317.9049	11.01	-1.16	299193.750	2.0	330640.600	1.0
317.9060	74.00	.12	17583.339	0.0	49039.178	0.0
317.9165	24.00	-2.58	24833.860	3.0	56279.560	4.0
317.9223	24.01	-2.40	38509.070	3.5	69954.200	2.5
317.9278	24.00	-4.39	23512.000	1.0	54956.590	1.0
317.9297	22.00	-1.99	7255.369	2.0	38699.767	2.0
317.9311	29.01	-3.58	114511.440	1.0	145955.700	1.0
317.9331	20.01	.51	25414.400	1.5	56858.460	2.5
317.9407	23.01	-1.46	30641.710	3.0	62085.020	2.0
317.9410	39.01	-1.44	806.575	0.0	32258.951	0.0
317.9412	24.01	-1.52	35569.020	2.5	67012.280	2.5
317.9429	22.00	-3.92	386.874	4.0	31829.972	4.0
317.9480	26.00	-3.56	12968.552	2.0	44411.137	1.0
317.9499	26.01	-.90	38164.240	2.5	69606.640	3.5
317.9622	28.01	-1.74	104503.220	2.5	135944.400	3.5
317.9730	45.00	-1.07	7743.122	0.0	39192.333	0.0
317.9793	29.01	-1.22	116576.810	0.0	148016.300	1.0
317.9827	27.00	-.50	16778.160	2.5	48217.320	3.5
317.9880	18.02	-3.46	240257.590	1.0	271696.220	0.0
317.9927	25.00	-2.89	31076.420	1.5	62514.590	2.5
317.9965	23.00	-1.31	8715.720	3.5	40153.510	2.5
317.9967	28.01	-3.73	105499.050	3.5	136936.820	3.5
318.0000	23.01	-3.03	18293.870	2.0	49731.320	2.0
318.0010	25.01	-4.17	39826.570	1.0	71263.920	1.0
318.0059	24.00	-4.12	31393.400	5.0	62830.260	5.0
318.0100	13.02	-1.50	178433.430	.5	209869.890	.5
318.0120	76.00	.29	19761.092	0.0	51206.446	0.0
318.0131	26.02	-3.06	90483.590	3.0	121919.740	3.0
318.0142	26.01	-1.10	38214.500	1.5	69650.540	2.5
318.0146	24.03	-4.03	127202.000	4.5	158638.000	4.5
318.0167	23.03	-1.13	223033.000	3.0	254468.800	2.0
318.0200	90.01	-.71	1451.835	0.0	32896.398	0.0
318.0217	26.00	.07	19757.020	3.0	51192.320	4.0
318.0262	26.00	-1.84	29371.860	3.0	60806.720	3.0
318.0275	22.01	-.83	30836.520	1.5	62271.250	2.5
318.0283	9.02	-2.19	413143.860	3.5	444578.510	4.5
318.0290	41.01	.28	7823.779	0.0	39267.452	0.0
318.0301	23.00	-1.26	18680.120	5.5	50114.590	5.5
318.0318	23.00	-2.39	8412.940	.5	39847.240	1.5
318.0350	77.00	.19	15970.189	0.0	47413.269	0.0
318.0369	17.01	-3.36	126743.300	2.0	158177.100	1.0
318.0401	28.01	-3.39	107142.210	1.5	138575.690	2.5
318.0471	26.00	-2.08	22838.320	2.0	54271.110	1.0
318.0517	20.00	-2.20	15315.943	2.0	46748.283	1.0
318.0560	69.00	-1.08	0.000	0.0	31441.004	0.0
318.0578	25.00	-2.17	30354.210	3.5	61785.940	3.5
318.0603	9.02	-3.27	413143.860	3.5	444575.350	2.5
318.0724	24.01	-.28	20512.750	5.5	51943.040	4.5
318.0740	26.00	-2.09	27394.676	3.0	58824.810	2.0
318.0740	74.00	-.67	13227.833	0.0	44667.058	0.0
318.0756	26.00	-3.19	704.003	2.0	32133.977	2.0
318.0789	28.01	-3.97	101740.270	3.5	133169.920	3.5
318.0816	24.01	-3.49	55081.700	1.5	86511.080	1.5
318.0820	58.01	-1.12	2339.068	0.0	33777.502	0.0
318.0861	29.01	-2.59	117130.360	2.0	148559.300	2.0
318.0920	70.01	-.01	33311.556	0.0	64749.002	0.0
318.0944	28.01	-3.04	68131.210	3.5	99559.330	2.5
318.0944	9.02	-2.65	413195.000	2.5	444623.120	3.5
318.0950	73.00	-1.14	0.000	0.0	31437.149	0.0
318.1010	72.00	-.74	5484.711	0.0	36921.267	0.0
318.1036	18.01	-.64	155043.070	2.5	186470.280	1.5
318.1150	72.00	-1.14	4516.821	0.0	35951.994	0.0
318.1180	90.01	-.97	7259.177	0.0	38694.053	0.0
318.1191	24.01	-3.59	55081.700	1.5	86507.380	2.5
318.1226	25.00	-1.53	31001.150	2.5	62426.480	3.5
318.1269	25.00	-1.51	34343.900	4.5	65768.810	4.5
318.1275	20.01	-.45	25414.400	1.5	56839.250	1.5
318.1289	24.01	-4.05	20518.330	3.5	51943.040	4.5
318.1341	17.01	-1.23	146330.000	1.0	177754.200	1.0
318.1374	28.01	-2.61	68965.650	1.5	100389.520	2.5
318.1400	41.01	-.56	7178.519	0.0	38611.222	0.0
318.1418	26.02	-1.16	188142.640	2.0	219566.080	3.0
318.1443	24.01	-1.47	20519.850	4.5	51943.040	4.5
318.1497	23.00	-5.02	8578.520	2.5	40001.180	3.5
318.1515	26.00	-1.26	20874.482	3.0	52296.960	2.0
318.1560	25.01	-2.38	48317.850	4.0	79739.880	5.0
318.1580	40.01	-.01	7420.492	0.0	38851.416	0.0
318.1627	23.00	-2.17	8578.520	2.5	39999.890	2.5
318.1690	73.00	-.71	9678.902	0.0	41108.740	0.0
318.1691	24.01	-3.02	42898.120	2.5	74318.860	2.5
318.1726	17.01	-.82	146333.800	2.0	177754.200	1.0
318.1737	28.00	-1.20	15609.861	2.0	47030.148	3.0
318.1771	22.00	-5.91	6556.828	1.0	37976.780	2.0
318.1798	9.01	-4.75	265357.560	1.0	296777.250	2.0
318.1810	74.00	.17	16292.819	0.0	47721.471	0.0
318.1841	22.01	-.14	32025.500	2.5	63444.760	3.5
318.1844	26.00	-1.39	23192.486	2.0	54611.720	2.0
318.1876	23.00	-1.08	18513.460	4.5	49932.370	4.5
318.1880	76.00	.10	14276.381	0.0	45704.342	0.0
318.1907	26.00	-.14	19912.486	2.0	51331.090	2.0
318.1915	26.00	-2.43	24335.764	2.0	55754.290	2.0
318.1920	40.01	-.33	5726.684	0.0	37154.250	0.0
318.1928	27.02	-4.52	72083.300	4.5	103501.700	3.5
318.1937	24.00	-3.95	27703.840	4.0	59122.150	3.0
318.1999	25.00	-3.78	34938.700	4.5	66356.400	4.5
318.2050	26.00	-4.64	19562.435	4.0	50979.627	4.0
318.2062	26.00	-1.09	22996.661	4.0	54413.740	3.0
318.2067	28.01	-3.38	105861.190	2.5	137278.220	1.5
318.2075	22.00	-4.78	6742.757	4.0	38159.710	3.0
318.2099	23.00	-1.05	18372.460	3.5	49789.170	3.5
318.2120	27.00	-1.18	16195.680	.5	47612.180	1.5
318.2161	26.00	-2.31	26224.961	3.0	57641.060	3.0
318.2165	29.01	-.83	114511.440	1.0	145927.500	2.0
318.2219	26.00	-2.48	24338.766	3.0	55754.290	2.0
318.2324	18.02	-3.35	240257.590	1.0	271672.080	1.0
318.2337	18.01	-4.32	187589.230	2.5	219003.600	2.5
318.2400	90.01	-1.18	6613.917	0.0	38036.743	0.0
318.2435	17.01	-1.92	147125.700	3.0	178539.100	2.0
318.2485	25.00	-.63	35041.370	3.5	66454.270	3.5
318.2517	28.01	-3.14	105439.850	1.5	136852.440	1.5
318.2519	18.01	-4.73	187589.230	2.5	219001.800	1.5
318.2570	73.00	-1.13	5968.656	0.0	37389.803	0.0
318.2570	76.00	-.06	13953.751	0.0	45374.898	0.0
318.2588	23.01	-.56	30673.140	2.0	62085.020	2.0
318.2604	22.01	-.29	31756.500	1.5	63168.230	2.5
318.2607	26.00	-3.05	22249.430	3.0	53661.130	3.0
318.2640	90.01	-.76	8952.985	0.0	40373.441	0.0
318.2660	75.00	-.35	19357.805	0.0	50778.064	0.0
318.2661	25.02	-2.34	146066.070	1.5	177477.230	2.5
318.2676	23.01	-.11	20980.920	2.0	52391.940	3.0
318.2717	24.00	-2.51	31280.350	5.0	62690.960	5.0
318.2772	23.00	-2.03	8715.720	3.5	40125.790	3.5
318.2776	25.00	-3.84	34463.370	1.5	65873.400	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
318.2792	26.00	-3.25	12968.552	2.0	44378.420	1.0
318.2860	40.01	.29	4436.164	0.0	35854.448	0.0
318.2870	75.00	.54	18793.202	0.0	50211.387	0.0
318.2958	23.00	-2.45	8476.200	1.5	39884.430	1.5
318.2959	9.02	-4.34	413143.860	3.5	444552.080	3.5
318.2980	26.00	-3.66	17726.985	2.0	49135.003	3.0
318.2982	27.02	-4.43	91715.100	2.5	123123.100	1.5
318.3030	42.00	.56	16696.107	0.0	48112.713	0.0
318.3031	28.00	-1.70	16017.317	0.0	47424.830	1.0
318.3101	25.01	-2.79	48333.060	5.0	79739.880	5.0
318.3107	26.00	-2.92	24118.815	4.0	55525.580	5.0
318.3113	26.01	-2.59	13673.210	1.5	45079.910	2.5
318.3218	29.01	-2.19	108335.430	2.0	139741.100	3.0
318.3239	23.02	-1.66	56922.500	2.5	88327.960	3.5
318.3248	28.00	-1.37	15734.018	1.0	47139.392	2.0
318.3284	28.01	-3.03	68154.310	1.5	99559.330	2.5
318.3318	24.01	-.74	35607.600	3.5	67012.280	2.5
318.3320	24.00	-2.56	28679.430	1.0	60084.090	1.0
318.3371	25.01	-2.16	37811.570	1.0	69215.730	1.0
318.3375	24.00	-4.37	24282.340	4.0	55686.460	5.0
318.3386	28.01	-4.25	104646.520	3.5	136050.530	2.5
318.3407	23.00	.45	137.380	2.5	31541.180	3.5
318.3420	68.00	-.73	403.288	0.0	31816.045	0.0
318.3434	23.00	-2.78	8715.720	3.5	40119.260	2.5
318.3481	24.01	-3.08	33521.230	3.5	64924.300	3.5
318.3488	10.03	-2.51	642184.000	1.5	673587.000	2.5
318.3520	58.01	.18	4436.164	0.0	35847.935	0.0
318.3556	25.01	-1.91	33147.390	5.0	64549.720	6.0
318.3563	27.00	-5.43	4690.180	2.5	36092.440	2.5
318.3569	25.01	-2.00	36364.300	1.0	67766.510	2.0
318.3569	26.02	-.95	188013.400	4.0	219415.610	5.0
318.3571	26.00	-2.42	19621.004	5.0	51023.190	6.0
318.3599	24.00	-1.24	28682.180	2.0	60084.090	1.0
318.3649	23.00	-3.45	8476.200	1.5	39877.620	.5
318.3650	17.01	-4.93	153257.000	2.0	184658.400	2.0
318.3674	25.01	-4.61	67008.930	3.0	98410.100	2.0
318.3730	71.01	-1.02	17180.052	0.0	48589.751	0.0
318.3750	25.01	-4.79	49820.160	2.0	81220.580	3.0
318.3790	90.01	-.55	13147.176	0.0	44556.283	0.0
318.3836	13.02	-1.20	178470.320	1.5	209869.890	.5
318.3852	26.02	-4.58	86847.110	2.0	118246.520	3.0
318.3908	22.00	-3.07	7255.369	2.0	38654.230	1.0
318.3920	28.01	-1.95	104503.220	2.5	135901.960	2.5
318.3964	23.00	.60	323.420	3.5	31721.730	4.5
318.3973	28.01	-3.37	105838.060	3.5	137236.280	3.5
318.3975	17.01	-2.16	153257.000	2.0	184655.200	3.0
318.3986	23.00	.30	0.000	1.5	31398.090	2.5
318.4023	24.00	-3.64	31364.330	3.0	62762.060	4.0
318.4040	25.01	-1.93	49882.150	4.0	81279.710	4.0
318.4040	74.00	.15	17986.627	0.0	49393.268	0.0
318.4100	26.00	-.92	26874.534	5.0	58271.500	5.0
318.4109	22.01	-2.09	93.940	2.5	31490.820	3.5
318.4210	58.01	-.86	2500.383	0.0	33905.347	0.0
318.4220	41.01	.56	15808.874	0.0	47213.739	0.0
318.4222	25.00	-2.78	34938.700	4.5	66334.470	3.5
318.4239	24.02	-2.71	66222.700	5.0	97618.300	5.0
318.4265	18.01	-3.32	172335.520	2.5	203730.860	1.5
318.4310	30.02	-2.67	233610.400	2.0	265005.300	2.0
318.4361	28.00	-1.81	2216.519	2.0	33610.916	2.0
318.4362	24.01	-1.00	38509.070	3.5	69903.460	3.5
318.4401	28.01	-4.33	106620.530	3.5	138014.530	2.5
318.4420	74.00	-1.60	3306.958	0.0	34709.851	0.0
318.4429	26.01	-4.31	30764.460	3.5	62158.190	4.5
318.4445	24.00	-1.58	31280.350	5.0	62673.920	6.0
318.4545	11.01	-.51	300107.710	2.0	331500.290	2.0
318.4550	73.00	-.80	5968.656	0.0	37370.267	0.0
318.4570	42.00	.06	16615.449	0.0	48016.863	0.0
318.4619	26.00	-.06	19757.020	3.0	51148.870	3.0
318.4622	18.03	-2.62	268171.380	1.5	299563.200	.5
318.4661	29.01	-4.71	117130.360	2.0	148521.800	1.0
318.4741	24.00	-2.72	31280.350	5.0	62671.000	4.0
318.4760	75.00	.81	18793.202	0.0	50192.742	0.0
318.4770	66.01	-1.15	806.575	0.0	32206.017	0.0
318.4822	25.01	-1.69	49889.860	3.0	81279.710	4.0
318.4841	29.01	-.75	114511.440	1.0	145901.100	1.0
318.4885	25.00	-3.57	35114.980	2.5	66504.210	1.5
318.4895	26.00	-2.72	415.932	3.0	31805.059	3.0
318.4940	90.01	-.89	4436.164	0.0	35833.930	0.0
318.4999	28.01	-4.68	25036.380	2.5	56424.490	1.5
318.5091	25.00	-.70	24802.250	3.5	56189.450	4.5
318.5095	16.02	-2.01	173191.730	2.0	204578.890	2.0
318.5096	26.01	-2.90	30764.460	3.5	62151.610	2.5
318.5100	42.00	-.02	11775.998	0.0	43172.187	0.0
318.5122	14.02	-.23	176487.190	1.0	207874.090	0.0
318.5132	22.00	-1.70	17075.310	4.0	48462.110	5.0
318.5211	9.02	-3.15	355981.900	1.5	387367.920	2.5
318.5231	26.00	-3.27	29371.860	3.0	60757.680	4.0
318.5314	27.02	-3.90	138970.500	1.5	170355.500	2.5
318.5317	26.01	-3.30	13904.870	.5	45289.840	1.5
318.5323	28.01	-2.73	104646.520	3.5	136031.430	2.5
318.5330	76.00	-1.33	2661.698	0.0	34055.620	0.0
318.5400	23.00	.73	553.020	4.5	31937.180	5.5
318.5406	24.00	-4.69	31377.960	4.0	62762.060	4.0
318.5451	23.00	-3.73	8578.520	2.5	39962.170	2.5
318.5533	26.00	-2.43	29371.860	3.0	60754.710	4.0
318.5540	63.00	-1.24	0.000	0.0	31391.852	0.0
318.5546	28.01	-4.19	99418.610	3.5	130801.330	4.5
318.5570	75.00	.81	18793.202	0.0	50184.758	0.0
318.5590	45.00	-.83	9114.300	0.0	40505.659	0.0
318.5596	25.01	-4.25	71323.150	2.0	102705.370	3.0
318.5618	24.00	-4.54	24897.550	4.0	56279.560	4.0
318.5631	27.00	-2.92	17733.680	3.5	48615.560	2.5
318.5669	28.01	-2.74	105499.050	3.5	136880.560	4.5
318.5706	29.01	-1.46	108014.660	3.0	139395.800	4.0
318.5710	42.00	.23	16534.792	0.0	47924.969	0.0
318.5779	18.02	-3.69	240291.660	2.0	271672.080	1.0
318.5787	9.02	-1.96	413195.000	2.5	444575.350	2.5
318.5888	8.02	-3.29	300440.850	2.0	331820.200	3.0
318.5924	9.03	-.61	519539.000	1.0	550918.000	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
318.5941	27.00	-2.33	15184.040	2.5	46562.870	1.5
318.6009	29.01	-1.12	114511.440	1.0	145889.600	0.0
318.6022	22.00	-5.28	6598.749	2.0	37976.780	2.0
318.6040	44.00	-1.07	2661.698	0.0	34048.623	0.0
318.6047	26.00	-3.26	21715.735	5.0	53093.517	6.0
318.6083	23.01	-2.21	18353.890	3.0	49731.320	2.0
318.6130	58.01	.03	5726.684	0.0	37112.723	0.0
318.6173	18.01	-3.89	163506.450	3.5	194883.000	3.5
318.6218	25.03	-4.57	138123.100	6.0	169499.200	5.0
318.6233	24.00	-4.77	24833.860	3.0	56209.810	3.0
318.6290	75.00	.25	27100.927	0.0	58485.390	0.0
318.6293	24.01	-3.21	42898.120	2.5	74273.480	1.5
318.6320	28.01	-3.04	105861.190	2.5	137236.280	3.5
318.6343	27.00	-2.87	1406.840	2.5	32781.710	2.5
318.6353	29.01	-2.29	108335.430	2.0	139710.200	2.0
318.6386	23.00	-6.31	2153.200	1.5	33527.640	2.5
318.6451	22.00	.01	0.000	2.0	31373.801	3.0
318.6507	25.00	-2.51	30354.210	3.5	61727.460	2.5
318.6540	41.00	-.71	4920.109	0.0	36302.110	0.0
318.6645	18.00	-3.64	93750.639	1.0	125122.540	0.0
318.6690	24.01	-2.92	51669.750	2.5	83041.200	3.5
318.6718	25.01	-3.64	33147.390	5.0	64518.570	5.0
318.6726	24.01	-1.42	35356.060	1.5	66727.160	2.5
318.6732	23.00	-1.75	8476.200	1.5	39847.240	1.5
318.6736	26.01	-1.69	13673.210	1.5	45044.210	1.5
318.6809	26.00	-2.51	17927.378	1.0	49297.660	1.0
318.6859	23.01	-.82	18353.890	3.0	49723.680	4.0
318.6980	76.00	-.14	11292.053	0.0	42669.721	0.0
318.7010	62.01	-.96	1451.835	0.0	32829.208	0.0
318.7049	29.01	-4.46	110365.980	2.0	141733.900	2.0
318.7058	25.01	-1.16	37847.900	2.0	69215.730	1.0
318.7103	22.00	-1.54	16961.420	3.0	48328.810	4.0
318.7121	26.02	-3.63	158417.310	2.0	189784.520	2.0
318.7123	21.01	-1.24	28161.030	3.0	59528.220	3.0
318.7153	26.00	-1.91	23244.826	1.0	54611.720	2.0
318.7167	11.01	-2.76	300510.920	1.0	331877.670	1.0
318.7210	25.00	-1.85	30419.610	2.5	61785.940	3.5
318.7220	62.01	-.62	2984.328	0.0	34359.633	0.0
318.7295	26.01	-1.17	33466.500	4.5	64832.000	4.5
318.7319	28.01	-4.30	98822.550	6.5	130187.810	6.5
318.7340	76.00	-.63	13308.491	0.0	44682.615	0.0
318.7386	22.01	-6.28	24961.340	1.5	56325.940	2.5
318.7425	26.00	-4.89	29313.008	6.0	60677.230	5.0
318.7432	10.01	-1.36	251011.180	2.5	282375.330	1.5
318.7474	26.01	-3.19	72619.610	2.5	103983.350	3.5
318.7487	17.01	-1.11	146330.000	1.0	177693.600	0.0
318.7490	41.00	-.55	2742.356	0.0	34115.003	0.0
318.7514	28.01	-4.09	101366.140	2.5	132729.480	2.5
318.7575	10.01	-3.72	219648.440	1.5	251011.180	2.5
318.7590	42.01	.69	23713.311	0.0	55084.974	0.0
318.7610	25.01	-3.76	54846.000	0.0	86208.400	1.0
318.7611	26.02	-.98	188109.580	3.0	219471.970	4.0
318.7679	26.00	-3.81	12560.933	3.0	43922.652	3.0
318.7706	23.01	-.02	8640.210	2.0	40001.660	2.0
318.7740	2.00	-1.16	159856.000	0.0	191226.187	0.0
318.7790	62.01	-.80	2177.753	0.0	33547.448	0.0
318.7822	25.00	-.60	30354.210	3.5	61714.520	4.5
318.7840	18.02	-3.20	211563.830	1.0	242923.960	1.0
318.7902	8.01	-1.91	234402.480	1.5	265762.000	1.5
318.8008	24.00	-1.63	24093.160	2.0	55451.640	3.0
318.8061	23.01	-3.68	32299.240	1.0	63657.200	2.0
318.8090	42.00	.26	23551.996	0.0	54918.739	0.0
318.8095	23.01	-.01	17910.980	4.0	49268.610	4.0
318.8140	11.01	-1.03	300391.590	0.0	331748.770	1.0
318.8140	11.01	-1.03	300391.590	0.0	331748.770	1.0
318.8150	9.02	-3.62	413195.000	2.5	444552.080	3.5
318.8182	25.00	-1.10	30354.210	3.5	61710.980	3.5
318.8204	23.00	-4.07	8578.520	2.5	39935.070	1.5
318.8230	90.01	-.81	1774.465	0.0	33139.831	0.0
318.8268	27.00	.27	21920.090	4.5	53276.020	4.5
318.8331	15.04	-1.65	414458.700	2.5	445814.000	2.5
318.8331	15.04	-.34	414458.700	3.5	445814.000	2.5
318.8331	15.04	-.50	414458.700	2.5	445814.000	1.5
318.8338	28.01	-4.36	103025.580	2.5	134380.820	3.5
318.8340	44.00	-1.03	2016.438	0.0	33380.722	0.0
318.8340	92.01	-1.24	1693.808	0.0	33058.092	0.0
318.8370	27.00	-1.31	15774.040	1.5	47128.960	2.5
318.8380	18.01	-3.50	163506.450	3.5	194861.270	2.5
318.8400	42.00	.25	23390.681	0.0	54754.374	0.0
318.8482	25.00	-2.39	35041.370	3.5	66395.190	2.5
318.8510	23.01	.12	8841.970	3.0	40195.520	3.0
318.8527	26.00	-.75	27166.804	4.0	58520.180	4.0
318.8554	23.00	-4.65	10892.500	3.5	42245.610	3.5
318.8562	26.00	-4.68	19350.882	5.0	50703.912	5.0
318.8647	30.02	-4.00	221052.200	4.0	252404.400	3.0
318.8658	26.00	-3.79	28819.966	5.0	60172.060	4.0
318.8704	29.01	-2.36	117130.360	2.0	148482.000	3.0
318.8720	62.01	-1.38	2661.698	0.0	34022.244	0.0
318.8741	10.01	-.65	249445.990	2.5	280797.260	2.5
318.8790	58.01	-.33	3952.218	0.0	35312.076	0.0
318.8801	24.01	-4.16	32355.940	3.5	63706.620	4.5
318.8818	28.01	-4.88	105838.060	3.5	137188.580	4.5
318.8833	28.00	-1.45	25753.578	4.0	57103.946	3.0
318.8900	26.00	-6.25	11976.239	4.0	43325.946	3.0
318.8927	25.01	-1.51	70150.390	1.0	101499.840	2.0
318.8962	14.01	.43	124317.000	2.5	155666.100	3.5
318.8983	27.02	-4.81	72341.900	1.5	103690.800	.5
318.9050	45.00	-1.41	2581.041	0.0	33938.342	0.0
318.9084	17.01	-.61	146469.000	3.0	177816.900	2.0
318.9177	26.01	-1.60	72261.830	5.5	103608.820	4.5
318.9211	28.01	-4.04	99418.610	3.5	130765.260	3.5
318.9233	25.01	-2.55	33147.390	5.0	64493.830	4.0
318.9240	74.01	.56	15082.956	0.0	46438.389	0.0
318.9266	28.01	-2.62	67694.640	2.5	99040.750	1.5
318.9280	41.01	.70	17341.367	0.0	48696.406	0.0
318.9324	25.00	-2.48	34423.270	3.5	65768.810	4.5
318.9325	9.02	-4.83	413143.860	3.5	444489.400	2.5
318.9460	76.00	-.47	8630.355	0.0	39983.625	0.0
318.9532	22.01	-.33	30836.520	1.5	62180.020	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
318.9603	28.01	-1.70	68735.980	2.5	100078.780	1.5
318.9620	72.00	-1.65	0.000	0.0	31351.697	0.0
318.9640	58.01	-.75	2581.041	0.0	33932.541	0.0
318.9643	25.02	-4.34	177477.230	2.5	208819.640	3.5
318.9729	23.02	-4.86	109854.870	3.5	141196.430	2.5
318.9746	26.02	-2.79	93512.640	4.0	124854.040	3.0
318.9751	27.00	-2.73	1809.330	1.5	33150.680	1.5
318.9779	23.01	-1.38	19132.690	2.0	50473.760	1.0
318.9783	11.01	-.52	268766.670	1.0	300107.710	2.0
318.9857	24.01	-1.62	38563.150	4.5	69903.460	3.5
318.9935	28.01	-4.07	104646.520	3.5	135986.060	3.5
318.9960	25.00	-1.23	35114.980	2.5	66454.270	3.5
318.9974	25.00	-3.97	35165.050	1.5	66504.210	1.5
318.9980	23.03	-1.85	225804.100	2.0	257143.200	2.0
318.9980	44.00	-1.03	2016.438	0.0	33364.597	0.0
319.0000	28.01	-4.10	99418.610	3.5	130757.510	4.5
319.0018	26.00	-2.49	20874.482	3.0	52213.207	3.0
319.0048	25.01	-4.20	49882.150	4.0	81220.580	3.0
319.0070	90.01	-.33	9517.587	0.0	40864.862	0.0
319.0080	28.01	-1.91	99132.780	5.5	130470.900	4.5
319.0139	26.01	-4.58	30388.550	4.5	61726.090	3.5
319.0170	75.00	-.29	16212.162	0.0	47558.454	0.0
319.0194	7.01	-2.36	166521.690	1.0	197858.690	1.0
319.0280	64.00	-.20	483.945	0.0	31829.156	0.0
319.0306	27.00	-1.81	23611.780	5.5	54947.680	5.5
319.0317	26.01	-3.02	47389.820	1.5	78725.610	1.5
319.0317	28.01	-3.57	100592.980	3.5	131928.770	4.5
319.0340	58.01	-.45	2581.041	0.0	33925.663	0.0
319.0394	28.01	-3.63	25036.380	2.5	56371.410	3.5
319.0410	21.01	-.74	29736.220	0.0	61071.100	1.0
319.0507	24.01	-3.99	53271.070	2.5	84604.990	2.5
319.0517	26.02	-3.47	89907.850	4.0	121241.670	4.0
319.0517	26.02	-3.53	89907.850	5.0	121241.670	4.0
319.0532	22.00	-1.58	16875.190	2.0	48208.870	3.0
319.0645	26.00	-1.38	24574.655	4.0	55907.220	5.0
319.0673	23.01	.28	9097.810	4.0	40430.100	4.0
319.0689	24.01	-2.31	42986.730	1.5	74318.860	2.5
319.0760	26.01	-1.83	72651.910	3.5	103983.350	3.5
319.0778	28.01	-4.51	96535.870	3.5	127867.130	4.5
319.0780	75.00	.04	17099.394	0.0	48439.693	0.0
319.0791	26.01	-.52	68000.820	4.5	99331.950	4.5
319.0814	26.00	-.95	24574.655	4.0	55905.560	4.0
319.0815	24.02	-3.29	66027.800	4.0	97358.700	4.0
319.0826	28.01	-1.66	104646.520	3.5	135977.310	4.5
319.0833	25.01	-2.96	49889.860	3.0	81220.580	3.0
319.0837	26.01	-2.28	33501.320	3.5	64832.000	4.5
319.0862	22.01	.33	8744.270	2.5	40074.710	3.5
319.0864	10.01	-3.58	249695.530	1.5	281025.940	2.5
319.0896	23.03	-.26	254468.800	2.0	285798.900	2.0
319.0902	27.00	-2.39	18775.010	.5	50105.050	1.5
319.1010	21.01	-.29	29742.120	1.0	61071.100	1.0
319.1028	23.00	-7.24	2311.370	3.5	33640.180	4.5
319.1080	90.01	-1.69	1451.835	0.0	32789.188	0.0
319.1100	41.01	-.29	4113.534	0.0	35450.690	0.0
319.1107	26.00	-1.21	20641.110	4.0	51969.140	3.0
319.1109	25.02	-4.86	148355.600	3.5	179683.610	4.5
319.1160	73.00	-.54	10566.135	0.0	41902.702	0.0
319.1162	25.01	-4.23	49820.160	2.0	81147.650	2.0
319.1187	26.00	-2.35	24118.815	4.0	55446.060	4.0
319.1190	45.00	-.51	5565.369	0.0	36901.642	0.0
319.1210	40.00	-.38	0.000	0.0	31336.076	0.0
319.1249	28.01	-2.54	105439.850	1.5	136766.490	2.5
319.1290	27.00	-2.61	1406.840	2.5	32733.070	3.5
319.1290	23.02	-4.41	110181.470	2.5	141507.700	3.5
319.1310	39.00	-.08	11292.053	0.0	42627.147	0.0
319.1340	28.01	-2.46	99154.810	4.5	130480.550	3.5
319.1366	26.01	-2.81	31364.470	1.5	62689.960	2.5
319.1371	28.01	-3.69	103653.030	3.5	134978.470	2.5
319.1430	41.01	.98	17180.052	0.0	48513.968	0.0
319.1456	17.02	-.09	174613.900	2.5	205938.500	1.5
319.1487	26.00	-4.34	22946.810	1.0	54271.110	1.0
319.1491	18.00	-4.25	93750.639	1.0	125074.900	2.0
319.1520	42.00	.32	21212.928	0.0	52545.961	0.0
319.1541	24.01	-2.53	38315.000	2.5	69638.770	1.5
319.1570	74.00	-1.53	0.000	0.0	31332.542	0.0
319.1594	24.00	-2.99	25038.610	5.0	56361.860	5.0
319.1596	23.00	-4.75	8715.720	3.5	40038.950	4.5
319.1660	26.00	-2.85	0.000	4.0	31322.603	3.0
319.1725	18.00	-3.24	93750.639	1.0	125072.600	1.0
319.1797	24.00	-2.25	24833.860	3.0	56155.120	2.0
319.1800	71.01	.03	32263.008	0.0	63593.292	0.0
319.1866	28.00	-1.00	28542.113	5.0	59862.690	5.0
319.1900	40.01	-.10	6371.944	0.0	37701.246	0.0
319.1995	22.00	.15	170.132	3.0	31489.451	4.0
319.2057	26.01	-1.99	30764.460	3.5	62083.170	4.5
319.2067	22.00	-3.43	16458.710	6.0	47777.320	5.0
319.2105	24.01	-2.46	45669.540	1.5	76987.780	2.5
319.2112	24.00	-2.67	7593.160	2.0	38911.330	3.0
319.2221	27.00	-1.93	15774.040	1.5	47091.140	.5
319.2243	26.00	-3.82	12968.552	2.0	44285.436	2.0
319.2250	22.01	-2.31	8710.470	1.5	40027.280	1.5
319.2261	14.01	-.24	124317.000	2.5	155633.700	2.5
319.2268	29.01	-1.85	108014.660	3.0	139331.300	3.0
319.2286	24.00	-1.14	24200.230	6.0	55516.690	6.0
319.2287	26.02	-4.67	86847.110	2.0	118163.560	2.0
319.2324	28.01	-2.26	99154.810	4.5	130470.900	4.5
319.2333	27.02	-4.59	140211.600	2.5	171527.600	3.5
319.2356	22.00	-4.76	6661.003	3.0	37976.780	2.0
319.2360	75.00	-.25	14518.354	0.0	45843.142	0.0
319.2369	18.01	-2.24	163506.450	3.5	194822.100	3.5
319.2393	26.00	-.75	27394.676	3.0	58710.090	3.0
319.2404	26.00	-2.64	17927.378	1.0	49242.680	2.0
319.2411	25.01	-4.81	71390.140	3.0	102705.370	3.0
319.2432	25.00	-.96	35041.370	3.5	66356.400	4.5
319.2453	28.01	-2.73	98467.250	3.5	129782.070	3.5
319.2557	27.02	-4.01	72341.900	1.5	103655.700	1.5
319.2570	90.00	-.96	2823.013	0.0	34145.740	0.0
319.2582	28.01	-3.94	104646.520	3.5	135960.080	4.5
319.2618	25.01	-3.54	71390.140	3.0	102703.340	4.0
319.2685	22.01	-.23	30958.700	2.5	62271.250	2.5
319.2691	23.01	-.70	19161.270	0.0	50473.760	1.0
319.2714	24.00	-2.30	24897.550	4.0	56209.810	3.0
319.2776	28.01	-3.30	68131.210	3.5	99442.860	4.5
319.2798	26.00	-.58	20019.648	1.0	51331.090	2.0
319.2800	42.00	.31	21051.613	0.0	52372.084	0.0
319.2816	26.02	-4.36	89697.520	3.0	121008.780	3.0
319.2835	26.00	-1.74	24118.815	4.0	55429.890	5.0
319.2880	70.01	.46	30407.885	0.0	61727.571	0.0
319.2909	26.01	-1.89	13474.430	2.5	44784.780	2.5
319.2995	28.01	-2.29	100619.260	4.5	131928.770	4.5
319.3020	57.01	-1.61	1855.123	0.0	33173.436	0.0
319.3030	18.00	-3.01	93750.639	1.0	125059.800	2.0
319.3093	8.01	-1.51	234454.450	2.5	265763.000	3.5
319.3118	14.01	.25	124325.400	1.5	155633.700	2.5
319.3159	27.00	-2.17	4142.660	3.5	35450.560	3.5
319.3164	25.00	-1.62	30419.610	2.5	61727.460	2.5
319.3170	64.01	-.78	5242.739	0.0	36559.581	0.0
319.3193	23.01	-.61	19166.190	1.0	50473.760	1.0
319.3195	8.01	-2.94	234454.450	2.5	265762.000	1.5
319.3199	23.00	-7.25	2220.130	2.5	33527.640	2.5
319.3200	75.00	.11	22019.503	0.0	53336.051	0.0
319.3227	26.00	-2.40	0.000	4.0	31307.235	4.0
319.3294	26.00	-4.93	19912.486	2.0	51219.059	3.0
319.3310	66.01	-1.04	0.000	0.0	31315.469	0.0
319.3322	14.01	-1.50	124317.000	2.5	155623.300	1.5
319.3362	23.00	-2.17	8578.520	2.5	39884.430	1.5
319.3437	24.01	-2.41	33619.130	4.5	64924.300	3.5
319.3516	18.01	-3.93	172829.580	1.5	204133.980	2.5
319.3530	72.01	-1.03	2984.328	0.0	34297.640	0.0
319.3565	25.01	-2.89	48435.960	6.0	79739.880	5.0
319.3577	25.01	-1.77	62564.700	1.0	93868.500	1.0
319.3678	26.00	-1.35	23110.925	3.0	54413.740	3.0
319.3708	8.01	-3.46	234402.480	1.5	265705.000	2.5
319.3743	28.00	-1.85	26665.903	3.0	57968.080	3.0
319.3763	26.01	-3.23	31387.980	2.5	62689.960	2.5
319.3786	25.00	-1.17	30425.710	1.5	61727.460	2.5
319.3800	26.01	-1.73	13904.870	.5	45206.490	.5
319.3832	17.02	-4.41	173736.000	.5	205037.300	1.5
319.3852	26.01	-1.90	30764.460	3.5	62065.570	3.5
319.3970	42.00	-.17	0.000	0.0	31308.998	0.0
319.3985	23.01	-1.17	17910.980	4.0	49210.780	3.0
319.4025	26.00	-.16	19562.435	4.0	50861.850	3.0
319.4099	29.00	-2.02	13227.833	0.0	44535.566	0.0
319.4180	14.01	-.35	124325.400	1.5	155623.300	1.5
319.4181	28.01	-1.73	104646.520	3.5	135944.400	3.5
319.4190	72.01	-.68	3629.588	0.0	34936.429	0.0
319.4230	18.01	-1.35	155043.070	2.5	186340.480	1.5
319.4230	76.00	.18	13953.751	0.0	45260.200	0.0
319.4255	24.01	-1.58	51943.040	4.5	83240.200	4.5
319.4285	24.01	-3.42	51584.440	1.5	82881.300	2.5
319.4342	25.01	-1.20	62572.200	2.0	93868.500	1.0
319.4376	22.01	-.05	31113.610	3.5	62409.580	3.5
319.4419	26.00	-.59	19912.486	2.0	51208.040	1.0
319.4455	22.00	-5.85	6556.828	1.0	37852.021	1.0
319.4500	75.00	-.31	14921.641	0.0	46225.444	0.0
319.4578	10.01	-.86	249695.530	1.5	280989.530	1.5
319.4605	18.01	-4.28	163506.450	3.5	194800.180	4.5
319.4613	24.01	-.46	35356.060	1.5	66649.710	1.5
319.4627	25.00	-2.23	31001.150	2.5	62294.660	3.5
319.4644	22.01	.14	31300.920	4.5	62594.270	4.5
319.4669	25.00	-2.16	35041.370	3.5	66334.470	3.5
319.4691	28.01	-3.94	105439.850	1.5	136732.740	1.5
319.4765	28.00	-4.87	27580.411	5.0	58872.570	4.0
319.4783	24.01	-3.31	36101.820	3.5	67393.800	3.5
319.4815	28.01	-4.90	105588.890	4.5	136880.560	4.5
319.4830	58.01	.39	4839.451	0.0	36140.021	0.0
319.4846	25.00	-.91	30419.610	2.5	61710.980	3.5
319.4870	42.00	.28	23955.283	0.0	55255.461	0.0
319.4875	28.01	-2.04	105668.780	2.5	136959.860	2.5
319.4911	28.01	-4.89	101740.270	3.5	133031.000	4.5
319.4962	22.00	-1.79	16817.190	1.0	48107.420	2.0
319.4980	41.01	.04	2581.041	0.0	33880.141	0.0
319.5087	22.00	-2.22	7255.369	2.0	38544.380	3.0
319.5091	18.00	-4.42	93750.639	1.0	125039.600	1.0
319.5182	28.01	-2.21	72375.420	1.5	103663.500	1.5
319.5213	22.01	-4.92	24961.340	1.5	56249.110	1.5
319.5286	28.01	-3.12	24788.200	1.5	56075.260	2.5
319.5318	24.01	-2.88	42986.730	1.5	74273.480	1.5
319.5330	69.01	-.65	8711.012	0.0	40006.684	0.0
319.5380	76.00	-.40	10969.423	0.0	42264.605	0.0
319.5404	14.01	.04	124337.400	.5	155623.300	1.5
319.5447	28.01	-4.55	105439.850	1.5	136725.330	.5
319.5447	24.01	-3.03	36101.820	3.5	67387.300	2.5
319.5449	23.00	-6.14	8715.720	3.5	40001.180	3.5
319.5564	28.00	-2.77	2216.519	2.0	33500.854	3.0
319.5581	23.00	-2.73	8715.720	3.5	39999.890	2.5
319.5585	18.01	-2.89	172829.580	1.5	204113.710	1.5
319.5610	72.01	-.40	14276.381	0.0	45569.311	0.0
319.5620	39.01	-.42	806.575	0.0	32099.407	0.0
319.5690	90.00	-1.32	0.000	0.0	31292.147	0.0
319.5700	22.01	-2.03	8744.270	2.5	40027.280	1.5
319.5701	28.02	-4.11	82826.900	4.0	114109.900	3.0
319.5749	18.01	-2.11	174820.930	.5	206103.450	1.5
319.5753	28.00	-1.33	27943.543	1.0	59226.030	1.0
319.5793	27.02	-4.87	73726.600	2.5	105008.700	3.5
319.5800	3.01	.38	561245.000	0.0	592536.070	0.0
319.5940	58.01	-1.11	2581.041	0.0	33870.740	0.0
319.5949	26.02	-3.30	105929.160	3.0	137209.730	4.0
319.5954	26.00	-2.78	19788.248	4.0	51068.770	5.0
319.5956	25.01	-2.90	52653.270	4.0	83933.770	3.0
319.5960	42.00	.44	16615.449	0.0	47904.952	0.0
319.5970	76.00	-.54	11292.053	0.0	42581.458	0.0
319.5974	22.01	-1.42	9518.050	2.5	40798.370	3.5
319.5986	25.00	-.84	35114.980	2.5	66395.190	2.5
319.6069	26.01	-2.23	13474.430	2.5	44753.820	3.5
319.6133	26.00	-.90	22845.856	5.0	54124.620	4.0
319.6180	62.01	-.71	2984.328	0.0	34271.677	0.0
319.6243	25.01	-1.20	51553.060	5.0	82830.750	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
319.6275	9.02	-4.41	355981.900	1.5	387259.280	1.5
319.6356	24.01	-3.06	20512.620	2.5	51789.210	3.5
319.6389	27.00	-2.63	25269.250	3.5	56545.510	2.5
319.6391	7.01	-3.60	166582.450	2.0	197858.690	1.0
319.6394	24.01	-1.41	38362.560	1.5	69638.770	1.5
319.6445	23.00	-2.24	18513.460	4.5	49789.170	3.5
319.6488	28.01	-4.88	100845.410	.5	132120.700	.5
319.6494	9.02	-4.64	413195.000	2.5	444470.240	1.5
319.6540	69.01	-.89	8872.327	0.0	40156.153	0.0
319.6557	25.01	-1.96	73780.810	3.0	105055.430	2.0
319.6561	23.01	-.88	18293.870	2.0	49568.450	3.0
319.6590	44.00	-1.03	3064.986	0.0	34348.322	0.0
319.6629	26.01	-3.62	31999.120	3.5	63273.030	2.5
319.6632	26.00	-2.79	22838.320	2.0	54112.203	2.0
319.6671	24.00	-2.15	23933.900	4.0	55207.400	4.0
319.6674	25.00	-3.75	34343.900	4.5	65617.370	3.5
319.6900	26.02	-3.49	157684.300	2.0	188955.560	3.0
319.6922	26.00	.28	19562.435	4.0	50833.485	5.0
319.6936	27.00	-5.00	15184.040	2.5	46454.950	1.5
319.6939	24.01	-1.32	20518.330	3.5	51789.210	3.5
319.6985	23.00	-6.61	2424.890	4.5	33695.320	5.5
319.6987	26.00	-3.07	415.932	3.0	31686.342	2.0
319.6999	25.01	-3.86	54938.100	1.0	86208.400	1.0
319.7004	25.01	-2.24	33248.320	4.0	64518.570	5.0
319.7006	25.01	-1.45	70231.070	2.0	101501.300	3.0
319.7011	25.01	-2.89	73785.250	2.0	105055.430	2.0
319.7022	26.01	-2.03	46967.470	2.5	78237.540	3.5
319.7040	40.00	-.72	4113.534	0.0	35392.467	0.0
319.7090	28.01	-1.51	103025.580	2.5	134294.990	2.5
319.7095	24.01	-.39	20519.850	4.5	51789.210	3.5
319.7111	28.00	-2.10	1713.080	1.0	32982.280	1.0
319.7111	24.00	-2.38	24940.610	2.0	56209.810	3.0
319.7130	45.00	-1.29	2581.041	0.0	33859.094	0.0
319.7155	25.01	-2.00	70231.070	2.0	101499.840	2.0
319.7160	23.00	-1.52	8578.520	2.5	39847.240	1.5
319.7230	28.01	-1.80	105668.780	2.5	136936.820	3.5
319.7291	28.01	-4.30	105499.050	3.5	136766.490	2.5
319.7387	27.02	-4.79	140200.100	1.5	171466.600	2.5
319.7387	27.02	-4.79	140200.100	1.5	171466.600	2.5
319.7390	26.02	-2.93	114351.920	3.0	145618.390	2.0
319.7505	22.01	-2.68	225.470	3.5	31490.820	3.5
319.7516	26.00	-.91	27559.568	2.0	58824.810	2.0
319.7561	25.01	-2.40	39813.380	2.0	71078.180	1.0
319.7565	23.01	-1.08	20980.920	2.0	52245.680	2.0
319.7625	12.00	-1.04	21870.464	1.0	53134.642	2.0
319.7744	24.00	-2.66	27597.220	3.0	58860.230	2.0
319.7766	8.02	-3.14	370524.200	2.0	401787.000	2.0
319.7794	8.01	-2.21	234402.480	1.5	265665.000	2.5
319.7868	27.02	-4.87	76791.100	1.5	108052.900	2.5
319.7869	22.01	-4.96	24961.340	1.5	56223.133	.5
319.7872	26.02	-3.94	158417.310	2.0	189679.070	3.0
319.7917	23.00	-5.92	2220.130	2.5	33481.450	3.5
319.7979	23.00	-.51	137.380	2.5	31398.090	2.5
319.7991	24.00	-3.11	21856.940	3.0	53117.540	4.0
319.7996	24.01	-3.24	54678.950	4.5	85939.500	4.5
319.8049	28.00	-4.25	27260.891	6.0	58520.923	5.0
319.8120	71.01	-.25	14115.066	0.0	45383.436	0.0
319.8143	25.01	-2.06	52653.270	4.0	83912.380	5.0
319.8144	8.02	-1.11	374575.000	1.0	405834.100	2.0
319.8146	25.01	-2.44	48333.060	5.0	79592.140	6.0
319.8259	26.00	-2.78	21038.987	2.0	52296.960	2.0
319.8278	25.01	-2.72	49889.860	3.0	81147.650	2.0
319.8355	24.01	-2.50	45730.740	2.5	76987.780	2.5
319.8395	26.01	-2.76	72352.170	3.5	103608.820	4.5
319.8519	28.01	-3.10	104646.520	3.5	135901.960	2.5
319.8520	28.01	-3.73	106022.790	.5	137278.220	1.5
319.8544	29.01	-3.41	85388.770	2.0	116643.960	3.0
319.8564	27.02	-3.40	140211.600	2.5	171466.600	2.5
319.8564	27.02	-3.40	140211.600	2.5	171466.600	2.5
319.8580	75.00	-.33	14518.354	0.0	45782.227	0.0
319.8586	10.01	.28	249445.990	2.5	280700.770	3.5
319.8589	28.01	-1.98	71770.830	2.5	103025.580	2.5
319.8650	70.01	-.26	31779.063	0.0	63042.252	0.0
319.8663	27.00	-2.27	5075.830	1.5	36329.860	2.5
319.8670	73.00	-1.16	3871.561	0.0	35134.555	0.0
319.8710	90.01	-1.07	6613.917	0.0	37876.520	0.0
319.8717	22.00	-.92	17075.310	4.0	48328.810	4.0
319.8740	22.00	-5.22	6598.749	2.0	37852.021	1.0
319.8823	26.02	-2.70	82382.870	3.0	113635.340	4.0
319.8840	74.00	-.95	4758.794	0.0	36020.126	0.0
319.8845	23.00	-2.59	18680.120	5.5	49932.370	4.5
319.8850	42.00	-.46	12259.943	0.0	43521.178	0.0
319.8862	25.01	-3.63	54938.100	1.0	86190.180	2.0
319.8872	24.01	-2.02	51789.210	3.5	83041.200	3.5
319.8891	27.02	-3.79	72341.900	1.5	103593.700	2.5
319.8893	24.01	-4.68	36101.820	3.5	67353.600	4.5
319.8911	25.01	-1.89	39826.570	1.0	71078.180	1.0
319.8914	10.01	-1.19	249695.530	1.5	280947.100	1.5
319.8920	77.00	-.59	7017.204	0.0	38277.754	0.0
319.8983	25.01	-3.60	53017.160	1.0	84268.060	1.0
319.9002	24.01	-2.15	74114.480	3.5	105365.200	4.5
319.9019	8.01	-1.76	234454.450	2.5	265705.000	2.5
319.9045	18.02	-4.04	240257.590	1.0	271507.880	2.0
319.9151	23.01	-4.10	32299.240	1.0	63548.500	1.0
319.9245	25.02	-4.50	177687.540	3.5	208935.880	4.5
319.9280	58.01	-.08	5646.026	0.0	36903.059	0.0
319.9300	64.00	-.06	1693.808	0.0	32950.645	0.0
319.9315	27.00	-3.03	1406.840	2.5	32654.500	2.5
319.9336	22.00	-1.16	16961.420	3.0	48208.870	3.0
319.9347	25.01	-3.37	75719.590	1.0	106966.940	2.0
319.9364	21.01	-.06	29823.920	2.0	61071.100	1.0
319.9400	3.01	-.10	561276.000	0.0	592531.860	0.0
319.9416	22.00	-.73	17215.440	5.0	48462.110	5.0
319.9439	23.00	-5.34	8715.720	3.5	39962.170	2.5
319.9479	28.01	-3.53	98969.440	5.5	130215.500	4.5
319.9490	75.00	-.88	14115.066	0.0	45370.047	0.0
319.9501	26.00	-3.29	888.132	1.0	32133.977	2.0
319.9524	26.00	-.11	19562.435	4.0	50808.053	4.0
319.9526	14.01	.60	124449.600	3.5	155695.200	4.5
319.9535	25.01	-3.32	33248.320	4.0	64493.830	4.0
319.9536	23.00	-4.61	10892.500	3.5	42138.000	2.5
319.9561	24.01	-4.62	32355.940	3.5	63601.200	3.5
319.9580	64.00	-.34	483.945	0.0	31738.047	0.0
319.9792	10.03	-2.46	642184.000	1.5	673427.000	1.5
319.9795	25.01	-3.38	75719.590	1.0	106962.560	1.0
319.9833	24.01	-2.88	36101.820	3.5	67344.420	2.5
319.9853	24.01	-1.02	38396.360	.5	69638.770	1.5
319.9899	28.01	-4.92	100592.980	3.5	131834.940	2.5
319.9916	22.00	.29	386.674	4.0	31628.668	5.0
319.9929	26.00	-.17	19757.020	3.0	50098.686	2.0
319.9929	22.00	-1.50	16817.190	1.0	48058.850	1.0
319.9990	72.01	.05	15163.614	0.0	46413.712	0.0
320.0002	24.00	-2.62	25038.610	5.0	56279.560	4.0
320.0017	27.02	-3.46	140225.800	3.5	171466.600	2.5
320.0017	27.02	-3.46	140225.800	3.5	171466.600	2.5
320.0040	75.00	-.27	16534.792	0.0	47784.401	0.0
320.0043	9.01	-2.31	238323.380	3.0	269563.930	2.0
320.0210	42.00	-.08	18147.942	0.0	49395.891	0.0
320.0270	39.01	-.43	967.890	0.0	32215.254	0.0
320.0320	11.01	-1.45	300510.920	1.0	331748.770	1.0
320.0320	11.01	-1.45	300510.920	1.0	331748.770	1.0
320.0324	18.01	-3.06	173347.830	1.5	204585.640	2.5
320.0360	28.01	-3.77	98969.440	5.5	130206.900	4.5
320.0381	10.01	-1.47	312810.670	4.5	344047.920	3.5
320.0385	18.00	-3.19	93143.800	2.0	124381.010	2.0
320.0419	28.00	-3.96	204.786	3.0	31441.665	2.0
320.0424	25.01	-3.78	75719.590	1.0	106956.420	0.0
320.0427	26.02	-4.19	198333.560	2.0	229570.360	2.0
320.0435	26.02	-2.11	182810.660	5.0	214047.380	4.0
320.0453	8.01	-2.95	234454.450	2.5	265691.000	3.5
320.0459	28.01	-2.89	103025.580	2.5	134262.070	3.5
320.0459	24.01	-1.52	38269.670	3.5	69506.160	3.5
320.0468	26.00	-4.92	19912.486	2.0	51148.892	2.0
320.0470	26.00	-.19	19912.486	2.0	51148.870	3.0
320.0482	10.01	-1.99	312811.650	3.5	344047.920	3.5
320.0482	10.01	-1.48	312811.650	4.5	344047.920	3.5
320.0491	28.01	-2.41	98969.440	5.5	130205.620	5.5
320.0492	26.00	-3.82	29313.008	6.0	60549.180	5.0
320.0520	58.01	-.90	4274.849	0.0	35519.772	0.0
320.0530	41.00	-1.12	2097.096	0.0	33341.921	0.0
320.0569	25.01	-2.44	73785.250	2.0	105020.670	1.0
320.0691	7.01	-.61	190120.240	1.0	221354.470	2.0
320.0695	25.01	-1.88	49820.160	2.0	81054.350	2.0
320.0710	78.00	-.31	13389.148	0.0	44632.216	0.0
320.0720	75.00	-.53	15647.559	0.0	46890.529	0.0
320.0747	24.01	-2.08	36272.660	4.5	67506.340	5.5
320.0755	12.02	-1.31	559987.100	1.0	591220.700	1.0
320.0785	26.00	-3.82	704.003	2.0	31937.308	1.0
320.0786	26.02	-3.60	198337.060	3.0	229570.360	2.0
320.0808	25.02	-3.89	100054.100	.5	131287.180	.5
320.0813	25.01	-2.75	37811.570	1.0	69044.610	2.0
320.0860	18.00	-4.10	93143.800	2.0	124376.380	1.0
320.0880	24.01	-4.21	36101.820	3.5	67334.200	3.5
320.0890	42.00	-.06	18389.915	0.0	49631.226	0.0
320.0896	22.00	-1.41	16875.190	2.0	48107.420	2.0
320.0975	25.01	-2.99	49820.160	2.0	81051.620	3.0
320.0982	7.01	-3.94	190120.240	1.0	221351.630	1.0
320.0987	29.01	-3.26	117130.360	2.0	148361.700	1.0
320.1067	28.01	-3.52	105668.780	2.5	136899.340	2.5
320.1068	28.01	-4.74	105668.780	2.5	136899.330	1.5
320.1076	28.01	-2.98	103025.580	2.5	134256.050	2.5
320.1110	25.00	-1.44	35165.050	1.5	66395.190	2.5
320.1114	8.02	-.63	374575.000	1.0	405805.100	1.0
320.1115	18.00	-3.86	94553.707	0.0	125783.800	1.0
320.1160	70.01	.27	31456.433	0.0	62695.109	0.0
320.1186	24.02	-4.09	65890.900	3.0	97120.300	3.0
320.1203	27.00	-3.22	24326.110	3.5	55555.340	2.5
320.1215	28.01	-1.87	103025.580	2.5	134254.690	1.5
320.1229	23.00	-1.44	0.000	1.5	31228.980	2.5
320.1268	24.01	-.69	38269.670	3.5	69498.270	4.5
320.1404	28.01	-1.58	103025.580	2.5	134252.850	3.5
320.1465	24.00	-4.01	21810.840	1.0	53037.520	2.0
320.1475	28.01	-3.14	105668.780	2.5	136895.360	3.5
320.1479	28.01	-4.14	98276.700	4.5	129503.240	4.5
320.1500	42.01	-.26	16696.107	0.0	47931.465	0.0
320.1532	24.00	-3.43	21847.880	2.0	53073.900	3.0
320.1549	25.00	-1.99	34423.270	3.5	65649.130	2.5
320.1582	22.00	-1.57	8436.618	0.0	39662.150	1.0
320.1617	26.02	-3.22	89783.590	4.0	121008.780	3.0
320.1656	25.01	-2.24	33248.320	4.0	64473.130	3.0
320.1669	22.00	-3.59	16961.420	3.0	48186.110	4.0
320.1710	58.01	.77	6855.889	0.0	38089.199	0.0
320.1725	28.01	-3.32	103025.580	2.5	134249.720	1.5
320.1781	18.00	-3.58	94553.707	0.0	125777.300	1.0
320.1795	12.00	-1.51	21911.178	2.0	53134.642	2.0
320.1832	10.01	-3.65	312824.820	3.5	344047.920	3.5
320.1834	10.01	-3.28	312824.840	2.5	344047.920	3.5
320.1882	26.00	-4.28	19757.020	3.0	50979.627	4.0
320.1890	28.01	-4.61	23796.180	1.5	55018.710	2.5
320.1893	26.02	-3.35	82382.870	3.0	113605.370	3.0
320.1898	37.00	-7.75	0.000	0.0	31231.476	0.0
320.1925	25.01	-1.73	52653.270	4.0	83875.460	4.0
320.1945	19.02	-.05	212725.400	1.5	243947.400	1.5
320.1980	73.00	-1.14	9920.875	0.0	41151.551	0.0
320.2002	37.00	-7.92	0.000	0.0	31230.461	0.0
320.2014	22.01	-.84	30958.700	2.5	62180.020	1.5
320.2016	27.02	-4.86	138774.700	2.5	169996.000	1.5
320.2021	26.00	-2.07	23192.486	2.0	54413.740	3.0
320.2062	28.01	-2.73	98561.220	2.5	129782.070	3.5
320.2099	8.02	-1.09	374662.500	2.0	405883.000	3.0
320.2136	28.00	-.22	25753.578	4.0	56973.707	5.0
320.2202	25.00	-1.40	35114.980	2.5	66334.470	3.5
320.2215	26.00	-3.44	23051.744	0.0	54271.110	1.0
320.2308	28.01	-4.12	99442.860	4.5	130661.320	5.5
320.2317	28.01	-1.64	98969.440	5.5	130187.810	6.5
320.2379	23.00	-.38	323.420	3.5	31541.180	3.5
320.2398	26.01	-3.53	47626.140	.5	78843.720	.5
320.2461	24.00	-3.43	21856.940	3.0	53073.900	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
320.2468	24.01	-2.40	32844.920	1.5	64061.820	1.5
320.2509	14.01	-.34	124449.600	3.5	155666.100	3.5
320.2523	22.01	-.01	8710.470	1.5	39926.830	2.5
320.2523	24.01	-1.02	42898.120	2.5	74114.480	3.5
320.2532	23.00	-6.95	2311.370	3.5	33527.640	2.5
320.2537	18.02	-2.12	240291.660	2.0	271507.880	2.0
320.2553	26.00	-.46	24574.655	4.0	55790.720	3.0
320.2570	30.02	-3.01	233610.400	2.0	264826.300	1.0
320.2585	21.00	-3.59	0.000	1.5	31215.760	2.5
320.2617	25.01	-3.42	33278.390	3.0	64493.830	4.0
320.2633	23.00	-8.73	2424.890	4.5	33640.180	4.5
320.2645	28.01	-3.62	98969.440	5.5	130184.610	5.5
320.2657	26.00	-3.76	12968.552	2.0	44183.607	2.0
320.2668	28.00	-.30	27414.893	2.0	58629.840	2.0
320.2698	28.00	-3.19	27414.893	2.0	58629.550	3.0
320.2708	23.01	-1.77	18353.890	3.0	49568.450	3.0
320.2713	24.00	-2.83	24940.610	2.0	56155.120	2.0
320.2761	9.01	.28	215069.590	2.0	246283.630	2.0
320.2874	18.00	-3.57	93143.800	2.0	124356.730	2.0
320.2909	30.02	-2.83	221052.200	4.0	252264.800	4.0
320.2934	9.01	-4.05	258930.110	2.0	290142.460	2.0
320.2991	23.02	-2.33	56669.050	1.5	87880.850	2.5
320.3017	24.01	-2.51	51669.750	2.5	82881.300	2.5
320.3022	27.00	-2.56	816.000	3.5	32027.500	3.5
320.3095	2.01	.43	390142.340	0.0	421362.145	0.0
320.3119	8.01	-2.39	234454.450	2.5	265665.000	2.5
320.3135	25.00	-1.90	34938.700	4.5	66149.100	3.5
320.3167	27.00	-4.49	17233.680	3.5	48443.760	2.5
320.3230	90.01	-1.06	9114.300	0.0	40332.789	0.0
320.3243	28.01	-2.89	68131.210	3.5	99340.550	3.5
320.3273	10.02	-1.07	357930.000	2.0	389139.050	3.0
320.3320	39.01	-.45	806.575	0.0	32024.187	0.0
320.3341	24.01	-4.17	38269.670	3.5	69478.060	2.5
320.3350	41.01	.87	17180.052	0.0	48397.371	0.0
320.3381	9.03	-.61	519890.000	2.0	551098.000	2.0
320.3393	18.01	-3.90	170400.940	2.5	201608.820	3.5
320.3410	64.00	-.45	967.890	0.0	32184.625	0.0
320.3438	22.01	-1.61	0.000	1.5	31207.440	2.5
320.3508	26.01	-3.11	31483.200	3.5	62689.960	2.5
320.3511	24.01	-1.88	32855.090	2.5	64061.820	1.5
320.3588	22.00	-3.21	0.000	2.0	31205.985	3.0
320.3664	18.00	-2.87	93143.800	2.0	124349.040	3.0
320.3670	72.01	-.66	13389.148	0.0	44603.349	0.0
320.3740	26.01	-2.43	48039.230	2.5	79243.730	1.5
320.3826	22.00	-1.01	170.132	3.0	31373.801	3.0
320.3866	25.02	-2.84	146066.070	1.5	177269.340	1.5
320.3871	14.01	-.62	81191.600	.5	112394.820	1.5
320.3880	90.01	-1.00	9678.902	0.0	40891.057	0.0
320.3931	29.01	-2.37	108014.660	3.0	139217.300	2.0
320.3983	22.01	-2.17	31207.440	2.5	62409.580	3.5
320.3999	25.02	-4.79	100085.200	1.5	131287.180	.5
320.4040	78.00	-.74	6533.259	0.0	37743.856	0.0
320.4066	26.02	-4.63	82382.870	3.0	113584.200	2.0
320.4079	25.01	-4.53	55696.500	4.0	86897.700	3.0
320.4119	24.00	-4.17	21810.840	1.0	53011.650	1.0
320.4176	23.01	-2.26	20980.920	2.0	52181.180	1.0
320.4182	15.04	-.15	272961.100	.5	304161.300	.5
320.4190	23.00	-3.23	0.000	1.5	31200.120	1.5
320.4202	29.01	-4.24	115359.800	4.0	146559.800	4.0
320.4203	26.01	-4.58	44929.590	2.5	76129.580	1.5
320.4237	26.02	-3.44	182810.660	5.0	214010.320	5.0
320.4250	75.00	.56	16212.162	0.0	47420.713	0.0
320.4319	18.01	-1.06	159393.310	1.5	190592.170	1.5
320.4337	26.01	-3.48	30388.550	4.5	61587.240	5.5
320.4350	40.01	-.88	7662.464	0.0	38870.041	0.0
320.4440	26.00	-4.99	12968.552	2.0	44166.240	3.0
320.4452	28.01	-4.90	98276.700	4.5	129474.270	3.5
320.4499	26.02	-4.16	198333.560	2.0	229530.670	1.0
320.4620	22.00	-2.63	7255.369	2.0	38451.298	2.0
320.4728	25.01	-3.58	48317.850	4.0	79512.730	3.0
320.4743	25.01	-3.33	33278.390	3.0	64473.130	3.0
320.4764	27.00	-1.81	24326.110	3.5	55520.640	3.5
320.4774	26.02	-2.51	82410.940	2.0	113605.370	3.0
320.4808	25.00	-1.78	34423.270	3.5	65617.370	3.5
320.4852	22.00	-1.31	8492.421	1.0	39686.100	2.0
320.4874	25.01	-1.29	37851.150	3.0	69044.610	2.0
320.4900	40.00	-.52	5000.766	0.0	36202.988	0.0
320.4900	62.01	-1.16	2661.698	0.0	33863.920	0.0
320.4921	25.02	-4.00	89898.080	.5	121091.080	1.5
320.4998	18.01	-2.13	173393.380	2.5	204585.640	2.5
320.5055	27.01	-5.28	19189.900	4.0	50381.600	3.0
320.5083	22.00	-5.27	6661.003	3.0	37852.434	4.0
320.5100	9.01	-1.89	267399.940	1.0	298591.200	2.0
320.5110	24.01	-.82	38315.000	2.5	69506.160	3.5
320.5136	28.00	-3.06	16017.317	0.0	47208.228	1.0
320.5165	22.00	-2.01	0.000	2.0	31190.631	2.0
320.5172	9.01	-.88	267399.940	1.0	298590.500	1.0
320.5215	23.01	-3.81	44657.990	2.0	75848.130	3.0
320.5220	42.00	-.19	10888.765	0.0	42087.871	0.0
320.5267	24.00	-3.61	21847.880	2.0	53037.520	2.0
320.5271	25.01	-2.48	43370.370	3.0	74559.970	3.0
320.5318	28.01	-4.92	106022.790	.5	137211.930	.5
320.5395	26.00	-.33	20019.648	1.0	51208.040	1.0
320.5399	27.00	-4.50	8460.810	2.5	39649.160	3.5
320.5420	75.00	-.07	24600.544	0.0	55797.704	0.0
320.5448	28.01	-4.94	99844.130	3.5	131032.010	2.5
320.5512	28.01	-3.59	100609.010	2.5	131796.260	2.5
320.5540	42.00	-.53	11775.998	0.0	42971.990	0.0
320.5562	28.01	-2.66	99040.750	1.5	130227.520	2.5
320.5564	25.01	-3.47	55115.800	2.0	86302.550	3.0
320.5637	22.01	-1.92	9395.760	1.5	40581.800	2.5
320.5665	25.00	-3.53	34463.370	1.5	65649.130	2.5
320.5780	26.00	-2.38	20641.110	4.0	51825.758	3.0
320.5782	22.00	-3.30	16875.190	2.0	48059.820	3.0
320.5790	8.01	-3.02	234454.450	2.5	265639.000	3.5
320.5798	24.00	-2.28	25177.390	4.0	56361.860	5.0
320.5836	14.01	-1.64	124449.600	3.5	155633.700	2.5
320.5844	22.00	-1.33	0.000	2.0	31184.021	1.0
320.5878	27.00	-.20	21920.090	4.5	53103.780	3.5
320.5880	42.00	.40	12259.943	0.0	43452.626	0.0
320.5881	28.01	-3.96	105668.780	2.5	136852.440	1.5
320.5881	22.00	-1.65	16875.190	2.0	48058.850	1.0
320.5910	10.01	-2.40	312810.670	4.5	343994.050	4.5
320.5911	10.01	-3.34	312810.670	4.5	343994.040	5.5
320.5915	10.01	-3.87	312810.710	5.5	343994.050	4.5
320.5916	10.01	-2.05	312810.710	5.5	343994.040	5.5
320.5924	26.00	-3.70	21715.735	5.0	52898.980	5.0
320.5960	58.01	-.22	6936.547	0.0	38128.452	0.0
320.5978	28.01	-3.40	103025.580	2.5	134208.300	2.5
320.5994	22.01	-1.06	8744.270	2.5	39926.830	2.5
320.6011	10.01	-3.54	312811.650	3.5	343994.050	4.5
320.6011	10.01	-2.46	312811.650	4.5	343994.050	4.5
320.6012	10.01	-4.38	312811.650	4.5	343994.040	5.5
320.6045	26.02	-2.01	165719.200	4.0	196901.270	5.0
320.6110	72.00	-1.00	2339.068	0.0	33529.514	0.0
320.6198	24.00	-4.17	21856.940	3.0	53037.520	2.0
320.6230	92.01	-1.37	2258.411	0.0	33447.689	0.0
320.6243	26.02	-3.43	109570.840	2.0	140750.980	2.0
320.6303	26.02	-2.10	182830.760	6.0	214010.320	5.0
320.6327	22.00	-.49	16267.510	5.0	47446.840	6.0
320.6340	41.01	.11	7420.492	0.0	38608.700	0.0
320.6359	24.01	-3.15	51584.440	1.5	82763.450	1.5
320.6390	73.00	-1.08	5565.369	0.0	36753.091	0.0
320.6470	25.01	-2.10	33278.390	3.0	64456.330	2.0
320.6470	64.01	.63	18228.600	0.0	49415.544	0.0
320.6484	22.00	-9.04	14028.470	2.0	45206.270	3.0
320.6489	21.01	-2.45	32349.980	3.0	63527.730	4.0
320.6653	24.01	-3.45	36272.660	4.5	67448.820	4.5
320.6657	29.01	-1.99	110365.980	2.0	141542.100	2.0
320.6669	7.01	-.71	190120.240	1.0	221296.240	2.0
320.6724	9.01	-2.35	267399.940	1.0	298575.400	2.0
320.6812	22.00	-.32	16106.080	4.0	47280.690	5.0
320.6822	28.00	-.58	27943.543	1.0	59118.060	2.0
320.6852	26.00	-3.90	21038.987	2.0	52213.207	3.0
320.6906	25.00	-1.96	17052.290	4.5	48225.990	3.5
320.6940	90.01	-1.17	8307.725	0.0	39490.098	0.0
320.6946	25.02	-2.19	177477.230	2.5	208650.540	3.5
320.6949	28.00	-.31	27414.893	2.0	58588.168	3.0
320.6950	25.01	-4.88	44745.460	2.0	75918.730	2.0
320.6951	26.02	-3.10	82410.940	2.0	113584.200	2.0
320.6952	9.02	-4.81	395385.660	2.5	426558.910	1.5
320.6955	24.00	-2.28	25106.340	3.0	56279.560	4.0
320.7017	21.00	-3.15	0.000	1.5	31172.620	1.5
320.7019	26.01	-4.04	23317.600	2.5	54490.200	2.5
320.7019	26.01	-3.76	23317.600	2.5	54490.200	3.5
320.7029	26.02	-3.80	198337.060	3.0	229509.560	3.0
320.7075	26.00	-3.61	19350.882	5.0	50522.940	6.0
320.7093	28.01	-4.47	101740.270	3.5	132912.150	2.5
320.7121	8.02	-.44	374662.500	2.0	405834.100	2.0
320.7180	62.01	-1.09	0.000	0.0	31180.040	0.0
320.7190	26.02	-2.16	198338.620	4.0	229509.560	3.0
320.7250	74.00	-1.05	2903.671	0.0	34083.030	0.0
320.7278	23.00	-5.95	2311.370	3.5	33481.450	3.5
320.7314	22.00	-1.66	8492.421	1.0	39662.150	1.0
320.7341	25.01	-3.08	49882.150	4.0	81051.620	3.0
320.7358	24.00	-4.55	24282.340	4.0	55451.640	3.0
320.7419	23.00	-.49	553.020	4.5	31721.730	4.5
320.7423	10.01	-4.06	318183.730	5.5	349352.400	4.5
320.7467	24.01	-1.50	39684.000	3.5	70852.240	3.5
320.7477	10.01	-3.86	318184.260	3.5	349352.400	4.5
320.7479	10.01	-2.19	318184.270	4.5	349352.400	4.5
320.7495	24.00	-2.33	23933.900	4.0	55101.870	3.0
320.7500	18.00	-3.35	93143.800	2.0	124311.720	1.0
320.7575	26.01	-2.68	47674.780	1.5	78841.970	.5
320.7577	18.01	-2.96	173347.830	1.5	204515.000	.5
320.7647	26.00	-3.97	22838.320	2.0	54004.820	3.0
320.7669	18.01	-3.89	172335.520	2.5	203501.800	2.5
320.7760	26.00	-3.17	22946.810	1.0	54112.203	2.0
320.7850	73.00	-.91	11130.738	0.0	42304.265	0.0
320.7853	25.01	-3.42	49889.860	3.0	81054.350	2.0
320.7876	22.00	-.33	15975.590	3.0	47139.860	4.0
320.7928	24.00	-4.42	21847.880	2.0	53011.650	1.0
320.8001	24.01	-2.87	38315.000	2.5	69478.060	2.5
320.8017	9.02	-4.81	395268.130	1.5	426431.030	.5
320.8030	90.01	-.70	12098.628	0.0	43270.406	0.0
320.8035	25.00	-1.65	33825.490	2.5	64988.220	3.5
320.8113	28.01	-3.34	106620.530	3.5	137782.500	4.5
320.8134	25.01	-2.21	49889.860	3.0	81051.620	3.0
320.8189	26.00	-5.17	11976.239	4.0	43137.472	3.0
320.8215	22.00	-4.84	15877.180	2.0	47038.160	3.0
320.8231	29.00	-2.31	13227.833	0.0	44397.658	0.0
320.8254	10.01	-1.04	312833.450	5.5	343994.050	4.5
320.8255	10.01	-2.86	312833.450	5.5	343994.040	5.5
320.8257	10.01	-.97	312833.470	6.5	343994.040	5.5
320.8280	74.00	-1.59	3306.958	0.0	34476.307	0.0
320.8283	10.01	-3.14	249108.640	3.5	280268.960	2.5
320.8284	29.01	-2.00	110084.290	1.0	141244.600	1.0
320.8348	23.01	-.82	8841.970	3.0	40001.660	2.0
320.8447	25.01	-1.86	70342.580	3.0	101501.300	3.0
320.8459	15.01	-2.56	76764.960	2.0	107923.570	2.0
320.8467	10.01	-2.43	251522.120	1.5	282680.650	.5
320.8472	11.01	-4.12	300510.920	1.0	331669.400	2.0
320.8472	11.01	-4.12	300510.920	1.0	331669.400	2.0
320.8473	26.00	-.35	27666.334	1.0	58824.810	2.0
320.8507	24.01	-3.14	35569.020	2.5	66727.160	2.5
320.8559	22.01	-.68	31113.610	3.5	62271.250	2.5
320.8598	25.01	-3.15	70342.580	3.0	101499.840	2.0
320.8611	24.01	-1.45	20512.620	2.5	51669.750	2.5
320.8678	28.01	-2.67	99040.750	1.5	130197.230	1.5
320.8681	25.01	-1.39	70342.580	3.0	101499.030	4.0
320.8709	25.01	-4.76	48435.960	6.0	79592.140	6.0
320.8726	28.01	-3.43	106620.530	3.5	137776.550	3.5
320.8764	10.01	-1.04	318196.750	5.5	349352.400	4.5
320.8830	42.00	-.58	0.000	0.0	31164.007	0.0
320.8841	25.01	-1.59	62564.700	1.0	93719.600	0.0
320.8898	28.01	-3.23	23108.280	2.5	54262.630	3.5
320.8966	10.01	-.64	249108.640	3.5	280262.330	3.5
320.9026	22.00	-.50	15877.180	2.0	47030.280	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
320.9105	26.00	-3.25	17550.180	3.0	48702.518	4.0
320.9165	24.00	-2.88	24299.890	2.0	55451.640	3.0
320.9176	9.02	-2.90	356371.820	2.5	387523.470	3.5
320.9199	24.01	-.52	20518.330	3.5	51669.750	2.5
320.9213	24.00	-2.37	24056.110	5.0	55207.400	4.0
320.9292	26.00	-.21	27559.568	2.0	58710.090	3.0
320.9296	26.00	-.76	22650.415	6.0	53800.900	5.0
320.9305	26.01	-2.56	31811.870	2.5	62962.260	1.5
320.9346	19.02	-.50	214232.300	.5	245382.300	.5
320.9356	10.01	-.75	249839.630	.5	280989.530	1.5
320.9432	9.01	-2.49	267399.940	1.0	298549.100	0.0
320.9474	9.01	-4.29	267399.940	1.0	298548.700	1.0
320.9522	24.01	-1.41	45730.740	2.5	76879.030	3.5
320.9583	24.00	-4.70	24303.940	3.0	55451.640	3.0
320.9608	26.01	-2.35	36126.410	1.5	67273.860	1.5
320.9621	28.01	-3.70	98276.700	4.5	129424.030	5.5
320.9690	9.01	-.59	267399.940	1.0	298546.600	2.0
320.9758	22.00	-1.44	16961.420	3.0	48107.420	2.0
320.9800	27.00	-.74	15184.040	2.5	46329.630	2.5
320.9842	22.00	-5.41	6598.749	2.0	37743.933	3.0
320.9865	23.00	-3.52	11100.650	4.5	42245.610	3.5
320.9903	28.00	-.26	26665.903	3.0	57810.494	4.0
320.9925	26.02	-3.61	182418.700	4.0	213563.080	5.0
320.9952	25.01	-.62	73911.310	1.0	105055.430	2.0
320.9957	20.00	-1.43	15157.901	0.0	46301.973	1.0
320.9999	26.02	-3.46	182830.760	6.0	213974.420	6.0
321.0001	28.01	-1.98	99040.750	1.5	130184.390	2.5
321.0026	14.01	-.36	81251.580	1.5	112394.980	2.5
321.0043	14.01	-1.32	81251.580	1.5	112394.820	1.5
321.0056	26.01	-1.82	69606.640	3.5	100749.750	2.5
321.0095	22.01	-3.15	32025.500	2.5	63168.230	2.5
321.0109	8.02	-1.11	374662.500	2.0	405805.100	1.0
321.0187	26.00	-2.11	21038.987	2.0	52180.820	1.0
321.0199	28.01	-3.49	100609.010	2.5	131750.730	3.5
321.0213	27.00	-1.51	16470.600	1.5	47612.180	1.5
321.0224	26.00	-3.85	19562.435	4.0	50703.912	5.0
321.0290	41.00	-.20	9275.615	0.0	40425.449	0.0
321.0329	9.01	-2.22	267399.940	1.0	298540.400	1.0
321.0358	23.00	-7.06	2220.130	2.5	33360.310	3.5
321.0376	28.01	-3.20	99340.550	3.5	130480.550	3.5
321.0441	10.02	-3.51	357930.000	2.0	389069.370	2.0
321.0444	26.01	-1.69	13904.870	.5	45044.210	1.5
321.0457	27.00	-3.31	21215.900	.5	52355.120	.5
321.0535	9.01	-1.28	267399.940	1.0	298538.400	2.0
321.0570	63.00	-.22	0.000	0.0	31147.117	0.0
321.0605	25.00	-3.66	37148.660	5.5	68286.440	4.5
321.0633	24.00	-3.44	7593.160	2.0	38730.670	2.0
321.0748	29.01	-4.92	115359.800	4.0	146496.200	3.0
321.0789	24.02	-4.56	66222.700	5.0	97358.700	4.0
321.0806	25.01	-3.83	85895.270	2.0	117031.100	3.0
321.0829	26.00	-.35	19912.486	2.0	51048.100	1.0
321.0830	69.01	-1.60	0.000	0.0	31144.595	0.0
321.0845	26.01	-2.41	47389.820	1.5	78525.270	2.5
321.0950	58.01	-.29	6452.602	0.0	37596.033	0.0
321.0970	42.00	.35	16615.449	0.0	47758.686	0.0
321.0980	72.00	-.85	5565.369	0.0	36708.509	0.0
321.0995	27.00	-1.23	23855.620	4.5	54989.620	3.5
321.1040	22.00	-1.44	17075.310	4.0	48208.870	3.0
321.1063	28.01	-4.79	106620.530	3.5	137753.870	4.5
321.1069	28.01	-1.77	99040.750	1.5	130174.030	1.5
321.1072	26.01	-2.71	31811.870	2.5	62945.120	3.5
321.1108	22.01	-5.38	25193.040	2.5	56325.940	2.5
32..1133	26.00	-4.17	11976.239	4.0	43108.899	4.0
321.1172	9.02	-4.30	466190.970	3.5	497323.250	2.5
321.1191	25.01	-2.30	39808.140	3.0	70940.240	2.0
321.1200	90.00	-.98	2823.013	0.0	33964.019	0.0
321.1202	9.02	-4.25	466190.470	4.5	497322.460	3.5
321.1226	29.01	-3.37	118071.340	1.0	149203.100	0.0
321.1291	25.00	-2.36	30354.210	3.5	61485.340	4.5
321.1297	24.00	-.11	27597.220	3.0	58728.290	4.0
321.1328	23.00	-1.64	137.380	2.5	31268.150	3.5
321.1486	26.00	-4.88	20019.648	1.0	51148.892	2.0
321.1487	24.01	-4.15	54444.190	3.5	85573.420	3.5
321.1522	28.01	-3.69	101740.270	3.5	132869.160	3.5
321.1547	26.02	-3.57	89697.520	3.0	120826.170	2.0
321.1567	23.01	-3.97	32420.040	0.0	63548.500	1.0
321.1570	23.00	-1.73	10892.500	3.5	42020.930	3.5
321.1589	10.02	-.77	357930.000	2.0	389058.240	1.0
321.1618	26.00	-1.41	22996.661	4.0	54124.620	4.0
321.1681	26.00	.15	26874.534	5.0	58001.880	6.0
321.1732	25.01	-1.63	39813.380	2.0	70940.240	2.0
321.1750	75.00	-.59	14115.066	0.0	45250.740	0.0
321.1780	25.00	-1.68	30354.210	3.5	61480.600	3.5
321.1834	26.02	-3.87	182379.860	5.0	213505.730	6.0
321.1872	26.00	-.08	27394.676	3.0	58520.180	4.0
321.1982	26.00	-.25	19350.882	5.0	50475.320	4.0
321.1993	18.00	-3.65	95399.870	1.0	126524.200	0.0
321.1994	10.01	-2.13	281720.280	1.5	312844.600	1.5
321.2010	40.00	-.32	564.603	0.0	31697.756	0.0
321.2014	26.01	-1.51	30388.550	4.5	61512.670	4.5
321.2016	27.01	-3.12	24886.500	2.0	56010.600	2.0
321.2020	69.01	-.53	8711.012	0.0	39844.068	0.0
321.2041	27.00	-1.14	24326.110	3.5	55449.970	2.5
321.2057	28.00	-.85	26665.903	3.0	57789.611	4.0
321.2072	28.01	-4.25	93528.440	3.5	124652.000	4.5
321.2097	10.01	-4.23	281720.280	1.5	312843.600	.5
321.2120	77.00	-.38	7017.204	0.0	38149.291	0.0
321.2162	28.01	-4.60	105838.060	3.5	136960.750	2.5
321.2179	26.02	-4.34	109570.840	2.0	140693.360	3.0
321.2183	11.01	-.30	268766.670	1.0	299889.160	1.0
321.2195	26.02	-1.97	182852.050	7.0	213974.420	6.0
321.2254	28.01	-3.49	105838.060	3.5	136959.860	2.5
321.2322	24.01	-3.31	36272.660	4.5	67393.800	3.5
321.2368	28.00	-4.34	28068.091	4.0	59188.780	3.0
321.2485	24.01	-1.93	35607.600	3.5	66727.160	2.5
321.2508	28.01	-4.63	98276.700	4.5	129396.040	5.5
321.2517	18.01	-1.49	155351.030	1.5	186470.280	1.5
321.2531	25.02	-3.29	146066.070	1.5	177185.180	.5
321.2543	25.02	-4.92	143345.070	3.5	174464.070	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
321.2580	40.00	-.85	5000.766	0.0	36128.396	0.0
321.2674	26.02	-4.85	169277.600	4.0	200395.330	5.0
321.2694	22.01	-3.80	907.960	1.5	32025.500	2.5
321.2705	23.00	-4.94	10892.500	3.5	42009.930	2.5
321.2747	25.00	-3.25	30354.210	3.5	61471.230	2.5
321.2786	25.00	-1.14	34845.260	.5	65961.900	1.5
321.2810	63.00	.17	0.000	0.0	31125.401	0.0
321.2814	26.02	-4.11	158562.700	4.0	189679.070	3.0
321.2850	40.01	-.65	5726.684	0.0	36851.698	0.0
321.2881	25.00	-.78	17052.290	4.5	48168.010	4.5
321.2904	24.01	-2.75	38362.560	1.5	69478.060	2.5
321.2909	28.00	-2.53	27414.893	2.0	58530.350	3.0
321.2940	75.00	-.66	14115.066	0.0	45239.208	0.0
321.2956	10.03	-2.67	642472.000	2.5	673587.000	2.5
321.2970	44.00	-.79	9033.642	0.0	40157.493	0.0
321.3090	92.01	-.93	8307.725	0.0	39430.414	0.0
321.3093	25.01	-2.16	39826.570	1.0	70940.240	2.0
321.3111	22.01	-3.49	93.940	2.5	31207.440	2.5
321.3124	22.00	-1.71	17215.440	5.0	48328.810	4.0
321.3149	28.01	-3.40	68965.650	1.5	100078.780	1.5
321.3152	22.00	-1.06	8602.340	2.0	39715.437	3.0
321.3310	26.01	-1.31	13673.210	1.5	44784.780	2.5
321.3310	76.01	1.28	13147.176	0.0	44267.734	0.0
321.3320	42.00	-.81	11775.998	0.0	42896.459	0.0
321.3351	24.01	-3.72	53566.220	3.5	84477.390	3.5
321.3367	6.00	-4.69	88766.980	1.0	119878.000	1.0
321.3390	22.00	-2.41	17075.310	4.0	48186.110	4.0
321.3409	28.00	-1.22	27414.893	2.0	58525.507	1.0
321.3436	15.01	-3.62	76813.220	1.0	107923.570	2.0
321.3485	24.01	-2.78	39742.360	2.5	70852.240	3.5
321.3506	22.00	-5.49	6742.757	4.0	37852.434	4.0
321.3538	25.01	-1.00	73911.310	1.0	105020.670	1.0
321.3545	28.02	-3.23	103306.100	3.0	134415.400	4.0
321.3550	77.00	.06	18954.517	0.0	50072.751	0.0
321.3570	90.01	-.97	6129.972	0.0	37248.012	0.0
321.3601	28.01	-3.37	92325.850	3.5	123434.600	4.5
321.3611	22.01	-.76	31300.920	4.5	62409.580	3.5
321.3697	24.01	-3.84	51584.440	1.5	82692.260	.5
321.3707	25.00	-4.87	35041.370	3.5	66149.100	3.5
321.3720	72.00	-.06	14437.696	0.0	45554.284	0.0
321.3734	10.01	-.09	249839.630	.5	280947.100	1.5
321.3750	63.00	-.23	0.000	0.0	31116.297	0.0
321.3752	26.00	-1.83	24338.766	3.0	55446.060	4.0
321.3770	28.01	-1.86	99040.750	1.5	130147.870	.5
321.3784	21.00	-3.73	168.340	2.5	31275.320	3.5
321.3815	26.02	-4.86	169277.600	4.0	200384.280	3.0
321.3818	26.00	-3.28	28819.966	5.0	59926.620	5.0
321.3845	12.02	-1.58	531833.100	3.0	562939.500	2.0
321.3847	24.00	-6.49	0.000	3.0	31106.370	4.0
321.3859	28.01	-4.27	101740.270	3.5	132846.530	3.5
321.3910	73.01	-.05	5565.369	0.0	36680.117	0.0
321.4006	26.00	-.70	19757.020	3.0	50861.850	3.0
321.4008	28.01	-3.97	70635.460	2.5	101740.270	3.5
321.4020	26.00	.04	27166.804	4.0	58271.500	5.0
321.4055	28.00	-.50	25753.578	4.0	56857.933	4.0
321.4061	26.00	-.84	19757.020	3.0	50861.320	2.0
321.4080	90.00	-1.02	2500.383	0.0	33613.485	0.0
321.4092	22.01	-1.67	12676.990	4.5	43780.990	4.5
321.4110	75.00	.22	26213.694	0.0	57326.506	0.0
321.4120	62.01	-1.25	1935.780	0.0	33048.495	0.0
321.4147	24.00	-4.09	25106.340	3.0	56209.810	3.0
321.4149	22.01	-1.59	31490.820	3.5	62594.270	4.5
321.4190	40.01	-.26	725.918	0.0	31837.956	0.0
321.4239	22.00	-.98	386.874	4.0	31489.451	4.0
321.4281	24.00	-3.72	25177.390	4.0	56279.560	4.0
321.4320	45.00	-2.05	0.000	0.0	31110.779	0.0
321.4327	10.01	.16	249695.530	1.5	280797.260	2.5
321.4380	90.00	-.73	4920.109	0.0	36030.308	0.0
321.4396	26.00	-2.85	704.003	2.0	31805.059	3.0
321.4409	26.02	-3.33	89907.850	4.0	121008.780	3.0
321.4440	42.00	.05	16615.449	0.0	47725.067	0.0
321.4445	22.00	-8.79	14105.680	3.0	45206.270	3.0
321.4475	23.01	-3.98	44657.990	2.0	75758.290	2.0
321.4515	9.01	-2.65	255606.240	1.0	286706.140	1.0
321.4560	26.01	-3.02	47626.140	.5	78725.610	1.5
321.4587	26.01	-1.09	69650.540	2.5	100749.750	2.5
321.4630	69.01	-.91	8872.327	0.0	39980.106	0.0
321.4634	28.01	-3.10	105838.060	3.5	136936.820	3.5
321.4643	28.01	-3.13	105861.190	2.5	136959.860	2.5
321.4671	22.00	-2.27	16961.420	3.0	48059.820	3.0
321.4692	20.00	-1.96	15210.063	1.0	46308.257	2.0
321.4696	24.01	-3.90	51943.040	4.5	83041.200	3.5
321.4718	22.00	-5.76	6556.828	1.0	37654.770	2.0
321.4742	23.01	-.77	9097.810	4.0	40195.520	3.0
321.4742	28.01	-2.95	105668.780	2.5	136766.490	2.5
321.4754	22.01	-1.29	393.220	4.5	31490.820	3.5
321.4850	24.01	-3.92	36272.660	4.5	67369.330	5.5
321.4926	10.01	-1.47	252798.480	.5	283894.410	.5
321.5018	9.01	-4.06	255606.240	1.0	286701.280	2.0
321.5039	25.00	-2.75	33825.490	2.5	64920.330	3.5
321.5058	26.00	-3.69	20874.482	3.0	51969.140	3.0
321.5070	42.00	.05	11050.080	0.0	42153.602	0.0
321.5079	21.01	-4.43	32349.980	3.0	63444.430	3.0
321.5083	9.02	-.93	413143.860	3.5	444238.270	4.5
321.5123	9.02	-4.87	466229.230	3.5	497323.250	2.5
321.5157	24.01	-3.38	51669.750	2.5	82763.450	1.5
321.5168	20.00	-1.14	15210.063	1.0	46303.649	2.0
321.5219	17.01	-3.28	146330.000	1.0	177423.100	1.0
321.5249	9.02	-4.86	466229.650	4.5	497322.460	3.5
321.5260	62.01	-.86	2984.328	0.0	34086.012	0.0
321.5260	64.00	-.80	967.890	0.0	32069.574	0.0
321.5284	26.01	-1.67	68000.820	4.5	99093.290	5.5
321.5323	24.01	-3.35	51789.210	3.5	82881.300	2.5
321.5326	27.00	-1.04	23855.620	4.5	54947.680	5.5
321.5342	20.00	-1.56	15210.063	1.0	46301.973	1.0
321.5374	23.00	-2.67	137.380	2.5	31228.980	2.5
321.5508	28.01	-3.44	105499.050	3.5	136589.350	3.5
321.5560	74.00	-.36	6129.972	0.0	37228.754	0.0
321.5600	41.01	-.28	3468.273	0.0	34566.668	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
321.5610	26.02	-2.34	82494.880	1.0	113584.200	2.0
321.5612	17.01	-2.80	146333.800	2.0	177423.100	1.0
321.5684	22.00	-4.09	16106.080	4.0	47194.680	4.0
321.5810	57.00	-.70	1048.548	0.0	32144.913	0.0
321.5834	6.00	-4.89	88790.850	1.0	119878.000	1.0
321.5878	28.01	-4.41	106620.530	3.5	137707.260	3.5
321.5933	26.00	-3.63	19912.486	2.0	50998.686	2.0
321.6041	26.02	-3.13	198336.580	5.0	229421.730	4.0
321.6114	10.01	-1.84	281720.280	1.5	312804.730	2.5
321.6119	8.02	-.19	374798.600	3.0	405883.000	3.0
321.6185	22.00	-1.53	8602.340	2.0	39686.100	2.0
321.6185	10.01	-2.13	281720.280	1.5	312804.040	1.5
321.6191	27.02	-3.57	140382.900	3.5	171466.600	2.5
321.6191	27.02	-3.57	140382.900	3.5	171466.600	2.5
321.6213	27.00	-3.09	17233.680	3.5	48317.170	3.5
321.6252	26.02	-2.61	198338.620	4.0	229421.730	4.0
321.6271	22.00	-7.44	6661.003	3.0	37743.933	3.0
321.6286	11.01	-1.12	300107.710	2.0	331190.490	3.0
321.6286	11.01	-1.12	300107.710	2.0	331190.490	3.0
321.6293	28.01	-4.94	99132.780	5.5	130215.500	4.5
321.6362	22.00	-9.32	13981.750	1.0	45063.800	2.0
321.6404	24.00	-1.75	24833.860	3.0	55915.500	4.0
321.6477	24.01	-3.83	36272.660	4.5	67353.600	4.5
321.6503	24.01	-.86	35569.020	2.5	66649.710	1.5
321.6520	44.00	-1.65	2016.438	0.0	33105.938	0.0
321.6630	26.02	-2.15	188013.400	4.0	219092.860	5.0
321.6664	23.01	-6.53	16340.970	3.0	47420.100	4.0
321.6690	39.01	-.19	967.890	0.0	32055.747	0.0
321.6728	18.01	-4.30	170530.310	3.5	201608.820	3.5
321.6741	24.01	-2.66	34631.140	4.5	65709.530	5.5
321.6753	23.02	-4.00	109854.870	3.5	140933.140	3.5
321.6793	28.01	-3.28	101740.270	3.5	132818.160	4.5
321.6813	28.00	-.03	26665.903	3.0	57743.596	3.0
321.6850	62.01	-.83	806.575	0.0	31892.886	0.0
321.6883	22.01	-1.49	8997.690	3.5	40074.710	3.5
321.6930	73.00	-1.03	5968.656	0.0	37054.194	0.0
321.6945	25.00	-2.81	0.000	2.5	31076.420	1.5
321.6971	25.02	-4.01	89898.080	.5	120974.250	.5
321.6990	27.00	-2.12	15184.040	2.5	46260.020	1.5
321.7027	28.01	-3.47	105861.190	2.5	136936.820	3.5
321.7043	25.01	-2.84	43484.500	2.0	74559.970	3.0
321.7045	22.01	-.44	225.470	3.5	31300.920	4.5
321.7113	23.01	.18	16533.000	5.0	47607.790	6.0
321.7126	23.00	-1.97	323.420	3.5	31398.090	2.5
321.7154	19.00	-2.87	0.000	.5	31074.400	1.5
321.7156	25.01	-4.19	55115.800	2.0	86190.180	2.0
321.7180	70.01	-.19	32827.611	0.0	63910.733	0.0
321.7290	41.00	-.61	5242.739	0.0	36324.799	0.0
321.7300	10.01	-2.62	249695.530	1.5	280768.520	.5
321.7300	72.01	-1.35	2984.328	0.0	34066.291	0.0
321.7315	28.01	-4.64	99132.780	5.5	130205.620	5.5
321.7421	24.01	-.65	20512.620	2.5	51584.440	1.5
321.7450	90.01	-.57	9356.272	0.0	40436.786	0.0
321.7492	27.00	-1.40	23611.780	5.5	54682.910	4.5
321.7500	28.01	-3.78	99154.810	4.5	130225.870	3.5
321.7538	25.01	-3.69	85960.410	3.0	117031.100	3.0
321.7620	19.00	-3.22	0.000	.5	31069.900	.5
321.7672	18.01	-2.35	173347.830	1.5	204417.230	1.5
321.7682	24.02	-4.36	66027.800	4.0	97097.100	4.0
321.7819	28.00	.40	25753.578	4.0	56821.553	3.0
321.7860	41.00	-1.20	1532.493	0.0	32609.047	0.0
321.7948	22.00	.19	15877.180	2.0	46943.910	2.0
321.8064	28.01	-4.77	100010.170	.5	131075.780	1.5
321.8193	10.01	.75	249108.640	3.5	280173.010	4.5
321.8225	25.02	-2.40	177687.540	3.5	208751.600	4.5
321.8235	28.01	-4.74	105668.780	2.5	136732.740	1.5
321.8251	22.01	-2.45	31207.440	2.5	62271.250	2.5
321.8254	22.01	.02	12676.990	4.5	43740.770	3.5
321.8257	22.01	-2.11	9518.050	2.5	40581.800	2.5
321.8272	29.01	-4.96	115359.800	4.0	146423.400	4.0
321.8330	26.02	-1.87	117950.320	4.0	149013.360	4.0
321.8330	70.01	-.36	34844.049	0.0	65916.065	0.0
321.8362	23.00	-3.93	137.380	2.5	31200.120	1.5
321.8379	22.00	-3.89	15975.590	3.0	47038.160	3.0
321.8380	58.01	-.38	3306.958	0.0	34378.491	0.0
321.8429	22.01	-2.14	9363.710	.5	40425.800	1.5
321.8460	77.00	-.22	15970.189	0.0	47040.950	0.0
321.8480	22.00	-1.45	16875.190	2.0	47936.790	3.0
321.8486	24.01	-3.85	36272.660	4.5	67334.200	3.5
321.8513	28.01	-4.99	105838.060	3.5	136899.340	2.5
321.8543	25.00	-1.69	30419.610	2.5	61480.600	3.5
321.8574	28.01	-3.05	99154.810	4.5	130215.500	4.5
321.8665	22.00	-2.58	8602.340	2.0	39662.150	1.0
321.8700	24.00	-3.88	24093.160	2.0	55152.630	2.0
321.8801	23.02	-3.43	56160.420	2.5	87218.920	3.5
321.8868	23.00	-.62	10892.500	3.5	41950.350	2.5
321.8940	58.01	.61	6855.889	0.0	37922.016	0.0
321.8992	22.00	-1.31	16961.420	3.0	48018.080	4.0
321.9002	23.00	-5.57	2424.890	4.5	33481.450	3.5
321.9053	22.01	-4.41	25193.040	2.5	56249.110	1.5
321.9058	22.00	-6.59	6598.749	2.0	37654.770	2.0
321.9119	24.01	-.88	39824.520	4.5	70879.950	5.5
321.9148	27.00	-2.77	816.000	3.5	31871.150	3.5
321.9161	28.01	-4.80	99132.780	5.5	130187.810	6.5
321.9172	26.00	-4.10	18378.187	2.0	49433.108	2.0
321.9184	28.01	-2.35	100078.780	1.5	131133.580	2.5
321.9196	22.00	.26	15975.590	3.0	47030.280	3.0
321.9259	28.01	-3.36	99154.810	4.5	130208.890	3.5
321.9301	28.01	-1.95	100010.170	.5	131063.850	.5
321.9319	15.02	.38	141375.700	.5	172429.200	1.5
321.9327	22.00	-1.59	16817.190	1.0	47870.610	2.0
321.9348	26.00	-3.13	22838.320	2.0	53891.540	3.0
321.9366	26.00	-3.56	21715.735	5.0	52768.780	4.0
321.9403	26.00	-3.28	29313.008	6.0	60365.700	6.0
321.9451	25.01	-3.64	51553.060	5.0	82605.290	4.0
321.9457	10.01	-1.54	281720.280	1.5	312772.450	2.5
321.9465	28.01	-2.68	99154.810	4.5	130206.900	4.5
321.9492	28.01	-4.91	99132.780	5.5	130184.610	5.5
321.9510	77.00	-.61	7017.204	0.0	38077.831	0.0
321.9514	25.00	-2.16	30419.610	2.5	61471.230	2.5
321.9575	26.00	-.27	19757.020	3.0	50808.053	4.0
321.9576	25.01	-4.05	54938.100	1.0	85989.120	2.0
321.9598	28.01	-2.53	99154.810	4.5	130205.620	5.5
321.9605	24.00	-.06	27703.840	4.0	58754.580	5.0
321.9768	26.00	-4.38	888.132	1.0	31937.308	1.0
321.9785	24.01	-1.20	34631.140	4.5	65680.150	4.5
321.9788	28.00	-.89	27943.543	1.0	58992.520	2.0
321.9792	23.00	-8.27	2311.370	3.5	33360.310	3.5
321.9799	26.00	-.44	19562.435	4.0	50611.303	3.0
321.9809	24.00	-4.80	25106.340	3.0	56155.120	2.0
321.9868	25.01	-3.22	75918.730	2.0	106966.940	2.0
321.9882	28.00	-.44	25753.578	4.0	56801.654	5.0
321.9938	24.00	-2.62	24897.550	4.0	55945.080	5.0
321.9950	21.00	-3.46	168.340	2.5	31215.760	2.5
322.0021	26.00	-4.84	11976.239	4.0	43022.969	4.0
322.0147	25.00	-2.29	30425.710	1.5	61471.230	2.5
322.0250	28.01	-2.94	68965.650	1.5	100010.170	.5
322.0288	22.00	-1.18	17075.310	4.0	48119.470	5.0
322.0322	25.01	-3.87	75918.730	2.0	106962.560	1.0
322.0331	28.00	-6.01	13521.352	2.0	44565.100	3.0
322.0350	90.01	-1.22	4032.876	0.0	35085.401	0.0
322.0377	27.02	-4.65	140225.800	3.5	171269.100	4.5
322.0398	29.01	-3.66	115359.800	4.0	146402.900	5.0
322.0460	28.01	-2.78	105838.060	3.5	136880.560	4.5
322.0543	22.01	-3.54	983.800	2.5	32025.500	2.5
322.0543	17.01	-3.08	127726.900	1.0	158768.600	2.0
322.0570	82.00	-1.11	21293.585	0.0	52343.989	0.0
322.0610	72.01	.14	15002.299	0.0	46052.317	0.0
322.0621	27.00	-.25	23855.620	4.5	54896.570	3.5
322.0687	25.02	-2.20	145643.450	2.5	176683.760	2.5
322.0780	77.00	.01	2823.013	0.0	33871.393	0.0
322.0826	26.01	-2.83	32909.870	5.5	63948.840	4.5
322.0836	28.01	-4.56	25036.380	2.5	56075.260	2.5
322.0847	24.01	-4.69	53566.220	3.5	84604.990	2.5
322.0860	42.00	-.94	10646.793	0.0	41694.401	0.0
322.0911	28.01	-4.87	105861.190	2.5	136899.340	2.5
322.0912	28.01	-4.32	105861.190	2.5	136899.330	1.5
322.0959	28.01	-4.09	99442.860	4.5	130480.550	3.5
322.1150	22.00	-2.01	170.132	3.0	31205.985	3.0
322.1170	58.01	.41	4436.164	0.0	35480.784	0.0
322.1187	8.02	-1.09	374798.600	3.0	405834.100	2.0
322.1204	22.00	-8.91	14028.470	2.0	45063.800	2.0
322.1210	74.00	.16	17986.627	0.0	49030.862	0.0
322.1242	24.00	-3.80	23163.270	0.0	54198.230	1.0
322.1264	28.00	.47	30922.763	5.0	61957.517	6.0
322.1280	77.00	.65	28310.790	0.0	59354.350	0.0
322.1320	73.00	-.86	9920.875	0.0	40964.050	0.0
322.1324	28.01	-3.58	105861.190	2.5	136895.360	3.5
322.1330	25.00	-1.15	35114.980	2.5	66149.100	3.5
322.1365	22.00	.38	16106.080	4.0	47139.860	4.0
322.1368	23.01	-2.02	20089.560	1.0	51123.310	2.0
322.1409	24.01	-4.85	38315.000	2.5	69348.360	1.5
322.1601	25.01	-2.90	75918.730	2.0	106950.240	3.0
322.1625	18.01	-1.76	155043.070	2.5	186074.350	2.5
322.1649	28.00	-1.90	0.000	4.0	31031.042	3.0
322.1682	24.01	-2.94	33418.110	2.5	64448.840	2.5
322.1740	42.00	.65	18147.942	0.0	49187.070	0.0
322.1753	22.01	-2.20	9395.760	1.5	40425.800	1.5
322.1774	26.02	-3.67	157982.000	3.0	189011.840	4.0
322.1778	28.01	-2.38	99154.810	4.5	130184.610	5.5
322.1882	28.02	-2.69	103306.100	3.0	134334.900	3.0
322.1910	74.00	-1.60	3306.958	0.0	34344.448	0.0
322.1918	26.00	-.69	20019.648	1.0	51048.100	1.0
322.1956	28.01	-4.76	100609.010	2.5	131637.100	3.5
322.1961	28.01	-2.54	99442.860	4.5	130470.900	4.5
322.1965	9.03	-1.79	519890.000	2.0	550918.000	1.0
322.1994	24.01	-1.85	39824.520	4.5	70852.240	3.5
322.2000	8.04	-2.37	677333.000	0.0	708369.623	0.0
322.2000	8.04	-1.27	653100.000	0.0	684136.623	0.0
322.2008	10.01	-2.44	249445.990	2.5	280473.580	1.5
322.2048	26.00	-3.01	23783.617	5.0	54810.820	4.0
322.2062	26.00	-2.48	20641.110	4.0	51668.175	4.0
322.2065	26.00	.24	19350.882	5.0	50377.920	5.0
322.2189	26.00	-4.10	22249.430	3.0	53275.270	2.0
322.2334	24.00	-1.70	27703.840	4.0	58728.290	4.0
322.2339	28.01	-2.18	100078.780	1.5	131103.180	2.5
322.2387	21.01	-2.46	32349.980	3.0	63373.910	2.0
322.2396	18.01	-4.48	173393.380	2.5	204417.230	1.5
322.2399	22.00	-5.81	6598.749	2.0	37622.573	3.0
322.2410	58.01	-.93	4113.534	0.0	35146.208	0.0
322.2422	28.01	-3.24	68131.210	3.5	99154.810	4.5
322.2470	40.01	.52	14034.408	0.0	45066.504	0.0
322.2522	26.00	-4.63	26874.534	5.0	57897.170	5.0
322.2682	24.02	-3.78	128782.200	3.0	159803.300	4.0
322.2744	22.00	-1.17	170.132	3.0	31190.631	2.0
322.2830	22.01	-.35	93.940	2.5	31113.610	3.5
322.2965	14.02	-4.13	209531.400	2.0	240549.770	2.0
322.3001	22.00	-1.06	17215.440	5.0	48233.470	6.0
322.3009	24.00	-2.80	24897.550	4.0	55915.500	4.0
322.3073	26.00	-2.69	26623.726	2.0	57641.060	3.0
322.3148	27.00	-2.36	5075.830	1.5	36092.440	2.5
322.3191	26.01	-3.29	47674.780	1.5	78690.980	2.5
322.3270	26.00	-3.45	11976.239	4.0	42991.680	5.0
322.3270	44.00	-1.10	2661.698	0.0	33686.092	0.0
322.3320	23.02	-3.57	110181.470	2.5	141196.430	2.5
322.3320	41.01	-.41	8227.067	0.0	39250.980	0.0
322.3370	58.01	-.49	7743.122	0.0	38766.554	0.0
322.3435	29.00	-.89	42264.541	0.0	73287.347	0.0
322.3451	26.00	-2.38	23110.925	3.0	54124.620	4.0
322.3467	29.01	-2.43	108014.660	3.0	139028.200	2.0
322.3477	26.00	-2.73	26627.612	4.0	57641.060	3.0
322.3490	42.00	-.90	11050.080	0.0	42072.357	0.0
322.3505	22.00	.52	16267.510	5.0	47280.690	5.0
322.3520	28.00	-1.99	28212.997	0.0	59226.030	1.0
322.3529	28.00	.22	25753.578	4.0	56766.523	4.0
322.3532	28.01	-2.52	91800.050	4.5	122812.970	3.5
322.3535	25.00	-4.37	18402.460	2.5	49415.350	2.5
322.3652	25.00	-3.23	34250.520	5.5	65262.280	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
322.3740	64.01	-.33	1855.123	0.0	32874.994	0.0
322.3830	73.00	-.79	5565.369	0.0	36584.374	0.0
322.3842	25.00	-3.41	7985.783	2.0	38995.717	1.0
322.3890	22.00	-4.33	6842.964	5.0	37852.434	4.0
322.3891	18.01	-4.81	172335.520	2.5	203344.980	1.5
322.3969	24.00	-1.33	24093.160	2.0	55101.870	3.0
322.4068	26.00	-3.50	29798.960	4.0	60806.720	3.0
322.4233	22.01	.09	12774.810	5.5	43780.990	4.5
322.4296	28.01	-3.31	103653.030	3.5	134658.600	4.5
322.4323	27.00	-4.22	23855.620	4.5	54860.930	4.5
322.4430	21.00	-4.40	168.340	2.5	31172.620	1.5
322.4470	24.00	-4.63	7593.160	2.0	38597.060	1.0
322.4577	25.01	-1.58	73911.310	1.0	104914.180	0.0
322.4629	27.00	-1.86	15184.040	2.5	46186.410	1.5
322.4664	29.00	-.80	42264.541	0.0	73275.524	0.0
322.4710	25.01	-2.48	70497.440	4.0	101499.030	4.0
322.4753	22.00	-5.92	6742.757	4.0	37743.933	3.0
322.4756	25.00	-2.46	0.000	2.5	31001.150	2.5
322.4797	26.01	-3.07	32875.630	6.5	63876.380	5.5
322.4817	10.01	.63	274364.570	2.5	305365.130	3.5
322.4827	28.01	-4.70	105588.890	4.5	136589.350	3.5
322.4861	26.01	-3.38	44915.070	3.5	75915.210	2.5
322.4861	24.01	-4.63	74421.760	5.5	105421.900	5.5
322.4884	22.01	-3.28	16625.250	1.5	47625.170	2.5
322.4953	18.00	-4.29	93750.639	1.0	124749.890	0.0
322.4972	24.01	-3.92	35356.060	1.5	66355.130	1.5
322.5016	28.00	-1.46	3409.925	2.0	34408.574	1.0
322.5022	23.01	-5.80	16421.510	4.0	47420.100	4.0
322.5052	26.00	-3.28	26105.908	6.0	57104.207	5.0
322.5080	66.01	-1.10	806.575	0.0	31813.558	0.0
322.5113	25.00	-2.12	33825.490	2.5	64823.210	2.5
322.5130	24.01	-4.27	74424.350	6.5	105421.900	5.5
322.5139	24.01	-4.55	32603.730	2.5	63601.200	3.5
322.5177	12.02	-1.46	559987.100	1.0	590984.200	0.0
322.5178	24.01	-1.67	38509.070	3.5	69506.160	3.5
322.5187	28.01	-2.72	100078.780	1.5	131075.780	1.5
322.5208	17.01	-2.30	127726.900	1.0	158723.700	1.0
322.5281	9.02	-3.89	356371.820	2.5	387367.920	2.5
322.5305	29.01	-2.13	108335.430	2.0	139331.300	3.0
322.5333	27.02	-4.96	138774.700	2.5	169770.300	2.5
322.5334	23.00	-6.27	2311.370	3.5	33306.960	4.5
322.5352	22.00	-2.15	16875.190	2.0	47870.610	2.0
322.5373	24.01	-1.04	39684.000	3.5	70679.220	4.5
322.5389	28.01	-4.81	106283.160	2.5	137278.220	1.5
322.5420	90.01	-.32	9598.245	0.0	40601.959	0.0
322.5426	26.02	-4.92	199262.440	3.0	230257.150	2.0
322.5432	24.01	-1.59	32854.460	4.5	63849.110	5.5
322.5480	41.01	-.12	2339.068	0.0	33342.206	0.0
322.5491	23.00	-2.22	323.420	3.5	31317.500	4.5
322.5524	22.00	-5.77	6661.003	3.0	37654.770	2.0
322.5602	26.00	-2.16	19621.004	5.0	50614.020	4.0
322.5614	26.00	-3.59	29371.860	3.0	60364.760	3.0
322.5630	18.01	-3.63	179592.130	2.5	210584.880	1.5
322.5636	25.01	-2.27	34761.810	5.0	65754.500	6.0
322.5654	28.01	-4.96	102742.740	1.5	133735.260	2.5
322.5670	58.01	.45	8307.725	0.0	39309.036	0.0
322.5675	20.00	-2.43	15315.943	2.0	46308.257	2.0
322.5721	25.01	-1.19	70497.440	4.0	101489.310	5.0
322.5781	26.00	.46	19350.882	5.0	50342.180	6.0
322.5786	28.01	-4.58	105861.190	2.5	136852.440	1.5
322.5798	26.02	-1.48	188013.400	4.0	219004.530	4.0
322.5860	70.01	-.44	30085.255	0.0	61084.740	0.0
322.5871	14.02	-3.53	209559.330	3.0	240549.770	2.0
322.5904	20.00	-.81	15315.943	2.0	46306.059	3.0
322.5974	18.01	-1.95	155351.030	1.5	186340.480	1.5
322.5982	11.01	-.98	300510.920	1.0	331500.290	2.0
322.5999	24.01	-1.75	38509.070	3.5	69498.270	4.5
322.6008	26.00	-2.02	20641.110	4.0	51630.230	5.0
322.6014	28.01	-2.07	103653.030	3.5	134642.090	3.5
322.6029	25.00	-1.29	17282.000	3.5	48270.910	2.5
322.6096	24.00	-.48	31049.330	6.0	62037.600	5.0
322.6108	23.00	-2.09	553.020	4.5	31541.180	3.5
322.6111	22.00	.66	16458.710	6.0	47446.840	6.0
322.6120	90.01	-1.18	8307.725	0.0	39304.712	0.0
322.6155	20.00	-1.62	15315.943	2.0	46303.649	2.0
322.6157	9.00	-4.39	115917.909	2.5	146905.600	2.5
322.6218	10.01	-3.50	251011.180	2.5	281998.280	2.5
322.6236	22.00	-2.77	386.874	4.0	31373.801	3.0
322.6244	27.00	-1.12	24326.110	3.5	55312.960	4.5
322.6260	29.01	-3.28	85388.770	2.0	116375.470	3.0
322.6268	24.00	-1.55	27176.220	1.0	58162.840	2.0
322.6320	64.01	-.17	8469.040	0.0	39464.106	0.0
322.6329	20.00	-2.73	15315.943	2.0	46301.973	1.0
322.6353	24.01	-3.48	38362.560	1.5	69348.360	1.5
322.6370	44.00	-1.27	3064.986	0.0	34059.571	0.0
322.6372	26.01	-1.87	44929.590	2.5	75915.210	2.5
322.6474	22.00	-9.48	13981.750	1.0	44966.390	1.0
322.6488	22.00	-1.72	17075.310	4.0	48059.820	3.0
322.6555	24.00	-2.70	7927.470	2.0	38911.330	3.0
322.6584	25.01	-3.55	70517.720	3.0	101501.300	3.0
322.6684	22.01	-3.27	12758.150	2.5	43740.770	3.5
322.6714	26.00	-4.35	704.003	2.0	31686.342	2.0
322.6721	26.00	-2.11	24772.019	1.0	55754.290	2.0
322.6723	24.00	-2.18	31055.350	5.0	62037.600	5.0
322.6736	25.01	-2.70	70517.720	3.0	101499.840	2.0
322.6752	22.01	-1.86	225.470	3.5	31207.440	2.5
322.6821	25.01	-3.78	70517.720	3.0	101499.030	4.0
322.6841	27.00	-2.10	23184.230	2.5	54165.350	1.5
322.6915	23.01	-.54	25191.080	2.0	56171.490	1.0
322.6943	26.02	-4.44	199212.720	4.0	230192.860	3.0
322.6979	28.00	-2.24	0.000	4.0	30979.789	4.0
322.6999	24.00	-1.23	27223.050	2.0	58202.650	3.0
322.7034	25.00	-3.32	35041.370	3.5	66020.630	2.5
322.7057	26.00	-.40	20019.648	1.0	50998.686	2.0
322.7110	58.01	.08	2581.041	0.0	33568.519	0.0
322.7197	23.03	-1.20	225804.100	2.0	256781.800	1.0
322.7225	24.00	-1.69	24897.550	4.0	55874.980	5.0
322.7320	73.00	-.57	9194.957	0.0	40180.419	0.0
322.7440	22.00	-1.98	16961.420	3.0	47936.790	3.0
322.7460	75.00	-.44	15082.956	0.0	46067.074	0.0
322.7482	24.01	-4.34	39877.280	3.5	70852.240	3.5
322.7499	23.03	.36	254824.100	1.0	285798.900	2.0
322.7520	11.02	-4.17	440472.000	2.5	471446.600	1.5
322.7614	25.01	-3.58	86057.400	4.0	117031.100	3.0
322.7628	26.02	-4.53	157982.000	3.0	188955.560	3.0
322.7730	22.01	-1.95	31207.440	2.5	62180.020	1.5
322.7743	26.01	-1.08	13474.430	2.5	44446.890	3.5
322.7751	27.00	-3.35	1809.330	1.5	32781.710	2.5
322.7780	90.01	-1.91	0.000	0.0	30981.046	0.0
322.7791	26.00	-3.64	19562.435	4.0	50534.435	3.0
322.7814	28.01	-4.37	99844.130	3.5	130815.910	3.5
322.7821	25.01	-3.07	70527.320	5.0	101499.030	4.0
322.7832	28.00	-2.21	28068.091	4.0	59039.693	4.0
322.7880	44.00	-.62	8711.012	0.0	39691.098	0.0
322.7929	22.00	-1.55	17215.440	5.0	48186.110	4.0
322.7976	25.00	-1.11	34938.700	4.5	65908.920	4.5
322.7979	37.00	-2.69	0.000	0.0	30979.136	0.0
322.7994	26.00	-1.41	22838.320	2.0	53808.370	1.0
322.8089	25.00	.42	17052.290	4.5	48021.430	5.5
322.8105	24.01	-1.67	38509.070	3.5	69478.060	2.5
322.8174	22.00	-.50	15975.590	3.0	46943.910	2.0
322.8204	23.00	-2.13	10892.500	3.5	41860.540	4.5
322.8220	42.00	.27	11372.710	0.0	42349.533	0.0
322.8243	26.00	-4.00	19912.486	2.0	50880.152	1.0
322.8260	24.00	-4.45	31009.000	3.0	61976.500	4.0
322.8310	26.01	-1.78	73016.330	3.5	103983.350	3.5
322.8360	22.01	-2.10	9363.710	.5	40330.250	.5
322.8416	24.01	-4.32	74455.900	4.5	105421.900	5.5
322.8473	24.00	-7.02	0.000	3.0	30965.460	3.0
322.8530	44.00	-.37	7985.094	0.0	38958.943	0.0
322.8579	6.00	-4.81	88913.560	2.0	119878.000	1.0
322.8597	26.00	-1.36	26105.908	6.0	57070.171	6.0
322.8607	22.01	-.17	8710.470	1.5	39674.640	.5
322.8729	25.02	-3.01	177687.540	3.5	208650.540	3.5
322.8730	75.00	-.70	15647.559	0.0	46619.489	0.0
322.8780	62.01	-.71	4355.506	0.0	35326.957	0.0
322.8810	40.01	-.15	6371.944	0.0	37343.107	0.0
322.8818	28.01	-4.88	70778.120	3.5	101740.270	3.5
322.8834	25.01	-3.94	70527.320	5.0	101489.310	5.0
322.8834	9.03	-1.45	679798.000	2.0	710760.000	3.0
322.8854	26.02	-3.52	165939.470	5.0	196901.270	5.0
322.8872	26.01	-4.36	30764.460	3.5	61726.090	3.5
322.8878	22.00	-5.77	6661.003	3.0	37622.573	3.0
322.8914	25.00	-3.78	34343.900	4.5	65305.130	3.5
322.9010	90.01	-.31	7259.177	0.0	38228.421	0.0
322.9011	28.02	-4.13	86646.200	2.0	117606.500	3.0
322.9120	58.01	-.58	4194.191	0.0	35162.380	0.0
322.9122	26.00	-3.39	978.076	0.0	31937.308	1.0
322.9156	37.00	-3.27	0.000	0.0	30967.844	0.0
322.9175	26.00	-4.21	29798.960	4.0	60757.680	4.0
322.9178	22.01	-.51	0.000	1.5	30958.700	2.5
322.9200	24.00	-.04	27816.880	5.0	58775.360	6.0
322.9214	23.02	-2.73	56922.500	2.5	87880.850	2.5
322.9231	26.01	-3.54	72650.630	4.5	103608.820	4.5
322.9238	22.00	-9.64	14105.680	3.0	45063.800	2.0
322.9261	9.03	-4.62	469644.200	2.0	500602.100	1.0
322.9280	77.00	-.07	12098.628	0.0	43065.283	0.0
322.9293	27.00	-3.39	23207.760	1.5	54165.350	1.5
322.9304	24.01	-2.02	32844.920	1.5	63802.410	.5
322.9334	28.01	-4.17	99844.130	3.5	130801.330	4.5
322.9355	26.02	-4.31	199300.150	2.0	230257.150	2.0
322.9360	58.01	-.40	2581.041	0.0	33546.929	0.0
322.9364	27.00	-.20	24326.110	3.5	55283.020	2.5
322.9364	26.01	-1.95	72651.910	3.5	103608.820	4.5
322.9369	22.00	-4.63	6661.003	3.0	37617.868	4.0
322.9401	22.01	-.11	9118.150	4.5	40074.710	3.5
322.9431	22.00	-5.06	6598.749	2.0	37555.021	3.0
322.9457	10.01	-.80	274409.110	3.5	305365.130	3.5
322.9534	25.01	-2.67	70546.020	4.0	101501.300	3.0
322.9559	26.00	-1.67	22845.856	5.0	53800.900	5.0
322.9560	41.01	-.27	7178.519	0.0	38142.489	0.0
322.9564	14.01	.32	126236.700	1.5	157191.700	2.5
322.9572	10.01	.74	274409.110	3.5	305364.030	4.5
322.9632	28.01	-1.14	103653.030	3.5	134607.370	4.5
322.9657	26.00	-4.62	12968.552	2.0	43922.652	3.0
322.9678	24.02	-2.63	128849.400	4.0	159803.300	4.0
322.9688	28.00	-2.61	13521.352	2.0	44475.158	2.0
322.9750	81.00	-.37	7743.122	0.0	38705.271	0.0
322.9762	27.02	-4.43	140787.300	2.5	171740.400	1.5
322.9762	27.02	-4.43	140787.300	2.5	171740.400	1.5
322.9771	25.01	-3.22	70546.020	4.0	101499.030	4.0
322.9790	42.00	.21	12259.943	0.0	43221.708	0.0
322.9877	24.01	-3.63	38396.360	.5	69348.360	1.5
322.9880	73.01	.65	14357.039	0.0	45317.942	0.0
322.9919	23.03	-.42	256781.800	1.0	287733.400	2.0
322.9942	26.02	-4.79	84159.550	4.0	115110.920	4.0
322.9952	26.00	-3.54	20874.482	3.0	51825.758	3.0
322.9989	26.00	-.53	24574.655	4.0	55525.580	5.0
323.0000	8.04	-2.49	677333.000	0.0	708292.752	0.0
323.0022	18.01	-4.58	170400.940	2.5	201351.550	2.5
323.0065	14.01	-.63	126236.700	1.5	157186.900	1.5
323.0069	10.01	.26	246394.130	2.5	277344.290	2.5
323.0080	58.01	-1.33	967.890	0.0	31926.676	0.0
323.0090	26.00	-2.96	7728.058	3.0	38678.015	2.0
323.0152	26.00	-.26	19912.486	2.0	50861.850	3.0
323.0171	26.02	-3.39	158729.890	3.0	189679.070	3.0
323.0207	26.00	-.71	19912.486	2.0	50861.320	2.0
323.0230	25.00	.09	34938.700	4.5	65887.310	5.5
323.0290	78.00	-.94	13389.148	0.0	44346.121	0.0
323.0320	28.01	-3.43	103025.580	2.5	133973.330	2.5
323.0340	22.00	-4.50	6742.757	4.0	37690.320	5.0
323.0367	28.01	-3.01	99040.750	1.5	129988.050	2.5
323.0419	10.01	-.87	246397.490	1.5	277344.290	2.5
323.0446	26.02	-2.00	165939.470	5.0	196886.010	6.0
323.0451	28.02	-4.43	82194.300	5.0	113140.800	5.0
323.0455	23.00	-2.30	8476.200	1.5	39422.660	2.5
323.0495	14.02	-.66	175230.010	0.0	206176.080	1.0
323.0503	26.01	-3.86	31999.120	3.5	62945.120	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
323.0560	62.01	-.63	1451.835	0.0	32406.221	0.0
323.0635	23.00	-3.03	323.420	3.5	31268.150	3.5
323.0713	25.00	-.25	17282.000	3.5	48225.990	3.5
323.0760	77.00	-.75	10485.478	0.0	41437.947	0.0
323.0763	17.02	-4.73	174093.800	1.5	205037.300	1.5
323.0770	24.01	-4.04	74421.760	5.5	105365.200	4.5
323.0786	25.01	-2.41	70546.020	4.0	101489.310	5.0
323.0815	24.01	-3.11	38563.150	4.5	69506.160	3.5
323.0840	22.00	-1.98	17075.310	4.0	48018.080	4.0
323.0854	27.00	-4.44	24326.110	3.5	55268.750	3.5
323.0860	73.00	-.38	12179.286	0.0	43130.797	0.0
323.0860	90.01	-.72	9598.245	0.0	40549.756	0.0
323.0914	23.01	-1.58	17910.980	4.0	48853.040	5.0
323.0957	26.00	-3.61	19757.020	3.0	50698.666	2.0
323.0987	24.01	-.97	74423.840	3.5	105365.200	4.5
323.1000	22.00	-4.31	17423.853	2.0	48365.090	3.0
323.1038	10.01	-2.98	252953.540	1.5	283894.410	.5
323.1076	28.00	-2.16	27580.411	5.0	58520.923	5.0
323.1102	25.01	-2.63	70527.320	5.0	101467.580	6.0
323.1151	24.00	-2.60	27223.050	2.0	58162.840	2.0
323.1178	29.00	-.63	41135.335	0.0	72083.800	0.0
323.1240	58.01	.08	3952.218	0.0	34900.089	0.0
323.1270	2.00	-2.64	166278.000	0.0	197225.584	0.0
323.1281	26.00	-5.50	12560.933	3.0	43499.485	4.0
323.1308	22.01	-1.37	1087.210	3.5	32025.500	2.5
323.1370	28.00	-3.98	27580.411	5.0	58518.110	4.0
323.1370	24.00	-1.96	27816.880	5.0	58754.580	5.0
323.1376	25.00	-2.85	34938.700	4.5	65876.340	3.5
323.1449	25.01	-1.25	39808.140	3.0	70745.080	3.0
323.1467	7.01	-1.55	190120.240	1.0	221057.010	2.0
323.1510	69.01	-.66	8872.327	0.0	39817.613	0.0
323.1530	62.01	-1.01	806.575	0.0	31751.669	0.0
323.1583	26.00	-2.91	11976.239	4.0	42911.897	5.0
323.1636	25.00	-3.36	27201.540	2.5	58136.690	3.5
323.1638	22.00	-9.84	14105.680	3.0	45040.810	4.0
323.1639	24.01	-1.18	38563.150	4.5	69498.270	4.5
323.1655	18.01	-2.37	179592.130	2.5	210527.100	2.5
323.1677	26.02	-3.56	118350.240	4.0	149285.000	3.0
323.1690	40.01	-.41	241.973	0.0	31185.535	0.0
323.1702	26.01	-2.05	31387.980	2.5	62322.500	3.5
323.1705	22.01	-2.92	9395.760	1.5	40330.250	.5
323.1819	17.01	-1.18	147605.700	3.0	178539.100	2.0
323.1914	28.01	-2.87	106022.790	.5	136955.280	.5
323.1947	23.01	-.65	18269.490	1.0	49201.660	2.0
323.1950	62.01	-1.27	1935.780	0.0	32876.853	0.0
323.1996	25.01	-2.20	39813.380	2.0	70745.080	3.0
323.2000	77.00	.43	28310.790	0.0	59251.384	0.0
323.2020	10.01	-1.37	246394.130	2.5	277325.600	1.5
323.2043	25.01	-4.82	55371.300	3.0	86302.550	3.0
323.2059	27.02	-2.17	77472.300	2.5	108403.400	1.5
323.2060	76.00	-.27	4113.534	0.0	35053.554	0.0
323.2133	28.01	-3.78	105588.890	4.5	136519.280	4.5
323.2158	26.00	-2.98	21038.987	2.0	51969.140	3.0
323.2160	92.01	-.96	241.973	0.0	31181.035	0.0
323.2237	30.02	-3.20	234384.000	3.0	265313.400	2.0
323.2258	26.02	-4.90	199327.950	1.0	230257.150	2.0
323.2264	22.01	-.47	8997.690	3.5	39926.830	2.5
323.2290	10.01	-1.59	249839.630	.5	280768.520	.5
323.2292	26.01	-3.24	67516.370	5.5	98445.240	4.5
323.2310	90.00	-1.47	0.000	0.0	30937.627	0.0
323.2338	28.01	-4.51	105838.060	3.5	136766.490	2.5
323.2343	26.01	-1.12	73054.970	2.5	103983.350	3.5
323.2372	10.01	.10	246397.490	1.5	277325.600	1.5
323.2424	24.01	-2.42	33521.230	3.5	64448.840	2.5
323.2470	22.00	-4.59	16267.510	5.0	47194.680	4.0
323.2490	74.00	-1.10	6129.972	0.0	37065.876	0.0
323.2520	51.00	.54	18309.257	0.0	49244.874	0.0
323.2630	3.00	-1.96	0.000	0.0	30934.564	0.0
323.2638	26.00	-3.27	17550.180	3.0	48475.740	3.0
323.2650	74.00	-.34	15324.929	0.0	46259.302	0.0
323.2690	24.00	-4.28	24282.340	4.0	55207.400	4.0
323.2701	26.00	-4.19	22838.320	2.0	53763.280	3.0
323.2727	24.00	-4.92	27223.050	2.0	58147.760	3.0
323.2736	20.02	-1.05	247696.390	1.0	278621.010	1.0
323.2780	22.00	-.33	16106.080	4.0	47030.280	3.0
323.2780	64.00	-.23	483.945	0.0	31417.074	0.0
323.2787	26.01	-1.52	33501.320	3.5	64425.460	2.5
323.2871	27.00	-1.31	16470.600	1.5	47393.930	2.5
323.2930	28.00	-.93	0.000	4.0	30922.763	5.0
323.3047	26.00	.03	26105.908	6.0	57027.560	7.0
323.3099	24.00	-1.29	31055.350	5.0	61976.500	4.0
323.3110	24.00	-4.66	31009.000	3.0	61930.050	3.0
323.3136	28.00	.10	26665.903	3.0	57586.700	2.0
323.3140	42.00	1.02	16696.107	0.0	47625.791	0.0
323.3160	28.01	-4.16	105668.780	2.5	136589.350	3.5
323.3165	28.00	-.08	30922.763	5.0	61843.280	5.0
323.3187	26.02	-4.23	199327.950	1.0	230248.260	1.0
323.3190	23.00	-.48	11100.650	4.5	42020.930	3.5
323.3235	24.00	-2.51	7810.820	1.0	38730.670	2.0
323.3274	26.00	-2.53	18378.187	2.0	49297.660	1.0
323.3349	22.01	-2.66	31490.820	3.5	62409.580	3.5
323.3354	16.01	-4.88	109831.280	1.5	140750.000	1.5
323.3389	25.00	-2.85	34343.900	4.5	65262.280	4.5
323.3420	78.00	-.86	15405.586	0.0	46332.592	0.0
323.3440	58.01	-.62	2581.041	0.0	33507.856	0.0
323.3492	24.01	-.80	74504.510	4.5	105421.900	5.5
323.3496	6.00	-3.45	88960.640	0.0	119878.000	1.0
323.3543	23.01	-.85	18293.870	2.0	49210.780	3.0
323.3596	15.02	.63	141512.800	1.5	172429.200	2.5
323.3596	15.02	-.32	141512.800	1.5	172429.200	1.5
323.3712	22.01	-2.36	34543.360	3.5	65458.650	3.5
323.3750	69.00	-1.42	0.000	0.0	30923.850	0.0
323.3772	23.01	-.58	18353.890	3.0	49268.610	4.0
323.3899	29.00	-1.11	41135.335	0.0	72057.760	0.0
323.3912	28.01	-4.29	99844.130	3.5	130757.510	4.5
323.3941	28.00	-3.50	15609.861	2.0	46522.965	2.0
323.3954	14.02	-.19	175263.100	1.0	206176.080	1.0
323.3964	26.00	-.96	19562.435	4.0	50475.320	4.0
323.4065	24.01	-.07	34631.140	4.5	65543.060	3.5
323.4084	25.00	-3.16	27248.000	1.5	58159.730	2.5
323.4120	27.00	-.71	15774.040	1.5	46685.430	1.5
323.4120	40.00	-.19	1209.863	0.0	32130.175	0.0
323.4160	58.01	.08	2581.041	0.0	33500.971	0.0
323.4217	24.01	-3.96	36101.820	3.5	67012.280	2.5
323.4234	18.00	-2.71	93143.800	2.0	124054.100	3.0
323.4254	23.03	.50	255146.800	2.0	286056.900	3.0
323.4296	28.00	-1.08	30922.763	5.0	61832.470	4.0
323.4307	25.03	-4.64	137930.100	5.0	168839.700	4.0
323.4339	24.01	-3.80	74455.900	4.5	105365.200	4.5
323.4350	22.00	-3.33	16961.420	3.0	47870.610	2.0
323.4378	28.01	-4.18	106369.300	1.5	137278.220	1.5
323.4487	18.00	-3.43	93750.639	1.0	124658.520	2.0
323.4497	23.01	-1.44	18293.870	2.0	49201.660	2.0
323.4501	22.01	-3.04	9518.050	2.5	40425.800	1.5
323.4506	22.01	.46	393.220	4.5	31300.920	4.5
323.4516	14.01	.06	126279.300	.5	157186.900	1.5
323.4614	26.00	-3.11	415.932	3.0	31322.603	3.0
323.4635	24.00	-2.94	25038.610	5.0	55945.080	5.0
323.4642	28.00	-2.63	879.813	2.0	31786.210	3.0
323.4666	29.01	-2.25	108335.430	2.0	139241.600	1.0
323.4721	25.00	-2.54	35114.980	2.5	66020.630	2.5
323.4730	23.00	-5.15	323.420	3.5	31228.980	2.5
323.4736	25.00	-.24	35041.370	3.5	65946.870	2.5
323.4757	28.01	-3.74	105861.190	2.5	136766.490	2.5
323.4857	9.02	-4.84	466418.120	4.5	497322.460	3.5
323.4858	22.00	-.67	7255.369	2.0	38159.710	3.0
323.4890	22.00	-2.13	17215.440	5.0	48119.470	5.0
323.4890	58.01	.30	7178.519	0.0	38091.471	0.0
323.4909	9.02	-4.62	466418.610	3.5	497322.460	3.5
323.4923	26.01	-4.48	7955.240	3.5	38858.960	2.5
323.4926	11.01	-.97	299889.160	1.0	330792.850	2.0
323.4926	11.01	-.97	299889.160	1.0	330792.850	2.0
323.4950	24.00	-4.93	24303.940	3.0	55207.400	4.0
323.4978	26.02	-3.75	198606.370	2.0	229509.560	3.0
323.5000	90.00	-.90	3629.588	0.0	34541.489	0.0
323.5130	63.00	-1.19	0.000	0.0	30910.659	0.0
323.5132	24.00	-4.35	31028.330	2.0	61930.050	3.0
323.5178	18.01	-4.12	172829.580	1.5	203730.860	1.5
323.5238	24.01	-1.74	35356.060	1.5	66256.770	.5
323.5245	24.01	-1.98	39684.000	3.5	70584.640	2.5
323.5269	18.00	-4.20	93750.639	1.0	124651.050	1.0
323.5322	29.01	-3.38	110084.290	1.0	140984.200	1.0
323.5328	26.00	-3.07	21999.132	4.0	52898.980	5.0
323.5336	24.00	-2.27	24093.160	2.0	54992.930	2.0
323.5380	42.00	-.29	12259.943	0.0	43168.213	0.0
323.5450	69.01	-1.43	161.315	0.0	31068.917	0.0
323.5472	26.02	-3.17	105895.350	1.0	136793.820	2.0
323.5504	27.00	-1.24	22475.360	4.5	53373.530	3.5
323.5532	27.00	-.77	15774.040	1.5	46671.940	2.5
323.5532	23.03	-2.53	234121.800	0.0	265019.700	1.0
323.5591	26.00	-2.74	21715.735	5.0	52613.072	5.0
323.5670	58.01	-.61	4839.451	0.0	35744.951	0.0
323.5680	25.01	-3.24	34761.810	5.0	65658.300	5.0
323.5700	3.01	-1.26	561245.000	0.0	592150.214	0.0
323.5713	29.00	-.38	42264.541	0.0	73169.631	0.0
323.5736	23.02	-4.83	109854.870	3.5	140750.820	2.5
323.5747	28.00	-2.39	2216.519	2.0	33112.368	3.0
323.5788	27.00	-2.15	16195.680	.5	47091.140	.5
323.5850	90.01	-.53	6129.972	0.0	37033.753	0.0
323.5888	23.03	-1.88	226796.300	2.0	257690.800	3.0
323.5891	24.01	-4.16	54678.950	4.5	85573.420	3.5
323.5939	22.00	-5.21	6661.003	3.0	37555.021	3.0
323.5940	75.00	-.22	13711.778	0.0	44614.700	0.0
323.6056	18.00	-3.83	93750.639	1.0	124643.540	1.0
323.6058	23.00	-3.56	9544.540	.5	40437.420	1.5
323.6061	27.00	-3.24	24627.790	4.5	55520.640	3.5
323.6105	22.01	-.25	8710.470	1.5	39602.900	1.5
323.6223	26.00	-2.71	415.932	3.0	31307.235	4.0
323.6274	26.02	-2.98	105906.230	2.0	136797.050	3.0
323.6400	41.01	-.34	2984.328	0.0	33882.857	0.0
323.6554	22.01	.27	225.470	3.5	31113.610	3.5
323.6580	40.01	.53	14195.724	0.0	45092.535	0.0
323.6601	28.01	-4.23	105439.850	1.5	136327.550	1.5
323.6612	26.02	-3.23	105906.230	2.0	136793.820	2.0
323.6613	24.00	-4.83	27176.220	1.0	58063.800	2.0
323.6627	25.00	-1.14	33825.490	2.5	64712.940	2.5
323.6663	23.01	-3.72	16533.000	5.0	47420.100	4.0
323.6677	28.01	-4.29	99340.550	3.5	130227.520	2.5
323.6733	28.01	-2.80	68154.310	1.5	99040.750	1.5
323.6737	28.01	-4.88	99844.130	3.5	130730.530	2.5
323.6737	8.02	-.87	370900.600	2.0	401787.000	2.0
323.6740	58.01	.04	4436.164	0.0	35331.448	0.0
323.6743	28.01	-.75	103653.030	3.5	134539.370	2.5
323.6758	27.02	-4.94	140382.900	3.5	171269.100	4.5
323.6778	25.00	-.05	17282.000	3.5	48168.010	4.5
323.6809	18.01	-1.63	159706.460	.5	190592.170	1.5
323.6810	69.01	.04	8872.327	0.0	39766.942	0.0
323.6817	18.01	-1.70	179592.130	2.5	210477.770	3.5
323.6842	26.01	-.92	69606.640	3.5	100492.040	3.5
323.6850	28.01	-3.87	99340.550	3.5	130225.870	3.5
323.7019	25.00	-4.10	18531.640	3.5	49415.350	2.5
323.7021	27.00	-2.44	816.000	3.5	31699.690	4.5
323.7080	42.00	1.24	20164.380	0.0	51056.419	0.0
323.7084	29.01	-3.88	114000.000	3.0	144883.090	2.0
323.7090	74.00	-.85	9436.930	0.0	40328.873	0.0
323.7171	26.02	-2.17	109570.840	2.0	140453.100	3.0
323.7191	23.00	-6.29	2424.890	4.5	33306.960	4.5
323.7212	29.01	-2.31	108335.430	2.0	139217.300	2.0
323.7213	25.00	-2.40	34423.270	3.5	65305.130	3.5
323.7236	24.00	-3.82	20519.600	6.0	51401.240	5.0
323.7397	26.01	-1.78	31364.470	1.5	62244.570	1.5
323.7427	22.00	-4.96	6742.757	4.0	37622.573	3.0
323.7510	75.00	-.48	14921.641	0.0	45809.576	0.0
323.7552	29.01	-2.94	110365.980	2.0	141244.600	1.0
323.7589	26.00	-4.72	29798.960	4.0	60677.230	5.0
323.7607	28.02	-4.81	82826.900	4.0	113705.000	4.0
323.7613	25.02	-2.63	146391.300	.5	177269.340	1.5
323.7660	45.00	-1.04	7743.122	0.0	38629.626	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
323.7665	24.00	-4.65	20523.690	4.0	51401.240	5.0
323.7691	24.00	-3.74	20523.940	5.0	51401.240	5.0
323.7734	24.00	-4.22	25038.610	5.0	55915.500	4.0
323.7770	28.01	-3.35	106022.790	.5	136899.330	1.5
323.7798	22.00	-3.81	13981.750	1.0	44858.030	1.0
323.7814	26.01	-1.42	31368.450	.5	62244.570	1.5
323.7872	23.01	.05	16421.510	4.0	47297.080	5.0
323.7890	62.01	-1.09	3468.273	0.0	34352.583	0.0
323.7920	22.00	-4.85	6742.757	4.0	37617.868	4.0
323.7937	28.01	-2.46	99340.550	3.5	130215.500	4.5
323.7980	42.00	.01	16696.107	0.0	47579.559	0.0
323.8014	26.01	-3.16	36126.410	1.5	67000.630	2.5
323.8015	28.01	-.86	103653.030	3.5	134527.240	3.5
323.8108	25.01	-3.93	55115.800	2.0	85989.120	2.0
323.8210	22.00	-.32	16267.510	5.0	47139.860	4.0
323.8213	28.01	-3.86	107142.210	1.5	138014.530	2.5
323.8236	30.02	-1.97	234384.000	3.0	265256.100	3.0
323.8294	28.01	-3.82	105861.190	2.5	136732.740	1.5
323.8309	26.00	-2.73	24574.655	4.0	55446.060	4.0
323.8479	24.01	-1.47	32836.840	3.5	63706.620	4.5
323.8508	24.00	-1.57	25038.610	5.0	55908.120	6.0
323.8530	44.00	.48	14921.641	0.0	45799.848	0.0
323.8565	8.02	-1.80	293865.260	1.0	324734.220	2.0
323.8620	64.01	-.20	10324.163	0.0	41201.512	0.0
323.8630	76.00	-.90	5726.684	0.0	36603.938	0.0
323.8631	28.01	-2.61	99340.550	3.5	130208.890	3.5
323.8678	26.02	-2.39	105929.160	3.0	136797.050	3.0
323.8713	25.00	-.04	35041.370	3.5	65908.920	4.5
323.8762	24.01	-.13	34813.060	5.5	65680.150	4.5
323.8815	28.01	-4.82	67694.640	2.5	98561.220	2.5
323.8839	28.01	-3.11	99340.550	3.5	130206.900	4.5
323.8855	25.00	-1.85	37420.240	5.5	68286.440	4.5
323.8867	24.00	-3.56	24286.540	1.0	55152.630	2.0
323.8886	23.00	-3.11	10892.500	3.5	41758.410	3.5
323.8952	24.00	-1.50	23933.900	4.0	54799.180	5.0
323.9000	8.04	-.79	653262.000	0.0	684135.726	0.0
323.9006	22.01	.09	93.940	2.5	30958.700	2.5
323.9010	9.00	-4.25	116040.883	1.5	146905.600	2.5
323.9014	26.00	-4.07	18378.187	2.0	49242.872	3.0
323.9017	26.02	-2.67	105929.160	3.0	136793.820	2.0
323.9034	26.00	-2.23	18378.187	2.0	49242.680	2.0
323.9139	28.00	-1.63	30979.789	4.0	61843.280	5.0
323.9146	24.00	-4.78	24093.160	2.0	54956.590	1.0
323.9200	70.01	-.46	32182.351	0.0	63054.171	0.0
323.9242	27.00	-3.22	13795.520	2.5	44658.030	1.5
323.9250	9.02	-4.87	413195.000	2.5	444057.440	1.5
323.9304	18.01	-3.34	172335.520	2.5	203197.440	3.5
323.9342	26.00	-2.91	22946.810	1.0	53808.370	1.0
323.9350	22.00	-3.27	17075.310	4.0	47936.790	3.0
323.9427	26.00	-3.11	19562.435	4.0	50423.185	4.0
323.9433	24.01	-1.86	74504.510	4.5	105365.200	4.5
323.9630	24.00	-7.99	0.000	3.0	30858.820	2.0
323.9650	22.01	-.91	8744.270	2.5	39602.900	1.5
323.9660	62.01	-.34	3871.561	0.0	34738.998	0.0
323.9668	25.00	-2.10	33825.490	2.5	64683.950	1.5
323.9798	25.00	-3.42	30354.210	3.5	61211.430	4.5
323.9832	23.01	-1.69	18353.890	3.0	49210.780	3.0
323.9864	26.01	-3.61	31387.980	2.5	62244.570	1.5
323.9970	25.00	-1.14	35165.050	1.5	66020.630	2.5
323.9990	73.00	-.64	12179.286	0.0	43043.579	0.0
324.0006	26.00	-2.62	24574.655	4.0	55429.890	5.0
324.0062	24.01	-1.84	39824.520	4.5	70679.220	4.5
324.0106	26.00	-.69	19757.020	3.0	50611.303	3.0
324.0146	26.02	-3.61	198655.660	3.0	229509.560	3.0
324.0172	23.00	-5.57	8412.940	.5	39266.600	1.5
324.0188	27.02	-4.29	140225.800	3.5	171079.300	3.5
324.0188	27.02	-4.29	140225.800	3.5	171079.300	3.5
324.0219	10.01	-2.21	251522.120	1.5	282375.330	1.5
324.0268	24.00	-3.29	24299.890	2.0	55152.630	2.0
324.0274	28.00	-.93	30979.789	4.0	61832.470	4.0
324.0329	24.01	-2.65	32854.460	4.5	63706.620	4.5
324.0397	25.00	-.59	17052.290	4.5	47903.800	4.5
324.0480	90.01	-1.10	6613.917	0.0	37473.543	0.0
324.0481	24.00	-1.35	28637.000	3.0	59487.710	4.0
324.0487	16.01	-2.64	127976.210	1.5	158826.870	2.5
324.0490	42.00	-.29	12259.943	0.0	43119.474	0.0
324.0613	25.00	-1.01	17451.520	2.5	48300.980	1.5
324.0661	29.01	-4.87	117666.600	4.0	148515.600	4.0
324.0664	26.00	-2.67	18378.187	2.0	49227.160	3.0
324.0687	28.01	-4.69	105439.850	1.5	136288.600	2.5
324.0694	24.00	-4.24	24303.940	3.0	55152.630	2.0
324.0709	22.01	-2.75	907.960	1.5	31756.500	1.5
324.0710	42.01	-.04	17099.394	0.0	47956.830	0.0
324.0790	23.01	-2.73	18353.890	3.0	49201.660	2.0
324.0834	22.00	-4.81	6842.964	5.0	37690.320	5.0
324.0880	25.00	-.47	35114.980	2.5	65961.900	1.5
324.0940	73.01	-.32	5242.739	0.0	36097.985	0.0
324.0947	24.00	-2.58	7750.780	0.0	38597.060	1.0
324.0976	27.01	-5.03	19189.900	4.0	50035.900	3.0
324.1040	76.00	-.43	10969.423	0.0	41823.717	0.0
324.1050	40.01	-.34	241.973	0.0	31096.171	0.0
324.1063	27.00	-6.92	1809.330	1.5	32654.500	2.5
324.1120	90.01	-.73	6936.547	0.0	37790.079	0.0
324.1160	62.01	-.91	322.630	0.0	31175.781	0.0
324.1172	23.00	-1.45	8578.520	2.5	39422.660	2.5
324.1186	27.00	-.27	24733.280	2.5	55577.280	1.5
324.1194	23.00	-4.02	2311.370	3.5	33155.300	4.5
324.1203	28.01	-3.20	99340.550	3.5	130184.390	2.5
324.1240	44.00	-.51	9033.642	0.0	39886.032	0.0
324.1244	23.01	-7.34	20242.320	4.0	51085.770	3.0
324.1330	28.01	-4.69	106369.300	1.5	137211.930	.5
324.1367	24.01	-1.70	39742.360	2.5	70584.640	2.5
324.1400	63.00	-.89	0.000	0.0	30850.867	0.0
324.1412	25.01	-3.51	70657.180	5.0	101499.030	4.0
324.1431	26.00	-.81	20019.648	1.0	50861.320	2.0
324.1447	16.01	-2.37	127824.930	.5	158666.450	1.5
324.1449	26.01	-2.56	69650.540	2.5	100492.040	3.5
324.1470	75.00	-.80	14518.354	0.0	45368.555	0.0
324.1501	26.00	-8.48	8154.713	1.0	38995.717	1.0
324.1502	23.03	.72	255445.500	3.0	286286.500	4.0
324.1520	77.00	-.89	4032.876	0.0	34882.601	0.0
324.1522	26.02	-4.38	120697.100	1.0	151537.910	0.0
324.1530	69.01	-.76	0.000	0.0	30849.630	0.0
324.1544	27.00	-.93	23611.780	5.5	54452.380	6.5
324.1572	14.03	-1.58	291497.500	1.5	322337.830	1.5
324.1583	14.03	-.62	291497.600	2.5	322337.830	1.5
324.1586	23.01	-6.21	16340.970	3.0	47181.170	3.0
324.1590	62.01	-1.24	1451.835	0.0	32300.894	0.0
324.1620	26.01	-2.28	73143.480	3.5	103983.350	3.5
324.1626	14.02	.04	175336.260	2.0	206176.080	1.0
324.1638	28.02	-4.43	85834.800	5.0	116674.500	4.0
324.1651	26.02	-4.38	120697.100	1.0	151536.680	1.0
324.1657	27.00	-4.15	24326.110	3.5	55165.630	2.5
324.1680	26.01	-2.21	31483.200	3.5	62322.500	3.5
324.1711	25.00	-3.73	34423.270	3.5	65262.280	4.5
324.1804	29.01	-1.89	110365.980	2.0	141204.100	3.0
324.1943	25.01	-3.89	55115.800	2.0	85952.600	3.0
324.1973	22.01	-.01	0.000	1.5	30836.520	1.5
324.1988	24.00	-2.92	25038.610	5.0	55874.980	5.0
324.2004	23.01	-1.97	19902.600	0.0	50738.820	1.0
324.2020	74.00	.40	21293.585	0.0	52138.552	0.0
324.2031	23.00	-2.36	8412.940	.5	39248.900	1.5
324.2050	73.00	-1.19	3871.561	0.0	34716.243	0.0
324.2136	25.00	-1.07	35041.370	3.5	65876.340	3.5
324.2173	29.01	-3.59	117231.690	1.0	148066.300	2.0
324.2235	27.00	-2.92	16778.160	2.5	47612.180	1.5
324.2254	26.00	-3.39	20874.482	3.0	51708.330	2.0
324.2280	39.01	-.05	1371.178	0.0	32213.672	0.0
324.2387	23.00	-7.12	0.000	1.5	30832.580	2.5
324.2434	25.01	-1.99	70657.180	5.0	101489.310	5.0
324.2445	25.00	-3.83	35041.370	3.5	65873.400	2.5
324.2452	16.01	-2.83	133399.820	1.5	164231.780	2.5
324.2459	25.00	-.97	35114.980	2.5	65946.870	2.5
324.2584	24.00	-1.59	24056.110	5.0	54886.820	6.0
324.2647	25.00	-1.59	34938.700	4.5	65768.810	4.5
324.2679	23.03	-3.07	254468.800	2.0	285298.600	1.0
324.2695	28.01	-1.31	106022.790	.5	136852.440	1.5
324.2700	46.00	.08	6533.259	0.0	37371.758	0.0
324.2705	22.00	-3.34	14028.470	2.0	44858.030	1.0
324.2830	73.00	-1.19	3871.561	0.0	34708.824	0.0
324.2943	27.00	-.22	23855.620	4.5	54682.910	4.5
324.3052	28.00	-1.59	204.786	3.0	31031.042	3.0
324.3103	26.00	-2.02	19788.248	4.0	50614.020	4.0
324.3164	29.00	-.15	41135.335	0.0	71969.422	0.0
324.3260	23.00	-3.25	8476.200	1.5	39300.480	2.5
324.3273	23.00	-1.53	8412.940	.5	39237.100	.5
324.3320	25.00	-4.08	33825.490	2.5	64649.200	3.5
324.3350	72.00	.36	16696.107	0.0	47528.425	0.0
324.3358	28.01	-3.05	68735.980	2.5	99559.330	2.5
324.3370	58.01	.04	4436.164	0.0	35268.292	0.0
324.3389	26.00	-1.25	26874.534	5.0	57697.590	4.0
324.3398	10.01	-.43	249445.990	2.5	280268.960	2.5
324.3415	26.00	-3.49	22838.320	2.0	53661.130	3.0
324.3464	9.02	-3.10	360435.080	1.5	391257.420	2.5
324.3479	24.02	-4.89	65890.900	3.0	96713.100	3.0
324.3494	27.00	-2.10	24733.280	2.5	55555.340	2.5
324.3500	44.00	-.83	6452.602	0.0	37283.495	0.0
324.3502	22.00	-.49	16458.710	6.0	47280.690	5.0
324.3570	25.02	-4.71	145643.450	2.5	176464.780	3.5
324.3575	27.00	-1.79	14036.280	1.5	44857.570	.5
324.3584	27.02	-3.96	140645.400	3.5	171466.600	2.5
324.3584	27.02	-3.96	140645.400	3.5	171466.600	2.5
324.3633	15.01	-3.82	107923.570	2.0	138744.300	3.0
324.3686	18.01	-.43	155351.030	1.5	186171.260	.5
324.3717	26.01	-1.32	33466.500	4.5	64286.440	3.5
324.3734	23.01	-5.25	17910.980	4.0	48730.760	4.0
324.3760	24.00	-3.38	24282.340	4.0	55101.870	3.0
324.3775	25.00	-.22	17451.520	2.5	48270.910	2.5
324.3804	22.00	-1.01	386.874	4.0	31205.985	3.0
324.3828	25.01	-4.42	55371.300	3.0	86190.180	2.0
324.3838	27.00	-.62	15184.040	2.5	46002.830	2.5
324.3964	23.00	-.94	11100.650	4.5	41918.240	5.5
324.4021	22.00	-8.82	14105.680	3.0	44922.730	3.0
324.4096	10.01	.34	249445.990	2.5	280262.330	3.5
324.4119	24.00	-2.41	8095.210	3.0	38911.330	3.0
324.4165	18.01	-4.55	172335.520	2.5	203151.200	2.5
324.4168	21.01	-3.24	0.000	1.0	30815.650	1.0
324.4186	26.00	-.48	19562.435	4.0	50377.920	5.0
324.4192	14.03	-.88	291497.500	1.5	322312.930	.5
324.4244	29.01	-4.50	114000.000	3.0	144814.930	3.0
324.4342	24.00	-1.37	33113.270	4.0	63927.270	5.0
324.4395	26.02	-3.39	188109.580	3.0	218923.080	3.0
324.4437	17.02	-.55	178369.700	.5	209182.800	1.5
324.4448	28.01	-4.00	100309.290	5.5	131122.280	5.5
324.4460	90.00	-1.06	0.000	0.0	30821.770	0.0
324.4470	42.00	-.21	18228.600	0.0	49050.275	0.0
324.4503	26.01	-3.35	47674.780	1.5	78487.250	1.5
324.4525	22.00	-8.14	6742.757	4.0	37555.021	3.0
324.4580	26.00	-2.69	17550.180	3.0	48361.920	4.0
324.4721	25.01	-1.19	70657.180	5.0	101467.580	6.0
324.4790	92.01	-1.40	2258.411	0.0	33077.046	0.0
324.4852	24.00	-2.13	25106.340	3.0	55915.500	4.0
324.4946	21.01	-1.78	27443.650	2.0	58251.920	2.0
324.5000	8.04	-3.67	677333.000	0.0	708149.641	0.0
324.5027	17.02	-2.47	217850.200	2.5	248657.700	2.5
324.5130	57.01	-.87	1371.178	0.0	32186.584	0.0
324.5141	25.01	-3.63	41204.340	5.0	72010.750	4.0
324.5170	58.01	-.57	4436.164	0.0	35251.191	0.0
324.5219	24.00	-2.28	32097.360	6.0	62903.030	6.0
324.5229	27.00	-3.52	25739.930	2.5	56545.510	2.5
324.5253	24.01	-2.17	34813.060	5.5	65618.410	6.5
324.5345	28.00	-.56	28068.091	4.0	58872.570	4.0
324.5370	26.00	-2.98	22996.661	4.0	53800.900	5.0
324.5480	24.00	-2.32	7927.470	2.0	38730.670	2.0
324.5538	24.00	.23	23933.900	4.0	54736.550	4.0
324.5539	22.00	-3.54	17215.440	5.0	48018.080	4.0
324.5574	22.00	-8.09	6556.828	1.0	37359.130	2.0
324.5608	24.00	-3.62	24299.890	2.0	55101.870	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
324.5612	24.01	-1.66	39877.280	3.5	70679.220	4.5
324.5666	28.00	-1.61	31031.042	3.0	61832.470	4.0
324.5747	27.00	-1.13	22475.360	4.5	53276.020	4.5
324.5768	23.00	-3.24	9636.960	1.5	40437.420	1.5
324.5780	90.01	-.42	8952.985	0.0	39762.220	0.0
324.5796	26.00	-2.94	29371.860	3.0	60172.060	4.0
324.5800	62.00	-.19	1451.835	0.0	32260.881	0.0
324.5840	24.00	-4.16	23163.270	0.0	53963.050	1.0
324.5860	69.01	-2.00	161.315	0.0	30969.791	0.0
324.5920	42.00	.41	27584.872	0.0	58392.779	0.0
324.5963	26.00	-4.92	19788.248	4.0	50586.857	3.0
324.5967	26.00	-2.84	7376.762	4.0	38175.332	3.0
324.5970	27.00	-4.74	21215.900	.5	52014.450	1.5
324.6005	26.00	-3.07	888.132	1.0	31686.342	2.0
324.6030	63.00	-1.19	0.000	0.0	30806.863	0.0
324.6035	24.00	-4.00	24303.940	3.0	55101.870	3.0
324.6047	26.00	-3.58	21715.735	5.0	52513.546	6.0
324.6149	25.00	-1.10	35165.050	1.5	65961.900	1.5
324.6187	25.02	-4.92	148355.600	3.5	179152.090	3.5
324.6274	22.00	-9.38	14028.470	2.0	44824.130	2.0
324.6374	25.01	-3.82	48317.850	4.0	79112.560	5.0
324.6390	92.01	-1.47	241.973	0.0	31045.419	0.0
324.6462	25.02	-2.68	146391.300	.5	177185.180	.5
324.6482	26.00	-1.53	20874.482	3.0	51668.175	4.0
324.6568	28.01	-3.66	100332.090	4.5	131124.960	3.5
324.6664	26.02	-3.67	198717.600	4.0	229509.560	3.0
324.6670	58.01	-.40	3306.958	0.0	34107.748	0.0
324.6780	41.00	-1.48	1129.205	0.0	31928.951	0.0
324.6829	23.00	-2.63	8476.200	1.5	39266.600	1.5
324.6851	28.01	-1.42	100332.090	4.5	131122.280	5.5
324.6959	26.00	-4.01	17726.985	2.0	48516.150	1.0
324.6982	28.00	-3.93	15734.018	1.0	46522.965	2.0
324.6986	24.00	-2.22	24897.550	4.0	55686.460	5.0
324.6994	27.00	-2.01	15774.040	1.5	46562.870	1.5
324.6996	24.01	-2.11	34631.140	4.5	65419.950	5.5
324.7149	27.00	-1.33	24733.280	2.5	55520.640	3.5
324.7172	27.00	.01	15184.040	2.5	45971.190	3.5
324.7173	26.01	-1.13	31364.470	1.5	62151.610	2.5
324.7212	26.00	-1.79	21038.987	2.0	51825.758	3.0
324.7268	24.00	-2.45	7810.820	1.0	38597.060	1.0
324.7274	26.00	-4.44	19912.486	2.0	50698.666	2.0
324.7281	24.01	-2.78	35569.020	2.5	66355.130	1.5
324.7386	26.01	-2.15	33501.320	3.5	64286.440	3.5
324.7440	29.01	-1.16	117231.690	1.0	148016.300	1.0
324.7460	69.01	-.43	8711.012	0.0	39504.309	0.0
324.7470	41.01	-.05	7823.779	0.0	38616.981	0.0
324.7482	18.01	-2.30	174409.830	1.5	205194.040	1.5
324.7540	29.00	-.05	0.000	0.0	30792.538	0.0
324.7550	63.00	-.85	0.000	0.0	30792.444	0.0
324.7551	9.02	-2.64	413143.860	3.5	443927.410	3.5
324.7585	14.02	-3.64	209531.400	2.0	240314.630	3.0
324.7589	28.01	-2.32	100332.090	4.5	131115.280	4.5
324.7608	28.01	-2.77	99442.860	4.5	130225.870	3.5
324.7648	25.02	-2.75	109780.400	2.5	140563.030	3.5
324.7660	72.00	-.98	2339.068	0.0	33130.469	0.0
324.7681	24.00	-4.29	35398.020	4.0	66180.340	5.0
324.7700	4.01	-.89	96498.000	0.0	127289.021	0.0
324.7734	25.00	-1.93	35165.050	1.5	65946.870	2.5
324.7813	24.00	-2.02	33060.740	3.0	63841.810	4.0
324.7879	26.02	-2.56	188142.640	2.0	218923.080	3.0
324.7881	22.01	-2.24	31490.820	3.5	62271.250	2.5
324.7893	23.01	-4.62	20343.000	2.0	51123.310	2.0
324.7925	24.00	-2.61	28637.000	3.0	59417.010	3.0
324.7935	25.01	-4.62	43131.400	2.0	73911.310	1.0
324.7973	22.00	-5.85	11531.760	2.0	42311.310	3.0
324.7979	25.01	-2.85	48333.060	5.0	79112.560	5.0
324.8000	76.00	-.34	13308.491	0.0	44096.668	0.0
324.8113	26.01	-3.14	67516.370	5.5	98294.600	5.5
324.8115	28.00	-2.32	29084.478	4.0	59862.690	5.0
324.8132	10.01	-.40	249695.530	1.5	280473.580	1.5
324.8158	24.02	-1.35	71321.800	3.0	102099.600	4.0
324.8180	23.02	-4.99	56160.420	2.5	86938.010	2.5
324.8199	26.00	-3.52	19757.020	3.0	50534.435	3.0
324.8347	10.01	-.23	277325.600	1.5	308101.610	1.5
324.8383	10.01	-1.67	277325.600	1.5	308101.270	2.5
324.8453	28.00	-4.74	204.786	3.0	30979.789	4.0
324.8454	24.00	-1.46	31987.060	4.0	62762.060	4.0
324.8464	22.00	-6.94	6842.964	5.0	37617.868	4.0
324.8510	25.00	.00	17451.520	2.5	48225.990	3.5
324.8520	73.00	-1.02	11130.738	0.0	41913.987	0.0
324.8530	90.01	-1.11	6613.917	0.0	37397.071	0.0
324.8550	75.00	-.60	16212.162	0.0	46995.127	0.0
324.8598	22.01	.40	10024.740	2.5	40798.370	3.5
324.8625	22.00	-1.39	8492.421	1.0	39265.800	2.0
324.8670	27.00	-4.28	13795.520	2.5	44568.470	2.5
324.8696	22.01	-1.72	983.800	2.5	31756.500	1.5
324.8696	23.00	-1.62	8476.200	1.5	39248.900	1.5
324.8703	28.01	-2.38	99442.860	4.5	130215.500	4.5
324.8706	28.01	-4.14	67694.640	2.5	98467.250	3.5
324.8716	26.02	-3.50	198737.050	4.0	229509.560	3.0
324.8723	28.01	-4.31	99559.330	2.5	130331.780	1.5
324.8771	24.00	-4.91	27223.050	2.0	57995.040	1.0
324.8926	18.01	-4.68	174409.830	1.5	205180.360	.5
324.8940	41.01	-.50	6129.972	0.0	36909.242	0.0
324.8981	24.00	-1.87	24200.230	6.0	54970.230	7.0
324.9000	8.04	-2.02	677532.000	0.0	708310.701	0.0
324.9019	26.00	-3.18	21999.132	4.0	52768.780	4.0
324.9038	9.02	-2.97	413143.860	3.5	443913.330	4.5
324.9050	22.01	-2.71	34543.360	3.5	65312.710	2.5
324.9120	23.00	-4.22	2220.130	2.5	32988.820	3.5
324.9132	22.00	-6.06	6556.828	1.0	37325.407	2.0
324.9156	26.01	-4.34	30388.550	4.5	61156.900	3.5
324.9185	26.00	-2.22	20641.110	4.0	51409.180	4.0
324.9190	58.01	-.79	2581.041	0.0	33357.942	0.0
324.9193	10.03	-1.86	641908.000	.5	672676.000	.5
324.9225	24.00	-1.68	25177.390	4.0	55945.080	5.0
324.9350	57.01	-1.16	1371.178	0.0	32146.564	0.0
324.9362	22.01	-.30	8710.470	1.5	39476.870	2.5
324.9401	28.01	-2.68	99442.860	4.5	130208.890	3.5
324.9404	9.03	-.54	679994.000	3.0	710760.000	3.0
324.9429	28.00	-5.33	2216.519	2.0	32982.280	1.0
324.9430	58.01	-.92	4436.164	0.0	35210.792	0.0
324.9446	24.00	-4.77	20520.920	3.0	51286.520	2.0
324.9454	23.01	-1.33	19132.690	2.0	49898.220	2.0
324.9506	24.01	-1.12	50667.330	3.5	81432.360	3.5
324.9508	26.00	-4.09	12560.933	3.0	43325.946	3.0
324.9520	41.00	-.91	1129.205	0.0	31902.981	0.0
324.9530	72.00	-1.18	2339.068	0.0	33112.749	0.0
324.9564	23.00	-6.03	553.020	4.5	31317.500	4.5
324.9577	24.01	-2.55	32836.840	3.5	63601.200	3.5
324.9606	22.01	-3.04	34543.360	3.5	65307.450	4.5
324.9607	23.01	-.78	16533.000	5.0	47297.080	5.0
324.9611	28.01	-1.66	99442.860	4.5	130206.900	4.5
324.9654	26.01	-1.89	31387.980	2.5	62151.610	2.5
324.9687	9.00	-4.79	116143.579	.5	146906.900	1.5
324.9695	23.00	-3.09	8576.520	2.5	39341.760	3.5
324.9700	17.01	-2.79	147053.700	2.0	177816.900	2.0
324.9745	23.00	-2.69	9824.580	2.5	40587.350	3.5
324.9746	28.01	-1.62	99442.860	4.5	130205.620	5.5
324.9799	18.01	-.35	155708.020	.5	186470.280	1.5
324.9805	23.00	-3.49	10892.500	3.5	41654.700	2.5
324.9870	90.00	-1.12	0.000	0.0	30770.462	0.0
324.9894	25.00	-.28	35114.980	2.5	65876.340	3.5
324.9910	28.01	-3.34	100332.090	4.5	131093.300	4.5
324.9920	42.00	-.25	16534.792	0.0	47304.780	0.0
324.9942	23.01	-5.79	16340.970	3.0	47101.880	2.0
324.9943	23.00	-1.61	8476.200	1.5	39237.100	.5
324.9998	27.00	-1.52	4690.180	2.5	35450.560	3.5
324.9998	22.00	-7.09	6598.749	2.0	37359.130	2.0
325.0018	27.00	-4.49	13795.520	2.5	44555.710	1.5
325.0049	23.00	-2.69	11100.650	4.5	41860.540	4.5
325.0074	23.01	-4.12	16421.510	4.0	47181.170	3.0
325.0100	3.01	-.38	561749.000	0.0	592517.284	0.0
325.0190	64.01	-.13	10566.135	0.0	41333.567	0.0
325.0205	25.00	-1.02	35114.980	2.5	65873.400	2.5
325.0241	26.02	-3.08	90483.590	3.0	121241.670	4.0
325.0321	10.01	-1.21	277344.290	2.5	308101.610	1.5
325.0333	27.00	-3.15	16467.900	4.5	47225.110	3.5
325.0333	26.01	-1.97	31368.450	.5	62125.660	1.5
325.0357	10.01	-.07	277344.290	2.5	308101.270	2.5
325.0360	73.00	-1.66	5968.656	0.0	36734.479	0.0
325.0370	62.01	-.83	0.000	0.0	30765.728	0.0
325.0374	26.00	-2.08	18378.187	2.0	49135.003	3.0
325.0390	40.00	-.58	564.603	0.0	31330.142	0.0
325.0394	26.00	-2.24	23051.744	0.0	53808.370	1.0
325.0437	25.01	-3.36	70745.080	3.0	101501.300	3.0
325.0459	29.01	-.49	117231.690	1.0	147987.700	2.0
325.0497	27.00	-.26	23611.780	5.5	54367.430	5.5
325.0534	14.02	-2.09	209559.330	3.0	240314.630	3.0
325.0538	23.00	-2.83	9544.540	.5	40299.810	.5
325.0565	24.01	-1.88	47354.630	2.5	78109.640	1.5
325.0592	25.01	-4.87	70745.080	3.0	101499.840	2.0
325.0625	26.00	-3.19	17550.180	3.0	48304.623	2.0
325.0677	25.01	-2.71	70745.080	3.0	101499.030	4.0
325.0739	28.00	-1.74	3409.925	2.0	34163.294	2.0
325.0761	26.00	-1.38	26351.049	5.0	57104.207	5.0
325.0766	23.01	.25	23391.090	5.0	54144.200	4.0
325.0788	24.01	-1.65	34631.140	4.5	65384.040	4.5
325.0790	14.02	-2.09	209531.400	2.0	240284.280	2.0
325.0805	25.01	-4.35	55696.500	4.0	86449.240	4.0
325.0839	26.02	-3.05	182810.660	5.0	213563.080	5.0
325.0942	11.01	-1.46	299889.160	1.0	330640.600	1.0
325.0942	11.01	-1.46	299889.160	1.0	330640.600	1.0
325.0958	28.01	-4.40	105838.060	3.5	136589.350	3.5
325.1005	26.02	-4.22	188109.580	3.0	218860.430	2.0
325.1072	14.02	-.97	22708I.190	1.0	257831.400	2.0
325.1133	25.00	-1.01	17568.480	1.5	48318.120	.5
325.1226	26.00	-2.90	17726.985	2.0	48475.740	3.0
325.1284	26.01	-3.33	30764.460	3.5	61512.670	4.5
325.1309	21.01	-1.85	67.680	2.0	30815.650	1.0
325.1320	25.01	-2.32	34910.430	4.0	65658.300	5.0
325.1341	26.01	-2.53	36252.960	2.5	67000.630	2.5
325.1392	14.02	-1.70	227084.210	2.0	257831.400	2.0
325.1392	14.02	-.80	227084.210	2.0	257831.400	3.0
325.1431	22.01	-.99	32697.940	2.5	63444.760	3.5
325.1439	24.01	-4.17	32854.460	4.5	63601.200	3.5
325.1506	24.01	-1.41	32855.090	2.5	63601.200	3.5
325.1528	9.03	-3.01	469644.200	2.0	500390.100	2.0
325.1620	41.00	-1.11	2097.096	0.0	32850.997	0.0
325.1640	46.00	-.09	10001.532	0.0	40755.244	0.0
325.1652	24.01	-2.85	50687.630	2.5	81432.360	3.5
325.1658	27.00	-.38	23611.780	5.5	54356.450	4.5
325.1666	17.02	-1.90	217913.100	1.5	248657.700	2.5
325.1713	24.00	-2.61	24056.110	5.0	54800.260	6.0
325.1723	28.01	-3.00	100389.520	2.5	131133.580	2.5
325.1812	24.01	-3.66	39684.000	3.5	70427.220	3.5
325.1828	24.00	.29	24056.110	5.0	54799.180	5.0
325.1853	26.00	-4.80	22996.661	4.0	53739.488	5.0
325.1859	23.01	-.02	20343.000	2.0	51085.770	3.0
325.1869	14.02	-3.25	227088.720	3.0	257831.400	2.0
325.1869	14.02	-1.70	227088.720	3.0	257831.400	3.0
325.1869	14.02	-.64	227088.720	3.0	257831.400	4.0
325.1879	22.01	-.53	93.940	2.5	30836.520	1.5
325.1967	28.01	-1.22	99442.860	4.5	130184.610	5.5
325.1980	78.00	-1.24	10082.190	0.0	40832.687	0.0
325.2132	24.00	-3.62	23512.000	1.0	54252.190	2.0
325.2152	24.03	-3.81	127202.000	4.5	157942.000	3.5
325.2260	75.00	-.39	15647.559	0.0	46395.408	0.0
325.2352	24.00	-3.18	25177.390	4.0	55915.500	4.0
325.2377	25.01	-4.52	39808.140	3.0	70546.020	4.0
325.2398	26.01	-3.43	31387.980	2.5	62125.660	1.5
325.2480	58.01	-.07	7178.519	0.0	37924.288	0.0
325.2481	24.01	-.94	47372.750	1.5	78109.640	1.5
325.2635	28.01	-3.17	100389.520	2.5	131124.960	3.5
325.2699	24.00	-1.68	28682.180	2.0	59417.010	3.0
325.2720	25.01	-2.43	36274.290	2.0	67008.930	3.0
325.2869	22.01	-.39	225.470	3.5	30958.700	2.5
325.2904	24.00	-3.47	32097.360	6.0	62830.260	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
325.2916	26.00	-1.54	20641.110	4.0	51373.894	5.0
325.2934	8.02	-1.97	294001.600	2.0	324734.220	2.0
325.2935	22.01	-.20	8744.270	2.5	39476.870	2.5
325.2946	25.00	-.30	17568.480	1.5	48300.980	1.5
325.2956	9.02	-1.01	413195.000	2.5	443927.410	3.5
325.2965	26.02	-3.98	182830.760	6.0	213563.080	5.0
325.2996	23.01	-2.33	19166.190	1.0	49898.220	2.0
325.3118	14.02	-1.35	209531.400	2.0	240262.280	1.0
325.3139	28.01	-3.89	70635.460	2.5	101366.140	2.5
325.3167	23.00	-3.50	2424.890	4.5	33155.300	4.5
325.3210	25.02	-4.60	100001.300	2.5	130731.310	3.5
325.3345	26.02	-3.25	188131.700	1.0	218860.430	2.0
325.3365	24.00	-1.65	33113.270	4.0	63841.810	4.0
325.3406	28.01	-3.27	105861.190	2.5	136589.350	3.5
325.3411	27.00	-1.83	15774.040	1.5	46502.150	.5
325.3482	25.00	-2.11	35041.370	3.5	65768.810	4.5
325.3565	22.00	-5.02	6598.749	2.0	37325.407	2.0
325.3700	72.01	-.67	2984.328	0.0	33718.569	0.0
325.3746	14.02	-1.18	209559.330	3.0	240284.280	2.0
325.3826	26.00	-2.40	20641.110	4.0	51365.300	3.0
325.3846	24.03	-4.67	127218.000	3.5	157942.000	3.5
325.3918	18.01	-3.01	155351.030	1.5	186074.350	2.5
325.3938	26.00	-1.98	21038.987	2.0	51762.120	2.0
325.3940	62.01	-.89	2984.328	0.0	33716.302	0.0
325.3965	24.01	-4.81	38769.670	3.5	68992.550	4.5
325.3973	19.02	-.71	212725.400	1.5	243448.200	1.5
325.4010	58.01	-.51	3629.588	0.0	34360.901	0.0
325.4034	25.00	-1.17	17052.290	4.5	47774.520	3.5
325.4062	23.00	-3.89	8578.520	2.5	39300.480	2.5
325.4067	25.02	-1.46	109841.120	3.5	140563.030	3.5
325.4070	41.01	-.50	2581.041	0.0	33311.787	0.0
325.4120	22.00	-3.40	7255.369	2.0	37976.780	2.0
325.4174	27.02	-4.95	140358.400	4.5	171079.300	3.5
325.4174	27.02	-4.95	140358.400	4.5	171079.300	3.5
325.4174	24.00	-5.00	28637.000	3.0	59357.900	2.0
325.4202	27.00	-.33	15184.040	2.5	45904.680	1.5
325.4228	22.01	-.51	393.220	4.5	31113.610	3.5
325.4280	40.00	1.22	16857.422	0.0	47586.185	0.0
325.4310	71.01	.25	14115.066	0.0	44843.546	0.0
325.4360	74.00	0.00	15002.299	0.0	45730.307	0.0
325.4363	26.00	-.02	26351.049	5.0	57070.171	6.0
325.4380	62.01	-.72	322.630	0.0	31050.449	0.0
325.4400	77.00	.10	18954.517	0.0	49682.147	0.0
325.4434	22.00	-9.90	14105.680	3.0	44824.130	2.0
325.4450	26.00	-1.85	19757.020	3.0	50475.320	4.0
325.4504	26.02	-3.31	188142.640	2.0	218860.430	2.0
325.4510	28.01	-4.99	97273.830	2.5	127991.560	3.5
325.4540	44.00	-1.48	2661.698	0.0	33388.006	0.0
325.4620	27.00	-.25	24733.280	2.5	55449.970	2.5
325.4641	27.02	-4.88	139818.700	3.5	170535.200	4.5
325.4641	27.02	-4.81	76791.100	1.5	107507.600	.5
325.4641	27.02	-4.88	139818.700	3.5	170535.200	4.5
325.4658	25.02	-3.37	109841.120	3.5	140557.460	4.5
325.4710	44.00	-.83	8952.985	0.0	39677.689	0.0
325.4722	26.00	-1.71	21715.735	5.0	52431.470	6.0
325.4762	23.01	-.03	16340.970	3.0	47056.320	4.0
325.4786	23.00	-6.16	553.020	4.5	31268.150	3.5
325.4807	14.02	-1.02	209599.700	4.0	240314.630	3.0
325.4820	90.01	-.98	6936.547	0.0	37660.212	0.0
325.4855	24.01	-3.15	74707.420	5.5	105421.900	5.5
325.4860	72.00	-.16	14599.011	0.0	45322.299	0.0
325.4910	76.00	.02	14760.326	0.0	45483.142	0.0
325.4942	28.01	-3.12	100389.520	2.5	131103.180	2.5
325.5209	25.01	-3.85	48435.960	6.0	79147.100	7.0
325.5232	23.01	-7.30	16340.970	3.0	47051.890	3.0
325.5235	25.02	-4.79	143209.800	2.5	173920.690	1.5
325.5275	26.02	-4.07	120826.170	2.0	151536.680	1.0
325.5280	72.01	-1.13	3629.588	0.0	34348.912	0.0
325.5281	24.01	-1.15	39684.000	3.5	70394.460	4.5
325.5314	22.01	-3.26	34748.500	4.5	65458.650	3.5
325.5335	28.01	-3.66	106022.790	.5	136732.740	1.5
325.5374	25.01	-4.34	39808.140	3.0	70517.720	3.0
325.5425	10.01	-1.70	251011.180	2.5	281720.280	1.5
325.5464	26.02	-4.47	120826.170	2.0	151534.900	2.0
325.5504	25.00	-.25	35165.050	1.5	65873.400	2.5
325.5534	25.02	-4.95	143127.000	.5	173835.070	.5
325.5545	25.00	-3.33	37630.620	4.5	68338.590	3.5
325.5546	26.02	-4.85	120826.170	2.0	151534.130	3.0
325.5609	24.01	-4.41	39877.280	3.5	70584.640	2.5
325.5630	62.01	-1.38	2177.753	0.0	32893.774	0.0
325.5654	23.00	-.88	8715.720	3.5	39422.660	2.5
325.5662	23.00	-1.17	10892.500	3.5	41599.360	4.5
325.5689	21.00	-.71	0.000	1.5	30706.610	1.5
325.5881	26.01	-2.50	7955.240	3.5	38660.040	3.5
325.5920	78.00	-1.13	6049.314	0.0	36762.599	0.0
325.5930	25.01	-3.47	39813.380	2.0	70517.720	3.0
325.5952	26.02	-2.66	198717.600	4.0	229421.730	4.0
325.5977	27.00	-4.43	23611.780	5.5	54315.670	5.5
325.6090	49.00	.30	2177.753	0.0	32889.435	0.0
325.6120	28.01	-4.26	106022.790	.5	136725.330	.5
325.6125	24.00	-1.82	25038.610	5.0	55741.110	6.0
325.6132	25.00	-.24	17568.480	1.5	48270.910	2.5
325.6146	26.00	-2.10	23711.443	4.0	54413.740	3.0
325.6177	22.00	-3.62	17075.310	4.0	47777.320	5.0
325.6210	42.00	.29	11372.710	0.0	42083.260	0.0
325.6337	17.01	-2.34	147053.700	2.0	177754.200	1.0
325.6391	26.02	-4.37	188955.560	3.0	219655.550	2.0
325.6469	9.02	-3.85	360348.280	.5	391047.540	.5
325.6515	26.00	-1.20	19912.486	2.0	50611.303	3.0
325.6532	26.02	-2.36	114339.950	4.0	145038.610	3.0
325.6548	26.02	-3.50	166187.500	6.0	196886.010	6.0
325.6589	22.00	-6.80	6661.003	3.0	37359.130	2.0
325.6624	25.01	-1.44	52373.180	3.0	83070.970	2.0
325.6646	24.00	-1.76	25177.390	4.0	55874.980	5.0
325.6671	22.01	-2.39	34748.500	4.5	65445.850	5.5
325.6772	27.02	-4.30	140382.900	3.5	171079.300	3.5
325.6772	27.02	-4.30	140382.900	3.5	171079.300	3.5
325.6899	23.00	-6.76	137.380	2.5	30832.580	2.5
325.6920	76.00	-.44	10969.423	0.0	41673.278	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
325.6961	25.01	-2.42	72010.750	4.0	102705.370	3.0
325.6990	28.01	-3.78	107082.210	2.5	137776.550	3.5
325.7030	26.02	-1.88	166187.500	6.0	196881.470	7.0
325.7075	23.00	-4.04	2153.200	1.5	32846.740	2.5
325.7075	23.00	-4.72	2153.200	1.5	32846.740	2.5
325.7128	24.00	-3.07	24299.890	2.0	54992.930	2.0
325.7145	27.01	-4.04	25317.720	1.0	56010.600	2.0
325.7157	29.01	-2.78	108335.430	2.0	139028.200	2.0
325.7160	90.01	-.55	9517.587	0.0	40219.180	0.0
325.7176	25.01	-3.37	72010.750	4.0	102703.340	4.0
325.7214	26.00	-4.45	7985.783	2.0	38678.015	2.0
325.7238	26.00	-1.42	24118.815	4.0	54810.820	4.0
325.7282	25.01	-2.64	52379.380	2.0	83070.970	2.0
325.7324	17.01	-1.81	147125.700	3.0	177816.900	2.0
325.7362	26.01	-2.79	31999.120	3.5	62689.960	2.5
325.7403	25.01	-4.56	55371.300	3.0	86061.750	3.0
325.7408	29.01	-2.58	120092.200	2.0	150782.600	2.0
325.7426	16.01	-2.60	127976.210	1.5	158666.450	1.5
325.7454	25.01	-3.04	55759.270	3.0	86449.240	4.0
325.7525	25.01	-2.07	39808.140	3.0	70497.440	4.0
325.7558	24.00	-3.28	24303.940	3.0	54992.930	2.0
325.7577	23.00	-4.93	9636.960	1.5	40325.770	2.5
325.7582	18.00	-3.92	93750.639	1.0	124439.410	0.0
325.7594	26.00	-3.20	17550.180	3.0	48238.832	2.0
325.7655	23.00	-2.93	8578.520	2.5	39266.600	1.5
325.7802	26.02	-4.31	114351.920	3.0	145038.610	3.0
325.7804	25.02	-5.00	143148.400	1.5	173835.070	.5
325.7813	24.00	.37	24200.230	6.0	54886.820	6.0
325.7844	28.00	-.97	27943.543	1.0	58629.840	2.0
325.7848	28.01	-4.24	100389.520	2.5	131075.780	1.5
325.7851	24.00	-3.92	23512.000	1.0	54198.230	1.0
325.7885	23.01	-.50	20089.560	1.0	50775.470	2.0
325.7890	26.01	-1.69	44915.070	3.5	75600.930	3.5
325.7964	27.00	-1.92	24627.790	4.5	55312.960	4.5
325.7966	11.01	-.11	300107.710	2.0	330792.850	2.0
325.7966	11.01	-.11	300107.710	2.0	330792.850	2.0
325.7997	24.01	-2.00	39742.360	2.5	70427.220	3.5
325.7999	28.00	-3.27	13521.352	2.0	44206.185	3.0
325.8003	25.01	-3.90	37811.570	1.0	68496.370	1.0
325.8022	27.00	-1.49	13795.520	2.5	44480.140	2.5
325.8050	69.01	-.86	0.000	0.0	30693.206	0.0
325.8128	26.02	-4.21	105929.160	3.0	136612.780	4.0
325.8250	62.01	-1.52	1935.780	0.0	32627.102	0.0
325.8280	2.00	-2.51	166278.000	0.0	196969.039	0.0
325.8379	23.02	-3.84	56256.750	1.5	86938.010	2.5
325.8410	25.00	-.46	17637.150	.5	48318.120	.5
325.8416	27.00	-1.22	15774.040	1.5	46454.950	1.5
325.8424	23.00	-3.11	9544.540	.5	40225.380	1.5
325.8444	25.00	-1.52	34138.880	6.5	64819.530	5.5
325.8466	24.00	-1.91	24056.110	5.0	54736.550	4.0
325.8502	30.02	-2.94	234576.000	4.0	265256.100	3.0
325.8560	49.00	-.34	2177.753	0.0	32866.155	0.0
325.8563	24.00	-3.69	24277.060	0.0	54956.590	1.0
325.8572	26.02	-4.30	199577.710	2.0	230257.150	2.0
325.8587	27.02	-4.22	140787.300	2.5	171466.600	2.5
325.8587	27.02	-4.22	140787.300	2.5	171466.600	2.5
325.8612	26.02	-3.80	166222.200	4.0	196901.270	5.0
325.8617	26.00	-4.06	20019.648	1.0	50698.666	2.0
325.8654	25.00	-1.72	34938.700	4.5	65617.370	3.5
325.8665	24.01	-4.43	74743.330	6.5	105421.900	5.5
325.8675	24.00	-1.93	28679.430	1.0	59357.900	2.0
325.8725	17.02	-3.44	217850.200	2.5	248528.200	1.5
325.8741	28.01	-3.12	72985.650	1.5	103663.500	1.5
325.8745	24.01	-.90	40202.140	6.5	70879.950	5.5
325.8753	22.01	-1.59	32767.020	3.5	63444.760	3.5
325.8762	29.01	-4.50	88362.030	2.0	119039.680	2.0
325.8769	26.01	-1.05	31387.980	2.5	62065.570	3.5
325.8779	24.01	-1.32	44307.440	.5	74984.930	1.5
325.8780	46.00	0.00	10001.532	0.0	40687.862	0.0
325.8784	23.00	-4.40	2311.370	3.5	32988.820	3.5
325.8850	75.00	.27	16212.162	0.0	46897.833	0.0
325.8863	28.01	-2.97	106283.160	2.5	136959.860	2.5
325.8870	58.01	-.23	7259.177	0.0	37944.660	0.0
325.8874	25.01	-3.06	48435.960	6.0	79112.560	5.0
325.8899	18.01	-3.69	142717.020	3.5	173393.380	2.5
325.8967	24.00	-2.69	28682.180	2.0	59357.900	2.0
325.9012	23.00	-2.79	8715.720	3.5	39391.020	4.5
325.9031	22.00	-3.86	11531.760	2.0	42206.880	2.0
325.9045	26.01	-.94	31483.200	3.5	62158.190	4.5
325.9047	26.02	-3.01	182830.760	6.0	213505.730	6.0
325.9160	42.00	.54	24358.571	0.0	55041.324	0.0
325.9169	27.00	-.32	24733.280	2.5	55417.100	1.5
325.9184	9.02	-4.52	413195.000	2.5	443868.680	2.5
325.9250	64.01	-.08	10727.450	0.0	41409.355	0.0
325.9320	17.02	-.25	178369.700	.5	209042.100	.5
325.9344	18.01	-2.51	172335.520	2.5	203007.690	1.5
325.9415	22.00	-5.61	11639.804	3.0	42311.310	3.0
325.9433	26.01	-4.00	44929.590	2.5	75600.930	3.5
325.9440	74.00	.14	17986.627	0.0	48666.744	0.0
325.9476	25.01	-3.93	53597.130	2.0	84268.060	1.0
325.9476	23.00	-3.96	2220.130	2.5	32891.060	3.5
325.9517	26.02	-2.87	199577.710	2.0	230248.260	1.0
325.9521	25.00	-3.05	37148.660	5.5	67819.170	4.5
325.9535	23.00	-1.45	8578.520	2.5	39248.900	1.5
325.9542	9.02	-3.39	413195.000	2.5	443865.310	1.5
325.9550	75.00	-.32	11534.025	0.0	42213.106	0.0
325.9570	24.00	-3.39	24286.540	1.0	54956.590	1.0
325.9596	27.02	-2.08	77383.100	3.5	108052.900	2.5
325.9619	24.00	-3.44	7927.470	2.0	38597.060	1.0
325.9627	25.00	-3.09	23549.200	2.5	54218.710	1.5
325.9645	25.01	-4.16	72010.750	4.0	102680.090	5.0
325.9645	26.00	-2.34	21038.987	2.0	51708.330	2.0
325.9656	18.01	-1.96	174409.830	1.5	205079.070	2.5
325.9660	74.00	-1.26	4758.794	0.0	35436.840	0.0
325.9684	23.01	-1.81	17910.980	4.0	48579.960	3.0
325.9744	26.01	-4.86	31483.200	3.5	62151.610	2.5
325.9768	28.01	-2.56	99559.330	2.5	130227.520	2.5
325.9910	26.00	-4.47	22249.430	3.0	52916.278	2.0
325.9924	24.00	-1.10	31009.000	3.0	61675.720	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
325.9943	28.01	-2.48	99559.330	2.5	130225.870	3.5
325.9983	26.00	-3.65	19757.020	3.0	50423.185	4.0
326.0110	40.00	-.34	4113.534	0.0	34787.346	0.0
326.0140	41.00	-1.24	1129.205	0.0	31802.734	0.0
326.0170	22.00	-4.71	6661.003	3.0	37325.407	2.0
326.0180	73.00	-2.15	0.000	0.0	30673.153	0.0
326.0211	11.01	-1.21	299889.160	1.0	330553.180	0.0
326.0211	11.01	-1.21	299889.160	1.0	330553.180	0.0
326.0231	25.00	-.57	17637.150	.5	48300.980	1.5
326.0234	21.01	-1.84	29736.220	0.0	60400.020	1.0
326.0259	22.01	-.95	9363.710	.5	40027.280	1.5
326.0262	26.00	-1.45	20641.110	4.0	51304.650	4.0
326.0265	27.00	-.19	24326.110	3.5	54989.620	3.5
326.0270	22.00	-2.38	8602.340	2.0	39265.800	2.0
326.0300	76.00	-.73	8630.355	0.0	39302.379	0.0
326.0333	16.01	-4.20	125485.320	.5	156148.190	.5
326.0335	23.00	-4.06	9636.960	1.5	40299.810	.5
326.0350	44.00	-1.13	1129.205	0.0	31800.759	0.0
326.0442	26.02	-2.65	199595.300	3.0	230257.150	2.0
326.0480	42.00	-.25	16615.449	0.0	47285.780	0.0
326.0560	41.01	1.16	17341.367	0.0	48010.945	0.0
326.0677	24.00	-2.87	31377.960	4.0	62037.600	5.0
326.0705	28.01	-2.67	70706.770	1.5	101366.140	2.5
326.0711	27.00	-3.78	20500.710	1.5	51160.030	2.5
326.0739	27.00	-4.11	23855.620	4.5	54514.670	3.5
326.0769	28.01	-3.64	105668.780	2.5	136327.550	1.5
326.0813	27.00	-.30	16470.600	1.5	47128.960	2.5
326.0862	21.01	-1.43	29742.120	1.0	60400.020	1.0
326.0874	24.01	-2.95	74707.420	5.5	105365.200	4.5
326.0877	28.01	-3.19	100475.820	3.5	131133.580	2.5
326.0877	23.00	-3.11	11100.650	4.5	41758.410	3.5
326.0920	90.01	-.80	9194.957	0.0	39861.149	0.0
326.0977	28.00	-3.76	28569.210	2.0	59226.030	1.0
326.0980	58.01	.18	8065.752	0.0	38731.380	0.0
326.0995	8.02	.31	294001.600	2.0	324658.250	3.0
326.1016	27.00	-1.28	24733.280	2.5	55389.730	1.5
326.1060	48.00	-2.84	0.000	0.0	30664.876	0.0
326.1083	25.00	-3.52	37630.620	4.5	68286.440	4.5
326.1111	23.00	-5.74	2112.320	.5	32767.880	1.5
326.1133	26.00	-2.54	24335.764	2.0	54991.110	1.0
326.1144	25.01	-2.90	34910.430	4.0	65565.680	4.0
326.1178	25.01	-1.72	36274.290	2.0	66929.220	2.0
326.1293	25.01	-3.76	43131.400	2.0	73785.250	2.0
326.1311	26.02	-3.74	182852.050	7.0	213505.730	6.0
326.1313	28.01	-2.81	106283.160	2.5	136936.820	3.5
326.1372	18.01	-2.75	179931.770	1.5	210584.880	1.5
326.1383	10.03	-3.37	642934.000	3.5	673587.000	2.5
326.1479	23.03	-1.17	255146.800	2.0	285798.900	2.0
326.1500	70.01	-.01	30407.885	0.0	61068.624	0.0
326.1516	26.01	-2.95	48039.230	2.5	78690.980	2.5
326.1542	24.01	-2.61	40228.440	5.5	70879.950	5.5
326.1560	75.00	-.36	15082.956	0.0	45743.131	0.0
326.1589	22.01	.03	9930.740	1.5	40581.800	2.5
326.1593	22.01	.62	15257.530	4.5	45908.560	5.5
326.1620	27.00	-3.36	3482.820	4.5	34133.590	3.5
326.1628	29.01	-1.31	120092.200	2.0	150742.900	3.0
326.1685	28.01	-3.41	72375.420	1.5	103025.580	2.5
326.1744	21.01	-1.68	27602.320	3.0	58251.920	2.0
326.1749	28.01	-.85	99559.330	2.5	130208.890	3.5
326.1765	25.01	-3.13	43131.400	2.0	73780.810	3.0
326.1781	23.01	-1.72	20089.560	1.0	50738.820	1.0
326.1794	28.01	-2.26	100475.820	3.5	131124.960	3.5
326.1800	26.00	-4.48	12560.933	3.0	43210.011	2.0
326.1865	25.01	-2.42	37847.900	2.0	68496.370	1.0
326.1900	72.00	-.41	14357.039	0.0	45014.018	0.0
326.1931	24.00	-3.40	25038.610	5.0	55686.460	5.0
326.1968	28.01	-3.35	99340.550	3.5	129988.050	2.5
326.1980	24.00	-1.28	31028.330	2.0	61675.720	2.0
326.2004	26.00	-1.53	27166.804	4.0	57813.970	3.0
326.2010	77.00	-.56	9759.560	0.0	40415.505	0.0
326.2060	23.00	-2.53	10892.500	3.5	41539.140	4.5
326.2086	18.01	-2.84	174409.830	1.5	205056.220	1.5
326.2280	62.01	-.81	2661.698	0.0	33315.106	0.0
326.2290	76.00	-.09	4113.534	0.0	34766.848	0.0
326.2307	25.00	-2.57	34343.900	4.5	64988.220	3.5
326.2320	24.00	-3.78	31393.400	5.0	62037.600	5.0
326.2340	50.00	.25	8549.697	0.0	39202.541	0.0
326.2372	24.01	-2.56	33418.110	2.5	64061.820	1.5
326.2431	26.02	-1.81	114325.350	5.0	144968.500	4.0
326.2470	72.00	-.48	10485.478	0.0	41137.101	0.0
326.2487	28.01	-1.99	100490.950	1.5	131133.580	2.5
326.2622	22.01	-3.45	34543.360	3.5	65184.720	3.5
326.2630	42.00	.42	16534.792	0.0	47184.912	0.0
326.2642	28.01	-2.57	91800.050	4.5	122441.220	4.5
326.2650	22.00	-3.04	8436.618	0.0	39077.713	1.0
326.2670	90.01	-.27	6129.972	0.0	36779.716	0.0
326.2750	76.00	-.43	8630.355	0.0	39279.347	0.0
326.2770	75.00	-.33	17180.052	0.0	47828.857	0.0
326.2824	28.01	-3.05	100475.820	3.5	131115.280	4.5
326.2990	28.01	-4.11	99559.330	2.5	130197.230	1.5
326.3030	90.01	-.76	9517.587	0.0	40163.949	0.0
326.3035	25.00	-1.41	34250.520	5.5	64888.000	4.5
326.3120	92.00	-.88	0.000	0.0	30645.517	0.0
326.3127	26.00	-4.99	23110.925	3.0	53747.547	3.0
326.3140	45.00	-.81	3226.301	0.0	33871.630	0.0
326.3209	27.00	-1.01	18389.570	1.5	49025.420	1.5
326.3235	23.00	-.03	0.000	1.5	30635.600	2.5
326.3250	24.00	-5.38	8095.210	3.0	38730.670	2.0
326.3320	23.01	-.89	16421.510	4.0	47056.320	4.0
326.3370	26.00	-2.14	19552.474	1.0	50186.814	2.0
326.3370	41.01	1.28	20970.955	0.0	51614.124	0.0
326.3411	10.01	-.14	249839.630	.5	280473.580	1.5
326.3439	26.00	-1.47	26224.961	3.0	56858.650	2.0
326.3450	58.01	.03	8065.752	0.0	38708.170	0.0
326.3508	24.01	-2.77	39684.000	3.5	70317.040	2.5
326.3570	18.01	-1.17	155708.020	.5	186340.480	1.5
326.3662	15.03	-1.85	226888.600	1.0	257520.200	1.0
326.3670	22.01	-.72	9395.760	1.5	40027.280	1.5
326.3673	28.01	-2.99	103663.500	1.5	134294.990	2.5
326.3792	23.01	-5.75	16421.510	4.0	47051.890	3.0
326.3793	18.00	-3.67	93750.639	1.0	124381.010	2.0
326.3830	42.00	-.73	10646.793	0.0	41285.644	0.0
326.3861	15.01	-2.10	107923.570	2.0	138553.300	2.0
326.3880	58.01	-.37	3629.588	0.0	34267.969	0.0
326.3987	26.02	-3.80	114339.950	4.0	144968.500	4.0
326.4000	27.00	-2.36	22475.360	4.5	53103.780	3.5
326.4000	8.04	-2.50	677532.000	0.0	708169.255	0.0
326.4038	9.02	-3.46	360348.280	.5	390976.350	1.5
326.4124	28.01	-3.10	99154.810	4.5	129782.070	3.5
326.4145	26.02	-4.96	182830.760	6.0	213457.820	7.0
326.4148	9.02	-4.04	413143.860	3.5	443770.900	3.5
326.4152	30.02	-1.95	233610.400	2.0	264237.400	1.0
326.4166	24.00	-2.22	31048.850	1.0	61675.720	2.0
326.4168	25.01	-3.14	36274.290	2.0	66901.140	2.0
326.4193	23.00	-6.07	2220.130	2.5	32846.740	2.5
326.4193	23.00	-3.64	2220.130	2.5	32846.740	2.5
326.4235	26.02	-4.61	105906.230	2.0	136532.450	2.0
326.4254	23.00	-3.44	8715.720	3.5	39341.760	3.5
326.4270	24.01	-.89	34631.140	4.5	65257.030	3.5
326.4278	23.00	-5.63	2112.320	.5	32738.140	1.5
326.4286	18.00	-3.53	93750.639	1.0	124376.380	1.0
326.4329	24.01	-4.94	36101.820	3.5	66727.160	2.5
326.4359	28.01	-.79	99559.330	2.5	130184.390	2.5
326.4400	42.00	.63	16696.107	0.0	47329.608	0.0
326.4440	90.01	-.41	12340.601	0.0	42973.726	0.0
326.4510	26.00	-2.81	17726.985	2.0	48350.620	1.0
326.4550	44.00	-1.26	3064.986	0.0	33697.079	0.0
326.4590	41.00	-.71	2742.356	0.0	33374.074	0.0
326.4641	25.01	-1.90	53805.800	4.0	84428.210	5.0
326.4650	25.02	-3.29	145643.450	2.5	176265.780	1.5
326.4681	25.01	-3.07	49291.310	3.0	79913.350	4.0
326.4690	26.00	-3.66	19912.486	2.0	50534.435	3.0
326.4706	25.00	-.06	17282.000	3.5	47903.800	4.5
326.4711	27.00	-1.75	14036.280	1.5	44658.030	1.5
326.4717	24.02	-3.81	128753.900	2.0	159375.600	3.0
326.4743	27.00	-3.03	23855.620	4.5	54477.070	3.5
326.4753	26.01	-3.94	8391.920	2.5	39013.280	1.5
326.4759	30.02	-3.50	234384.000	3.0	265005.300	2.0
326.4790	68.00	-.03	0.000	0.0	30629.841	0.0
326.4810	40.01	-.78	7420.492	0.0	38050.146	0.0
326.4814	27.00	-.09	24326.110	3.5	54946.900	2.5
326.4828	27.00	-3.27	1406.840	2.5	32027.500	3.5
326.4840	27.00	-.90	16470.600	1.5	47091.140	.5
326.4940	62.01	-.78	2177.753	0.0	32806.187	0.0
326.4944	28.00	-3.60	28569.210	2.0	59188.780	3.0
326.4951	25.01	-4.40	36274.290	2.0	66893.790	1.0
326.5047	26.00	-3.10	704.003	2.0	31322.603	3.0
326.5088	29.01	-2.50	110365.980	2.0	140984.200	1.0
326.5135	24.00	-2.85	24833.860	3.0	55451.640	3.0
326.5144	25.02	-3.27	146066.070	1.5	176683.760	2.5
326.5167	28.01	-1.58	100475.820	3.5	131093.300	4.5
326.5197	28.02	-4.81	83033.800	2.0	113651.000	2.0
326.5261	27.01	-4.65	17771.500	3.0	48388.100	2.0
326.5263	26.02	-4.87	114351.920	3.0	144968.500	4.0
326.5290	72.00	.05	15566.901	0.0	46192.052	0.0
326.5305	28.01	-1.27	106283.160	2.5	136899.340	2.5
326.5306	28.01	-4.65	106283.160	2.5	136899.330	1.5
326.5312	22.00	-4.77	6556.828	1.0	37172.947	1.0
326.5314	26.02	-4.93	183431.280	5.0	214047.380	4.0
326.5349	27.00	-2.01	16778.160	2.5	47393.930	2.5
326.5351	28.01	-4.69	106620.530	3.5	137236.280	3.5
326.5415	26.02	-4.71	199577.710	2.0	230192.860	3.0
326.5420	58.01	-.56	7420.492	0.0	38044.424	0.0
326.5457	8.02	.47	294221.650	3.0	324836.410	4.0
326.5463	28.01	-1.15	99559.330	2.5	130174.030	1.5
326.5465	23.00	-7.25	2153.200	1.5	32767.880	1.5
326.5469	28.01	-2.19	105439.850	1.5	136054.500	1.5
326.5471	22.00	-4.12	11531.760	2.0	42146.390	1.0
326.5544	26.00	-1.82	21999.132	4.0	52613.072	5.0
326.5579	26.00	-2.99	29313.008	6.0	59926.620	5.0
326.5580	26.01	-2.79	67516.370	5.5	98129.980	6.5
326.5580	90.01	-1.04	7259.177	0.0	37881.609	0.0
326.5591	28.01	-4.11	104503.220	2.5	135116.720	2.5
326.5606	24.01	-1.42	44307.440	.5	74920.800	.5
326.5618	26.00	-1.10	17550.180	3.0	48163.427	2.0
326.5662	23.00	-4.07	9824.580	2.5	40437.420	1.5
326.5670	57.01	-.71	2581.041	0.0	33202.629	0.0
326.5690	28.01	-4.98	105588.890	4.5	136201.460	3.5
326.5694	23.00	-6.27	2112.320	.5	32724.860	.5
326.5702	9.02	-4.32	360435.080	1.5	391047.540	.5
326.5727	28.01	-.89	100490.950	1.5	131103.180	2.5
326.5730	28.01	-.63	106283.160	2.5	136895.360	3.5
326.5733	24.00	-3.07	31364.330	3.0	61976.500	4.0
326.5761	28.01	-4.41	70635.460	2.5	101247.370	2.5
326.5815	23.03	-.33	255445.500	3.0	286056.900	3.0
326.5885	23.01	-.42	19112.930	4.0	49723.680	4.0
326.5886	28.00	-.96	28578.046	3.0	59188.780	3.0
326.5892	28.01	-2.44	105439.850	1.5	136050.530	2.5
326.5909	26.02	-4.72	188955.560	3.0	219566.080	3.0
326.6019	28.01	-4.54	73893.730	1.5	104503.220	2.5
326.6050	9.02	-3.46	413143.860	3.5	443753.060	2.5
326.6081	23.00	.49	10892.500	3.5	41501.410	4.5
326.6204	25.00	-2.17	35041.370	3.5	65649.130	2.5
326.6237	24.01	-1.51	38563.150	4.5	69170.600	5.5
326.6297	24.01	-2.54	34813.060	5.5	65419.950	5.5
326.6381	18.00	-3.40	93750.639	1.0	124356.730	2.0
326.6386	25.01	-3.81	55696.500	4.0	86302.550	3.0
326.6390	63.01	.43	23632.653	0.0	54247.491	0.0
326.6404	22.01	-.66	9975.920	1.5	40581.800	2.5
326.6416	25.01	-3.41	37811.570	1.0	68417.340	2.0
326.6416	26.02	-2.94	182852.050	7.0	213457.820	7.0
326.6440	44.00	-.34	10566.135	0.0	41180.504	0.0
326.6440	77.00	-.78	5726.684	0.0	36341.053	0.0
326.6452	24.00	-4.77	27597.220	3.0	58202.650	3.0
326.6544	28.01	-1.89	68735.980	2.5	99340.550	3.5
326.6586	25.00	-2.60	37148.660	5.5	67752.840	5.5
326.6630	69.01	-.92	161.315	0.0	30773.904	0.0
326.6631	24.00	-2.80	8307.570	4.0	38911.330	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
326.6712	25.00	-4.08	30354.210	3.5	60957.210	3.5
326.6730	64.00	.14	483.945	0.0	31095.596	0.0
326.6744	24.01	-3.13	39824.520	4.5	70427.220	3.5
326.6850	75.00	-.33	17180.052	0.0	47790.579	0.0
326.6854	25.00	-2.65	30354.210	3.5	60955.880	4.5
326.6884	26.02	-1.38	83138.230	5.0	113739.620	6.0
326.6886	25.00	-1.49	37737.220	3.5	68338.590	3.5
326.6907	23.01	-2.53	20522.140	1.0	51123.310	2.0
326.6933	26.01	-2.77	30388.550	4.5	60989.480	4.5
326.6999	25.01	-4.88	43311.000	1.0	73911.310	1.0
326.7000	90.01	-.87	6936.547	0.0	37545.669	0.0
326.7029	24.00	-1.66	24200.230	6.0	54800.260	6.0
326.7035	26.01	-3.24	31483.200	3.5	62083.170	4.5
326.7050	41.00	-.30	8711.012	0.0	39319.665	0.0
326.7054	23.00	-3.16	10892.500	3.5	41492.290	3.5
326.7144	27.00	-3.17	13795.520	2.5	44394.470	3.5
326.7144	24.00	-3.07	24200.230	6.0	54799.180	5.0
326.7157	15.01	-.96	107923.570	2.0	138522.400	1.0
326.7165	26.02	-3.96	118686.250	4.0	149285.000	3.0
326.7178	23.01	-3.78	19132.690	2.0	49731.320	2.0
326.7180	72.00	-1.29	5565.369	0.0	36172.804	0.0
326.7188	24.00	-3.11	31377.960	4.0	61976.500	4.0
326.7237	26.01	-7.19	16369.390	3.5	46967.470	2.5
326.7293	26.02	-3.62	199595.300	3.0	230192.860	3.0
326.7328	28.01	-2.01	104503.220	2.5	135100.450	3.5
326.7331	8.02	.14	293865.260	1.0	324462.460	2.0
326.7390	22.00	-2.99	7255.369	2.0	37852.021	1.0
326.7400	69.01	.02	8872.327	0.0	39477.701	0.0
326.7510	51.00	.26	16292.819	0.0	46897.163	0.0
326.7531	18.01	-2.15	179931.770	1.5	210527.100	2.5
326.7640	64.00	-.22	161.315	0.0	30764.441	0.0
326.7690	23.01	.29	8640.210	2.0	39234.050	3.0
326.7694	16.01	-2.84	128233.070	2.5	158826.870	2.5
326.7707	28.01	-4.43	68965.650	1.5	99559.330	2.5
326.7715	23.03	-1.09	255463.300	2.0	286056.900	3.0
326.7737	24.02	-2.80	128782.200	3.0	159375.600	3.0
326.7780	25.00	.20	34138.880	6.5	64731.680	6.5
326.7801	24.00	-4.89	35501.260	3.0	66094.060	4.0
326.7828	28.01	-4.54	103663.500	1.5	134256.050	2.5
326.7834	26.01	-1.30	73016.330	3.5	103608.820	4.5
326.7931	28.01	-1.94	105439.850	1.5	136031.430	2.5
326.7940	76.00	-.60	0.000	0.0	30600.317	0.0
326.7973	28.01	-2.70	103663.500	1.5	134254.690	1.5
326.8026	26.02	-2.00	183456.690	3.0	214047.380	4.0
326.8040	28.01	-3.75	106369.300	1.5	136959.860	2.5
326.8063	10.01	-4.24	313457.570	3.5	344047.920	3.5
326.8075	26.02	-3.77	183457.150	4.0	214047.380	4.0
326.8079	23.03	.34	257143.200	2.0	287733.400	2.0
326.8164	25.01	-3.03	51553.060	5.0	82142.460	6.0
326.8180	26.02	-2.52	199603.610	4.0	230192.860	3.0
326.8210	44.00	.25	13550.463	0.0	44148.252	0.0
326.8231	26.00	-2.63	17927.378	1.0	48516.150	1.0
326.8251	25.00	-2.02	37164.250	6.5	67752.840	5.5
326.8269	23.00	-4.25	9636.960	1.5	40225.380	1.5
326.8278	29.00	-.67	41538.623	0.0	72135.775	0.0
326.8340	64.01	-1.27	241.973	0.0	30838.545	0.0
326.8360	28.01	-4.57	101247.370	2.5	131834.940	2.5
326.8369	24.01	-2.06	42898.120	2.5	73485.600	3.5
326.8431	27.02	-3.92	140492.400	4.5	171079.300	3.5
326.8431	27.02	-3.92	140492.400	4.5	171079.300	3.5
326.8477	24.01	-1.95	34631.140	4.5	65217.610	4.5
326.8480	75.00	-.31	16534.792	0.0	47130.053	0.0
326.8504	28.01	-4.28	103663.500	1.5	134249.720	1.5
326.8508	26.01	-1.72	33501.320	3.5	64087.500	2.5
326.8530	28.01	-3.25	106369.300	1.5	136955.280	.5
326.8533	10.01	-2.12	313461.970	4.5	344047.920	3.5
326.8603	22.00	-1.84	8492.421	1.0	39077.713	1.0
326.8641	23.00	-6.44	2153.200	1.5	32738.140	1.5
326.8653	28.01	-1.31	100490.950	1.5	131075.780	1.5
326.8660	23.00	-3.38	8715.720	3.5	39300.480	2.5
326.8660	25.00	-1.40	30354.210	3.5	60938.970	4.5
326.8720	25.00	-.03	33825.490	2.5	64409.690	3.5
326.8890	75.00	-.10	15647.559	0.0	46238.983	0.0
326.8892	27.00	-2.08	15184.040	2.5	45766.630	3.5
326.8915	26.01	-3.12	31483.200	3.5	62065.570	3.5
326.8936	23.01	-2.32	20156.640	0.0	50738.820	1.0
326.8959	28.00	-.20	27943.543	1.0	58525.507	1.0
326.8992	18.01	-1.90	155043.070	2.5	185624.730	3.5
326.9030	25.01	-4.13	55371.300	3.0	85952.600	3.0
326.9085	20.00	-2.65	15157.901	0.0	45738.684	1.0
326.9104	24.01	-.39	47354.630	2.5	77935.240	2.5
326.9105	27.02	-3.11	77472.300	2.5	108052.900	2.5
326.9202	23.00	-4.44	2311.370	3.5	32891.060	3.5
326.9210	76.00	-.59	5726.684	0.0	36315.114	0.0
326.9224	26.00	-1.79	27394.676	3.0	57974.160	2.0
326.9251	9.00	-4.54	118405.267	.5	148984.500	.5
326.9254	24.02	-1.52	71166.100	2.0	101745.300	3.0
326.9271	26.02	-3.48	183431.280	5.0	214010.320	5.0
326.9289	27.00	-2.94	24326.110	3.5	54904.990	2.5
326.9421	26.00	-2.23	17726.985	2.0	48304.623	2.0
326.9430	28.01	-1.60	104081.040	4.5	134658.600	4.5
326.9480	90.01	-1.12	6613.917	0.0	37199.821	0.0
326.9490	32.00	-.50	7017.204	0.0	37603.014	0.0
326.9539	26.00	-4.63	12560.933	3.0	43137.472	3.0
326.9551	25.00	-1.57	34343.900	4.5	64920.330	3.5
326.9586	21.01	-2.03	29823.920	2.0	60400.020	1.0
326.9596	25.00	-4.14	35041.370	3.5	65617.370	3.5
326.9607	9.02	-3.89	413195.000	2.5	443770.900	3.5
326.9660	40.00	-.38	4113.534	0.0	34697.754	0.0
326.9667	23.01	-.73	34228.790	3.0	64804.130	2.0
326.9714	22.01	-1.83	9850.900	.5	40425.800	1.5
326.9721	24.00	-1.79	31355.210	2.0	61930.050	3.0
326.9755	24.01	-.73	39824.520	4.5	70399.040	5.5
326.9761	26.01	-2.00	33466.500	4.5	64040.960	3.5
326.9780	92.01	-1.96	241.973	0.0	30825.070	0.0
326.9789	22.00	-4.51	6598.749	2.0	37172.947	1.0
326.9827	24.01	-2.16	38269.670	3.5	68843.510	3.5
326.9871	10.01	.12	249695.530	1.5	280268.960	2.5
326.9907	21.00	.01	0.000	1.5	30573.100	.5
326.9928	28.01	-1.90	100490.950	1.5	131063.850	.5
326.9939	23.01	-2.52	20089.560	1.0	50662.360	0.0
326.9946	26.00	-1.96	17550.180	3.0	48122.913	3.0
327.0000	25.01	-4.86	34910.430	4.0	65482.660	3.0
327.0061	23.00	-6.94	2153.200	1.5	32724.860	.5
327.0070	28.01	-3.64	101357.200	4.5	131928.770	4.5
327.0103	29.01	-1.92	118071.340	1.0	148642.600	2.0
327.0114	23.01	-.89	19902.600	0.0	50473.760	1.0
327.0120	92.01	-1.18	241.973	0.0	30821.891	0.0
327.0133	24.01	-.54	34813.060	5.5	65384.040	4.5
327.0167	24.00	-2.68	27597.220	3.0	58167.890	4.0
327.0189	27.00	.02	24326.110	3.5	54896.570	3.5
327.0245	24.01	-1.93	39824.520	4.5	70394.460	4.5
327.0286	26.02	-3.15	105895.350	1.0	136464.900	1.0
327.0298	25.01	-3.50	37847.900	2.0	68417.340	2.0
327.0307	25.01	-2.84	53698.700	2.0	84268.060	1.0
327.0308	23.02	-3.67	110181.470	2.5	140750.820	2.5
327.0315	28.01	-2.24	106283.160	2.5	136852.440	1.5
327.0344	25.00	.02	34250.520	5.5	64819.530	5.5
327.0397	28.00	-4.81	27260.891	6.0	57829.405	5.0
327.0423	26.01	-3.99	30388.550	4.5	60956.820	3.5
327.0460	26.01	-3.14	68000.820	4.5	98568.750	3.5
327.0478	18.01	-1.99	174409.830	1.5	204977.590	2.5
327.0482	10.01	-1.29	313480.200	3.5	344047.920	3.5
327.0486	10.01	-.49	313480.240	4.5	344047.920	3.5
327.0551	22.00	-3.70	11639.804	3.0	42206.880	2.0
327.0646	25.01	-2.23	37851.150	3.0	68417.340	2.0
327.0688	26.00	-3.64	29798.960	4.0	60364.760	3.0
327.0696	22.01	-1.41	32602.510	1.5	63168.230	2.5
327.0696	24.00	-1.46	31364.330	3.0	61930.050	3.0
327.0707	24.00	-2.26	27597.220	3.0	58162.840	2.0
327.0711	24.01	-1.85	50667.330	3.5	81232.910	2.5
327.0759	23.01	-4.50	19166.190	1.0	49731.320	2.0
327.0760	41.00	-1.12	1129.205	0.0	31703.139	0.0
327.0779	25.00	-1.37	34423.270	3.5	64988.220	3.5
327.0782	25.01	-2.16	36364.300	1.0	66929.220	2.0
327.0800	10.01	-1.34	219130.780	2.5	249695.530	1.5
327.0830	90.01	-1.94	0.000	0.0	30573.280	0.0
327.0870	25.01	-3.53	51553.060	5.0	82117.160	5.0
327.0888	23.00	-4.41	2424.890	4.5	32988.820	3.5
327.0900	42.00	.25	11775.998	0.0	42348.623	0.0
327.0912	8.01	-.14	228723.300	2.5	259287.000	1.5
327.0998	8.01	-1.37	228723.300	2.5	259286.200	2.5
327.1001	26.00	-.82	17726.985	2.0	48289.852	1.0
327.1005	25.01	-2.55	52373.180	3.0	82936.010	3.0
327.1042	24.01	-1.63	47372.750	1.5	77935.240	2.5
327.1107	22.00	-2.67	17215.440	5.0	47777.320	5.0
327.1110	28.00	-1.89	879.813	2.0	31441.665	2.0
327.1116	23.01	.40	8841.970	3.0	39403.770	4.0
327.1130	40.01	-.58	4194.191	0.0	34764.667	0.0
327.1150	58.01	-.69	3548.931	0.0	34119.220	0.0
327.1152	28.00	-3.51	28068.091	4.0	58629.550	3.0
327.1175	25.01	-2.59	35004.430	3.0	65565.680	4.0
327.1193	18.00	-4.12	93750.639	1.0	124311.720	1.0
327.1195	25.01	-3.09	70940.240	2.0	101501.300	3.0
327.1196	28.01	-1.70	104081.040	4.5	134642.090	3.5
327.1200	29.01	-2.85	116375.470	3.0	146936.480	2.0
327.1349	25.01	-1.86	52379.380	2.0	82939.000	1.0
327.1351	25.01	-3.92	70940.240	2.0	101499.840	2.0
327.1409	23.00	.57	11100.650	4.5	41659.710	5.5
327.1421	22.01	-2.28	34748.500	4.5	65307.450	4.5
327.1451	26.02	-2.98	105906.230	2.0	136464.900	1.0
327.1486	26.00	-1.12	26224.961	3.0	56783.306	3.0
327.1550	58.01	-.32	6533.259	0.0	37099.810	0.0
327.1610	45.00	-.82	3226.301	0.0	33792.291	0.0
327.1623	22.01	-.23	10024.740	2.5	40581.800	2.5
327.1634	23.00	.05	137.380	2.5	30694.340	3.5
327.1664	9.00	-4.73	118427.823	1.5	148984.500	.5
327.1666	22.01	-3.47	9518.050	2.5	40074.710	3.5
327.1669	25.01	-3.99	52379.380	2.0	82936.010	3.0
327.1684	26.00	-2.82	11976.239	4.0	42532.729	3.0
327.1692	23.02	-4.93	56160.420	2.5	86716.840	1.5
327.1781	27.00	-.63	15774.040	1.5	46329.630	2.5
327.1941	24.00	-2.69	24897.550	4.0	55451.640	3.0
327.2038	28.00	-.52	27414.893	2.0	57968.080	3.0
327.2040	26.02	-1.97	183457.150	4.0	214010.320	5.0
327.2050	90.00	-1.08	0.000	0.0	30561.880	0.0
327.2065	22.01	-.30	9872.870	.5	40425.800	1.5
327.2070	41.00	-.77	1532.493	0.0	32094.186	0.0
327.2134	25.01	-1.32	52383.720	4.0	82936.010	3.0
327.2155	24.00	-2.08	31377.960	4.0	61930.050	3.0
327.2160	76.00	.06	15082.956	0.0	45643.809	0.0
327.2220	40.01	-.55	0.000	0.0	30560.292	0.0
327.2220	41.01	.35	14679.669	0.0	45239.961	0.0
327.2221	28.01	-4.24	105499.050	3.5	136050.530	2.5
327.2246	28.01	-3.13	70706.770	1.5	101258.010	1.5
327.2250	58.01	.56	5565.369	0.0	36125.381	0.0
327.2280	22.01	-2.40	34543.360	3.5	65094.290	4.5
327.2386	24.01	-2.78	39877.280	3.5	70427.220	3.5
327.2407	27.00	-.22	24733.280	2.5	55283.020	2.5
327.2463	25.00	-3.19	37737.220	3.5	68286.440	4.5
327.2502	28.00	-2.87	28569.210	2.0	59118.060	2.0
327.2523	25.00	-2.48	37789.930	2.5	68338.590	3.5
327.2530	25.00	-2.98	30354.210	3.5	60902.800	3.5
327.2597	26.00	-3.16	12560.933	3.0	43108.899	4.0
327.2620	23.00	-6.02	2220.130	2.5	32767.880	1.5
327.2690	17.02	-3.11	209182.800	1.5	239729.900	2.5
327.2726	25.01	-1.74	51553.060	5.0	82099.820	4.0
327.2739	24.01	-4.03	44307.440	.5	74854.080	.5
327.2766	27.00	-4.86	23611.780	5.5	54158.170	4.5
327.2770	63.01	.59	23632.653	0.0	54187.810	0.0
327.2810	62.01	-.69	2984.328	0.0	33539.111	0.0
327.2885	24.01	-1.58	50687.630	2.5	81232.910	2.5
327.2936	28.01	-3.58	103663.500	1.5	134208.300	2.5
327.2958	25.01	-2.73	52373.180	3.0	82917.780	2.0
327.3003	22.00	-4.71	16106.080	4.0	46650.260	3.0
327.3011	25.00	-.14	34343.900	4.5	64888.000	4.5
327.3013	23.00	-.42	10892.500	3.5	41436.580	3.5
327.3027	16.01	-3.70	125485.320	.5	156029.280	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
327.3050	40.01	-.12	1290.520	0.0	31843.063	0.0
327.3080	44.00	-.44	7985.094	0.0	38537.357	0.0
327.3090	28.01	-3.36	105439.850	1.5	135983.220	1.5
327.3114	26.02	-1.83	183431.280	5.0	213974.420	6.0
327.3162	16.02	-2.83	174036.190	1.0	204578.890	2.0
327.3315	9.02	-3.50	360435.080	1.5	390976.350	1.5
327.3318	18.01	-1.17	159393.310	1.5	189934.550	.5
327.3320	62.01	-1.35	3468.273	0.0	34018.296	0.0
327.3338	26.02	-3.89	87901.870	3.0	118442.920	3.0
327.3386	28.01	-2.62	100592.980	3.5	131133.580	2.5
327.3386	28.01	-2.61	70706.770	1.5	101247.370	2.5
327.3449	28.00	-2.15	28578.046	3.0	59118.060	2.0
327.3489	26.01	-1.83	33501.320	3.5	64040.960	3.5
327.3516	28.01	-2.30	70706.770	1.5	101246.160	.5
327.3526	8.01	.01	228746.900	3.5	259286.200	2.5
327.3561	23.01	-4.83	16340.970	3.0	46879.940	2.0
327.3568	23.03	-2.72	255747.600	3.0	286286.500	4.0
327.3582	26.02	-2.72	83138.230	5.0	113677.010	5.0
327.3622	25.01	-2.15	52379.380	2.0	82917.780	2.0
327.3636	21.00	.26	168.340	2.5	30706.610	1.5
327.3638	26.02	-3.70	158417.310	2.0	188955.560	3.0
327.3649	24.01	-3.32	42898.120	2.5	73436.270	2.5
327.3660	72.01	-.99	6291.287	0.0	36838.137	0.0
327.3689	28.01	-4.67	105981.500	4.5	136519.280	4.5
327.3708	25.00	-3.95	30419.610	2.5	60957.210	3.5
327.3790	25.01	-2.55	36364.300	1.0	66901.140	2.0
327.3826	27.02	-4.26	140492.400	4.5	171028.900	5.5
327.3833	23.00	-2.68	10892.500	3.5	41428.930	2.5
327.3867	27.00	-.49	25041.160	1.5	55577.280	1.5
327.3869	24.00	-3.88	20523.690	4.0	51059.790	4.0
327.3896	24.00	-3.31	20523.940	5.0	51059.790	4.0
327.3936	27.00	-3.81	24733.280	2.5	55268.750	3.5
327.3947	23.00	-3.75	2311.370	3.5	32846.740	2.5
327.3947	23.00	-4.88	2311.370	3.5	32846.740	2.5
327.3957	29.00	-.35	0.000	0.0	30544.079	0.0
327.4006	27.00	-3.30	24326.110	3.5	54860.930	4.5
327.4040	22.00	-3.92	11776.806	4.0	42311.310	3.0
327.4047	25.01	-2.67	39808.140	3.0	70342.580	3.0
327.4078	25.00	-3.21	35114.980	2.5	65649.130	2.5
327.4104	12.02	-1.51	534197.700	1.0	564731.600	1.0
327.4113	22.00	-4.63	6556.828	1.0	37090.650	0.0
327.4128	9.02	-4.93	466789.570	2.5	497323.250	2.5
327.4147	28.01	-.88	104081.040	4.5	134614.550	5.5
327.4180	64.01	-.14	10324.163	0.0	40866.161	0.0
327.4213	11.01	-.72	300107.710	2.0	330640.600	1.0
327.4213	11.01	-.72	300107.710	2.0	330640.600	1.0
327.4229	26.00	-2.94	17927.378	1.0	48460.120	0.0
327.4268	28.01	-2.15	105499.050	3.5	136031.430	2.5
327.4288	27.00	-3.07	14036.280	1.5	44568.470	2.5
327.4300	10.01	-3.29	313461.970	4.5	343994.050	4.5
327.4301	10.01	-2.81	313461.970	4.5	343994.040	5.5
327.4302	10.01	-3.16	313461.990	5.5	343994.050	4.5
327.4303	10.01	-1.36	313461.990	5.5	343994.040	5.5
327.4311	28.01	-1.63	100592.980	3.5	131124.960	3.5
327.4408	22.01	-1.43	9395.760	1.5	39926.830	2.5
327.4439	26.00	-1.69	27166.804	4.0	57697.590	4.0
327.4500	23.01	-.80	22273.540	1.0	52803.750	1.0
327.4519	28.01	-.93	106369.300	1.5	136899.340	2.5
327.4520	28.01	-3.67	106369.300	1.5	136899.330	1.5
327.4609	25.01	-2.07	39813.380	2.0	70342.580	3.0
327.4628	26.02	-4.88	121008.780	3.0	151537.800	4.0
327.4640	4.01	-.86	88231.000	0.0	118768.708	0.0
327.4671	20.00	-2.17	15210.063	1.0	45738.684	1.0
327.4683	24.01	-4.00	38315.000	2.5	68843.510	3.5
327.4710	44.00	-.12	10566.135	0.0	41103.190	0.0
327.4822	26.02	-4.98	169277.600	4.0	199804.810	4.0
327.4860	58.01	.08	5646.026	0.0	36181.682	0.0
327.4916	28.01	-2.81	23108.280	2.5	53634.620	1.5
327.4917	28.01	-.86	104081.040	4.5	134607.370	4.5
327.4931	24.02	-3.80	128849.400	4.0	159375.600	3.0
327.4939	26.02	-3.94	121008.780	3.0	151534.900	2.0
327.4941	23.03	-.57	226617.100	1.0	257143.200	2.0
327.4950	73.01	-.36	3145.643	0.0	33680.460	0.0
327.5006	25.01	-1.97	53781.700	3.0	84307.200	4.0
327.5022	26.02	-4.56	121008.780	3.0	151534.130	3.0
327.5039	26.02	-4.59	90483.590	3.0	121008.780	3.0
327.5181	10.01	-.62	252798.480	.5	283322.350	1.5
327.5183	10.01	-3.49	318828.550	3.5	349352.400	4.5
327.5200	76.00	-.66	5726.684	0.0	36259.171	0.0
327.5240	23.01	-2.51	16533.000	5.0	47056.320	4.0
327.5242	26.00	-4.21	8154.713	1.0	38678.015	2.0
327.5277	22.01	-2.04	8710.470	1.5	39233.440	1.5
327.5349	28.01	-1.68	100592.980	3.5	131115.280	4.5
327.5528	24.00	-4.37	23512.000	1.0	54032.630	2.0
327.5588	28.00	-1.40	28068.091	4.0	58588.168	3.0
327.5642	18.01	-3.13	174409.830	1.5	204929.400	.5
327.5657	27.00	-4.82	14036.280	1.5	44555.710	1.5
327.5666	26.00	-2.00	22249.430	3.0	52768.780	4.0
327.5669	8.01	-4.45	231350.080	2.5	261869.400	2.5
327.5670	8.04	-.57	653605.000	0.0	684133.106	0.0
327.5680	73.01	-.47	5565.369	0.0	36093.382	0.0
327.5757	13.01	-2.44	95348.200	0.0	125866.700	1.0
327.5810	23.00	-5.91	2220.130	2.5	32738.140	1.5
327.5822	26.02	-2.87	114325.350	5.0	144843.240	5.0
327.5838	26.00	-4.49	23783.617	5.0	54301.360	4.0
327.5870	62.01	-1.60	1451.835	0.0	31978.077	0.0
327.5899	24.01	-1.14	39877.280	3.5	70394.460	4.5
327.5905	26.01	-2.72	73091.700	4.5	103608.820	4.5
327.5935	24.00	-3.72	24282.340	4.0	54799.180	5.0
327.5966	23.00	-1.22	9636.960	1.5	40153.510	2.5
327.5983	28.01	-.89	104081.040	4.5	134597.430	5.5
327.6025	8.03	-.78	606171.500	2.5	636687.500	1.5
327.6076	26.02	-1.49	83161.480	4.0	113677.010	5.0
327.6090	18.01	-4.40	172829.580	1.5	203344.980	1.5
327.6116	23.01	.50	9097.810	4.0	39612.970	5.0
327.6160	22.01	-1.74	31756.500	1.5	62271.250	2.5
327.6221	27.00	-1.73	25041.160	1.5	55555.340	2.5
327.6236	25.02	-3.29	109780.400	2.5	140294.440	3.5
327.6250	58.01	-.65	2581.041	0.0	33103.742	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
327.6256	10.01	-2.85	313480.200	3.5	343994.050	4.5
327.6259	24.01	-2.01	42898.120	2.5	73411.940	1.5
327.6261	10.01	-1.44	313480.240	4.5	343994.050	4.5
327.6262	10.01	-3.06	313480.240	4.5	343994.040	5.5
327.6394	8.02	-3.60	294221.650	3.0	324734.220	2.0
327.6471	26.00	-2.18	17726.985	2.0	48238.832	2.0
327.6475	27.00	.26	23855.620	4.5	54367.430	5.5
327.6529	28.01	-3.28	104147.290	5.5	134658.600	4.5
327.6559	24.00	-1.69	24940.610	2.0	55451.640	3.0
327.6602	26.01	-1.94	31811.870	2.5	62322.500	3.5
327.6611	10.01	-3.62	318841.850	3.5	349352.400	4.5
327.6615	10.01	-3.53	318841.890	4.5	349352.400	4.5
327.6648	28.01	-4.14	100592.980	3.5	131103.180	2.5
327.6744	28.01	-2.38	70748.700	.5	101258.010	1.5
327.6750	62.01	-.59	3871.561	0.0	34389.605	0.0
327.6752	22.01	-.45	9518.050	2.5	40027.280	1.5
327.6754	25.01	-1.74	49291.310	3.0	79800.520	4.0
327.6759	28.01	-3.41	70635.460	2.5	101144.630	3.5
327.6760	23.00	-7.38	323.420	3.5	30832.580	2.5
327.6769	24.00	-2.43	25177.390	4.0	55686.460	5.0
327.6799	17.01	-2.52	129065.400	2.0	159574.200	2.0
327.6810	69.01	-1.13	0.000	0.0	30517.485	0.0
327.6927	27.01	-5.79	19189.900	4.0	49697.500	4.0
327.6985	23.00	-3.86	2153.200	1.5	32660.260	2.5
327.6990	22.01	-2.72	983.800	2.5	31490.820	3.5
327.7071	23.01	-1.15	20617.050	2.0	51123.310	2.0
327.7110	27.02	-4.30	76791.100	1.5	107297.000	1.5
327.7131	28.01	-3.55	100619.260	4.5	131124.960	3.5
327.7180	28.00	-.87	27943.543	1.0	58448.790	0.0
327.7280	77.00	-.27	12985.861	0.0	43498.969	0.0
327.7302	27.00	-2.58	15184.040	2.5	45688.150	2.5
327.7341	26.01	-2.45	7955.240	3.5	38458.990	4.5
327.7390	26.02	-4.11	114339.950	4.0	144843.240	5.0
327.7419	28.01	-1.47	100619.260	4.5	131122.280	5.5
327.7446	23.01	-.25	26839.820	3.0	57342.590	2.0
327.7487	25.00	-3.36	35114.980	2.5	65617.370	3.5
327.7570	44.00	.07	14599.011	0.0	45109.420	0.0
327.7594	25.01	-4.98	53805.800	4.0	84307.200	4.0
327.7613	28.00	-2.07	27260.891	6.0	57762.106	6.0
327.7616	23.00	-3.13	9824.580	2.5	40325.770	2.5
327.7655	27.00	.21	23855.620	4.5	54356.450	4.5
327.7669	8.01	-.67	208392.270	1.5	238892.960	2.5
327.7670	41.00	-.87	1532.493	0.0	32041.971	0.0
327.7700	68.00	-1.50	0.000	0.0	30509.199	0.0
327.7710	23.01	-.54	20622.990	3.0	51123.310	2.0
327.7710	28.01	-1.09	100592.980	3.5	131093.300	4.5
327.7710	75.00	-.53	14518.354	0.0	45027.459	0.0
327.7780	63.01	.73	23632.653	0.0	54141.107	0.0
327.7784	29.01	-4.47	118142.970	3.0	148642.600	2.0
327.7813	22.00	-1.55	18525.070	2.0	49024.430	3.0
327.7840	26.01	-3.07	30388.550	4.5	60887.660	5.5
327.7850	24.00	-1.29	31028.330	2.0	61527.340	1.0
327.7872	24.00	-1.62	27703.840	4.0	58202.650	3.0
327.7883	23.00	-4.24	11100.650	4.5	41599.360	4.5
327.7935	23.00	-.86	137.380	2.5	30635.600	2.5
327.7970	76.00	-.87	5726.684	0.0	36233.370	0.0
327.8004	28.00	-4.45	28542.113	5.0	59039.693	4.0
327.8017	28.01	-3.70	70748.700	.5	101246.160	.5
327.8055	26.02	-3.76	83138.230	5.0	113635.340	4.0
327.8060	25.00	-.30	34423.270	3.5	64920.330	3.5
327.8101	27.00	.04	23855.620	4.5	54352.300	3.5
327.8132	6.00	-3.76	89381.610	0.0	119878.000	1.0
327.8172	28.01	-2.26	100619.260	4.5	131115.280	4.5
327.8275	22.01	-.24	9930.740	1.5	40425.800	1.5
327.8486	22.01	-2.31	34748.500	4.5	65241.600	5.5
327.8548	25.00	-1.28	17282.000	3.5	47774.520	3.5
327.8601	26.02	-3.67	199700.830	4.0	230192.860	3.0
327.8604	10.03	-1.54	.642184.000	1.5	672676.000	.5
327.8643	28.01	-4.86	100078.780	1.5	130570.420	.5
327.8731	26.00	-1.56	20874.482	3.0	51365.300	3.0
327.8736	26.00	-2.11	19552.474	1.0	50043.250	1.0
327.8787	19.02	-.22	207421.900	2.5	237912.200	1.5
327.8792	23.00	-4.45	9824.580	2.5	40314.830	3.5
327.8846	27.00	-2.06	16195.680	.5	46685.430	1.5
327.8908	22.01	.10	8744.270	2.5	39233.440	1.5
327.8970	71.00	-.83	0.000	0.0	30497.382	0.0
327.8973	22.00	-.61	7255.369	2.0	37743.933	3.0
327.9009	29.01	-3.45	118142.970	3.0	148631.200	3.0
327.9010	58.01	-.31	5404.054	0.0	35901.064	0.0
327.9038	29.01	-2.37	118071.340	1.0	148559.300	2.0
327.9131	9.02	-4.46	413143.860	3.5	443630.960	3.5
327.9141	28.01	-1.16	105499.050	3.5	135986.060	3.5
327.9214	26.01	-3.54	36126.410	1.5	66612.740	1.5
327.9246	25.01	-4.41	49427.320	4.0	79913.350	4.0
327.9251	27.00	-.86	15774.040	1.5	46260.020	1.5
327.9260	40.01	-.09	725.918	0.0	31220.603	0.0
327.9290	73.00	-.97	9678.902	0.0	40173.308	0.0
327.9303	25.02	-2.61	86578.240	3.5	117063.740	4.5
327.9341	24.00	-1.70	28637.000	3.0	59122.150	3.0
327.9440	42.00	-.26	16615.449	0.0	47108.460	0.0
327.9456	25.00	-1.60	35165.050	1.5	65649.130	2.5
327.9520	24.01	-1.81	38509.070	3.5	68992.550	4.5
327.9530	64.01	-.08	10808.108	0.0	41300.282	0.0
327.9536	28.01	-3.51	106283.160	2.5	136766.490	2.5
327.9552	25.00	-1.90	30419.610	2.5	60902.800	3.5
327.9557	28.01	-1.23	106369.300	1.5	136852.440	1.5
327.9643	26.01	-1.99	33466.500	4.5	63948.840	4.5
327.9647	23.00	-2.75	9636.960	1.5	40119.260	2.5
327.9730	26.00	-2.15	24118.815	4.0	54600.350	3.0
327.9748	25.00	-1.11	34250.520	5.5	64731.880	6.5
327.9815	29.00	-2.14	13227.833	0.0	43717.358	0.0
327.9840	58.01	-.55	2339.068	0.0	32826.360	0.0
327.9843	23.01	.33	19112.930	4.0	49593.410	5.0
327.9916	8.02	-.97	373046.200	0.0	403526.000	1.0
327.9940	18.01	-3.96	170400.940	2.5	200880.520	3.5
327.9965	22.01	-2.11	9850.900	.5	40330.250	.5
327.9980	72.01	-1.14	3629.588	0.0	34117.579	0.0
327.9983	22.01	-.52	8997.690	3.5	39476.870	2.5
328.0057	24.00	-1.33	31048.850	1.0	61527.340	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
328.0080	66.01	-.58	806.575	0.0	31293.636	0.0
328.0082	28.01	-1.40	105499.050	3.5	135977.310	4.5
328.0085	25.01	-2.55	35004.430	3.0	65482.660	3.0
328.0101	24.00	-2.24	25038.610	5.0	55516.690	6.0
328.0196	15.02	-.97	172429.200	2.5	202906.400	2.5
328.0196	15.02	.34	172429.200	2.5	202906.400	3.5
328.0196	15.02	.18	172429.200	1.5	202906.400	2.5
328.0234	23.00	-6.36	2311.370	3.5	32788.220	4.5
328.0261	26.00	-.08	26627.612	4.0	57104.207	5.0
328.0293	27.02	-4.12	73214.500	.5	103690.800	.5
328.0308	10.01	-4.54	251522.120	1.5	281998.280	2.5
328.0365	25.00	-1.04	34343.900	4.5	64819.530	5.5
328.0370	90.01	-.53	7904.437	0.0	38368.803	0.0
328.0393	22.00	-2.27	8602.340	2.0	39077.713	1.0
328.0406	28.01	-1.05	104503.220	2.5	134978.470	2.5
328.0487	23.03	-4.45	254824.100	1.0	285298.600	1.0
328.0490	58.01	-.70	4436.164	0.0	34919.415	0.0
328.0514	25.01	-3.36	43311.000	1.0	73785.250	2.0
328.0536	28.01	-3.07	100619.260	4.5	131093.300	4.5
328.0550	45.00	-.39	1451.835	0.0	31934.528	0.0
328.0556	26.02	-4.30	83161.480	4.0	113635.340	4.0
328.0654	28.01	-2.53	108368.050	2.5	138841.000	3.5
328.0657	23.00	-5.88	2424.890	4.5	32897.810	5.5
328.0680	47.00	-.28	0.000	0.0	30481.486	0.0
328.0735	23.01	-1.42	25191.080	2.0	55663.270	1.0
328.0738	25.01	-3.64	73395.970	2.0	103868.140	1.0
328.0750	26.00	-2.49	24338.766	3.0	54810.820	4.0
328.0757	25.00	-1.32	17282.000	3.5	47753.990	2.5
328.0760	23.00	-6.86	2220.130	2.5	32692.090	3.5
328.0870	73.00	-.97	9678.902	0.0	40158.622	0.0
328.0910	39.01	.26	14034.408	0.0	44513.757	0.0
328.0940	27.01	-1.95	32697.940	2.5	63168.230	2.5
328.0950	28.01	-3.36	104646.520	3.5	135116.720	2.5
328.1052	28.01	-4.38	70778.120	3.5	101247.370	2.5
328.1109	23.01	-1.38	20617.050	2.0	51085.770	3.0
328.1266	28.01	-4.39	104147.290	5.5	134614.550	5.5
328.1290	26.01	-2.69	8391.920	2.5	38858.960	2.5
328.1363	28.01	-3.97	105861.190	2.5	136327.550	1.5
328.1384	23.00	-3.68	2424.890	4.5	32891.060	3.5
328.1387	25.00	-3.79	30354.210	3.5	60820.350	2.5
328.1413	25.01	-4.81	36427.890	0.0	66893.790	1.0
328.1473	26.01	-3.37	73143.480	3.5	103608.820	4.5
328.1539	25.00	-1.25	34423.270	3.5	64888.000	4.5
328.1584	27.00	-5.19	1406.840	2.5	31871.150	3.5
328.1595	17.02	-2.44	209042.100	.5	239506.300	1.5
328.1610	64.01	-.16	10566.135	0.0	41038.982	0.0
328.1612	24.00	-3.11	27703.840	4.0	58167.890	4.0
328.1671	24.02	-1.68	70980.200	1.0	101443.700	2.0
328.1693	29.01	-.70	115569.200	5.0	146032.500	5.0
328.1699	18.01	-.82	155708.020	.5	186171.260	.5
328.1700	45.00	-.46	11856.655	0.0	42328.666	0.0
328.1740	71.00	-.28	1935.780	0.0	32407.420	0.0
328.1749	23.01	-1.07	20622.990	3.0	51085.770	3.0
328.1805	28.00	-1.81	28068.091	4.0	58530.350	3.0
328.1821	28.01	-1.53	105439.850	1.5	135901.960	2.5
328.1829	26.00	-3.11	12560.933	3.0	43022.969	4.0
328.1851	26.02	-3.07	158562.700	4.0	189024.530	5.0
328.1871	28.00	-.33	28578.046	3.0	59039.693	4.0
328.1937	28.01	-.60	105499.050	3.5	135960.080	4.5
328.1955	8.02	-.69	294001.600	2.0	324462.460	2.0
328.1970	78.00	.15	33472.871	0.0	63942.376	0.0
328.2016	29.01	-1.79	115569.200	5.0	146029.500	4.0
328.2034	26.02	-4.87	189011.840	4.0	219471.970	4.0
328.2039	23.02	-3.92	56256.750	1.5	86716.840	1.5
328.2040	28.01	-1.49	104147.290	5.5	134607.370	4.5
328.2043	27.00	-3.11	23855.620	4.5	54315.670	5.5
328.2233	27.00	-2.49	14399.280	.5	44857.570	.5
328.2250	64.00	-.14	967.890	0.0	31434.795	0.0
328.2264	10.03	-4.92	612781.000	1.5	643239.000	.5
328.2265	25.01	-4.53	72247.380	3.0	102705.370	3.0
328.2286	26.00	-4.93	23110.925	3.0	53568.720	2.0
328.2330	30.00	-.19	32101.693	0.0	62567.856	0.0
328.2331	22.01	-.29	9872.870	.5	40330.250	.5
328.2484	25.01	-4.29	72247.380	3.0	102703.340	4.0
328.2531	23.01	-.11	19112.930	4.0	49568.450	3.0
328.2609	29.01	-2.44	115569.200	5.0	146024.000	4.0
328.2655	26.01	-3.83	72130.440	4.5	102584.810	5.5
328.2672	24.00	-4.90	24282.340	4.0	54736.550	4.0
328.2688	22.00	-8.05	11531.760	2.0	41985.830	3.0
328.2689	28.00	-2.06	1332.153	3.0	31786.210	3.0
328.2703	28.01	-2.37	104646.520	3.5	135100.450	3.5
328.2712	26.00	-2.64	23783.617	5.0	54237.460	4.0
328.2716	29.00	-.27	41538.623	0.0	72001.203	0.0
328.2730	40.00	-.53	1209.863	0.0	31672.313	0.0
328.2768	25.02	-3.67	109841.120	3.5	140294.440	3.5
328.2780	60.01	-1.97	0.000	0.0	30461.986	0.0
328.2821	28.00	-.01	28068.091	4.0	58520.923	5.0
328.2833	22.00	-7.88	11639.804	3.0	42092.520	4.0
328.2893	26.00	-.61	26406.490	1.0	56858.650	2.0
328.3013	24.00	-3.92	23512.000	1.0	53963.050	1.0
328.3042	24.01	-1.24	40228.440	5.5	70679.220	4.5
328.3068	28.01	-3.20	105838.060	3.5	136288.600	2.5
328.3077	29.01	-2.15	118071.340	1.0	148521.800	1.0
328.3105	17.01	-1.69	127726.900	1.0	158177.100	1.0
328.3111	28.01	-.83	104147.290	5.5	134597.430	5.5
328.3124	28.00	-1.35	28068.091	4.0	58518.110	4.0
328.3137	15.01	-.87	111508.500	0.0	141958.400	1.0
328.3139	22.01	-1.00	9975.920	1.5	40425.800	1.5
328.3172	28.01	-4.94	106283.160	2.5	136732.740	1.5
328.3176	24.01	-2.83	42986.730	1.5	73436.270	2.5
328.3219	26.02	-4.18	158562.700	4.0	189011.840	4.0
328.3299	13.02	-1.88	178433.430	.5	208881.830	1.5
328.3310	23.00	.10	323.420	3.5	30771.720	4.5
328.3318	25.01	-3.43	49465.130	3.0	79913.350	4.0
328.3326	27.00	-1.01	18389.570	1.5	48837.720	.5
328.3340	26.01	-3.14	48039.230	2.5	78487.250	1.5
328.3350	58.01	-.22	7420.492	0.0	37877.190	0.0
328.3380	72.01	-.89	12017.970	0.0	42474.390	0.0
328.3394	26.01	-4.69	33501.320	3.5	63948.840	4.5
328.3400	69.01	-1.06	161.315	0.0	30617.549	0.0
328.3402	26.02	-3.89	189024.530	5.0	219471.970	4.0
328.3407	17.02	-.15	174093.800	1.5	204541.200	2.5
328.3420	26.00	-5.31	7728.058	3.0	38175.332	3.0
328.3447	25.01	-2.05	52383.720	4.0	82830.750	4.0
328.3455	27.00	-.06	16778.160	2.5	47225.110	3.5
328.3460	41.01	.93	15970.189	0.0	46425.867	0.0
328.3504	30.02	-4.19	234866.900	1.0	265313.400	2.0
328.3536	28.01	-1.33	104081.040	4.5	134527.240	3.5
328.3541	25.01	-4.56	43339.100	2.0	73785.250	2.0
328.3570	45.00	-.26	2581.041	0.0	33035.699	0.0
328.3628	28.01	-1.82	105499.050	3.5	135944.400	3.5
328.3666	24.01	-4.80	38315.000	2.5	68760.000	3.5
328.3680	58.01	-1.00	2581.041	0.0	33034.678	0.0
328.3691	27.00	-2.62	20500.710	1.5	50945.470	.5
328.3728	26.01	-3.51	68000.820	4.5	98445.240	4.5
328.3785	26.02	-3.90	83161.480	4.0	113605.370	3.0
328.3788	27.00	-1.53	14036.280	1.5	44480.140	2.5
328.3878	21.01	-3.23	29823.920	2.0	60266.950	3.0
328.3938	22.00	-.63	18593.990	3.0	49036.460	4.0
328.4020	25.01	-3.43	43339.100	2.0	73780.810	3.0
328.4053	8.01	-3.50	231427.990	3.5	261869.400	2.5
328.4075	27.02	-4.15	73214.500	.5	103655.700	1.5
328.4092	25.01	-2.79	73395.120	3.0	103836.170	2.0
328.4120	25.01	-1.43	51553.060	5.0	81993.650	4.0
328.4183	25.01	-4.28	73395.970	2.0	103836.170	2.0
328.4186	16.01	-3.88	110268.330	2.5	140708.510	2.5
328.4191	23.00	-5.37	2220.130	2.5	32660.260	2.5
328.4208	24.00	-2.10	28682.180	2.0	59122.150	3.0
328.4220	58.01	-.87	5081.424	0.0	35530.054	0.0
328.4231	24.01	-2.88	39877.280	3.5	70317.040	2.5
328.4239	25.02	-1.94	109841.120	3.5	140280.800	4.5
328.4248	23.03	-.49	256781.800	1.0	287221.400	2.0
328.4280	27.00	-2.56	18389.570	1.5	48828.870	2.5
328.4368	23.00	-.29	11100.650	4.5	41539.140	4.5
328.4416	28.00	-.22	26665.903	3.0	57103.946	3.0
328.4551	23.03	.89	257690.800	3.0	288127.600	4.0
328.4572	8.02	-.71	294221.650	3.0	324658.250	3.0
328.4585	25.01	-3.77	37847.900	2.0	68284.380	3.0
328.4589	26.00	-1.86	17726.985	2.0	48163.427	2.0
328.4613	22.01	-3.32	34748.500	4.5	65184.720	3.5
328.4641	9.02	-3.08	413195.000	2.5	443630.960	3.5
328.4660	28.01	-.37	104147.290	5.5	134583.070	6.5
328.4662	23.01	-2.31	19132.690	2.0	49568.450	3.0
328.4710	40.01	-.34	0.000	0.0	30444.088	0.0
328.4796	29.01	-3.64	88605.160	1.0	119039.680	2.0
328.4830	22.01	-1.89	34543.360	3.5	64977.570	3.5
328.4863	27.02	-4.13	140645.400	3.5	171079.300	3.5
328.4863	27.02	-4.13	140645.400	3.5	171079.300	3.5
328.4906	26.00	-3.29	22249.430	3.0	52682.930	2.0
328.4920	16.01	-4.03	128233.070	2.5	158666.450	1.5
328.4936	25.01	-2.89	37851.150	3.0	68284.380	3.0
328.4978	25.01	-4.19	67295.160	4.0	97728.000	3.0
328.4993	26.01	-3.76	31811.870	2.5	62244.570	1.5
328.5002	24.00	-4.26	24303.940	3.0	54736.550	4.0
328.5018	23.01	-.67	20343.000	2.0	50775.470	2.0
328.5020	42.00	-1.40	10888.765	0.0	41329.980	0.0
328.5031	27.00	-3.14	24733.280	2.5	55165.630	2.5
328.5046	22.00	-1.28	18482.860	1.0	48915.070	2.0
328.5114	18.00	-3.89	95399.870	1.0	125831.450	0.0
328.5186	25.01	-2.40	55759.270	3.0	86190.180	2.0
328.5190	26.00	-1.78	24180.848	3.0	54611.720	2.0
328.5220	58.01	-.13	3952.218	0.0	34391.580	0.0
328.5237	22.00	-.97	18593.990	3.0	49024.430	3.0
328.5266	26.00	-4.68	20874.482	3.0	51304.650	4.0
328.5283	28.01	-2.16	68131.210	3.5	98561.220	2.5
328.5338	24.00	-4.23	20520.920	3.0	50950.420	3.0
328.5360	42.00	-.56	16615.449	0.0	47053.514	0.0
328.5406	26.01	-3.85	8680.470	1.5	39109.340	.5
328.5422	28.01	-2.83	99559.330	2.5	129988.050	2.5
328.5481	25.00	-2.05	37148.660	5.5	67576.840	4.5
328.5537	26.00	-3.30	20641.110	4.0	51068.770	5.0
328.5564	28.01	-3.56	105861.190	2.5	136288.600	2.5
328.5599	11.01	.06	268766.670	1.0	299193.750	2.0
328.5610	69.01	-.02	8711.012	0.0	39146.761	0.0
328.5637	24.00	-3.42	20523.690	4.0	50950.420	3.0
328.5640	75.00	-.22	17099.394	0.0	47534.865	0.0
328.5642	25.02	-2.96	109780.400	2.5	140207.090	2.5
328.5660	41.00	-.71	1532.493	0.0	31967.778	0.0
328.5660	62.01	-1.27	1451.835	0.0	31887.120	0.0
328.5663	23.01	-1.08	22273.540	1.0	52700.030	2.0
328.5801	24.01	-2.99	42986.730	1.5	73411.940	1.5
328.5880	40.01	-.16	7985.094	0.0	38418.342	0.0
328.5889	27.00	-2.75	20500.710	1.5	50925.110	1.5
328.5892	22.00	-4.60	16106.080	4.0	46530.450	4.0
328.5908	26.02	-4.46	169277.600	4.0	199701.820	3.0
328.5950	24.01	-.40	39684.000	3.5	70107.830	4.5
328.5962	28.01	-3.64	99418.610	3.5	129842.330	2.5
328.5984	22.01	-1.49	31756.500	1.5	62180.020	1.5
328.5986	24.02	-2.41	71321.800	3.0	101745.300	3.0
328.6007	28.00	-4.33	28569.210	2.0	58992.520	2.0
328.6014	26.00	-2.66	17927.378	1.0	48350.620	1.0
328.6030	58.01	-.59	4436.164	0.0	34868.023	0.0
328.6040	28.01	-4.86	100609.010	2.5	131032.010	2.5
328.6048	25.01	-3.20	39808.140	3.0	70231.070	2.0
328.6068	20.00	-1.95	15315.943	2.0	45738.684	1.0
328.6108	18.02	.39	174375.000	2.0	204797.370	3.0
328.6185	25.01	-3.55	71078.180	1.0	101499.840	2.0
328.6230	62.01	-.60	3871.561	0.0	34301.567	0.0
328.6370	24.01	-2.00	42986.730	1.5	73406.680	.5
328.6440	26.00	-1.66	27394.676	3.0	57813.970	3.0
328.6501	26.01	-3.14	30388.550	4.5	60807.280	4.5
328.6540	62.01	-1.46	2661.698	0.0	33088.834	0.0
328.6555	27.00	-3.50	14036.280	1.5	44454.510	.5
328.6580	90.01	-.53	7904.437	0.0	38331.203	0.0
328.6614	25.01	-2.95	39813.380	2.0	70231.070	2.0
328.6670	76.00	-.68	12905.203	0.0	43331.136	0.0
328.6688	8.03	-.41	606171.500	2.5	636588.500	2.5
328.6715	28.00	-4.52	27260.891	6.0	57677.649	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
328.6754	26.00	-.46	17550.180	3.0	47966.571	3.0
328.6773	22.01	-1.59	15257.530	4.5	45673.750	4.5
328.6824	9.01	-3.42	240092.550	2.0	270508.290	2.0
328.6942	28.00	-2.98	204.786	3.0	30619.440	2.0
328.6949	26.00	-1.80	27559.568	2.0	57974.160	2.0
328.6961	28.00	-2.70	28578.046	3.0	58992.520	2.0
328.7060	77.00	-1.10	9759.560	0.0	40181.883	0.0
328.7102	26.00	-1.52	23711.443	4.0	54124.620	4.0
328.7121	25.01	-1.57	59537.400	4.0	89950.400	3.0
328.7130	75.00	.08	27100.927	0.0	57522.602	0.0
328.7189	27.00	-1.69	15774.040	1.5	46186.410	1.5
328.7208	22.00	-5.30	11531.760	2.0	41943.950	1.0
328.7211	25.01	-2.32	36274.290	2.0	66686.450	3.0
328.7221	28.00	-2.89	13521.352	2.0	43933.428	2.0
328.7250	46.00	-1.33	6533.259	0.0	36953.823	0.0
328.7282	13.02	-1.63	178470.320	1.5	208881.830	2.5
328.7282	13.02	-2.58	178470.320	1.5	208881.830	1.5
328.7379	24.01	-4.19	44307.440	.5	74718.050	1.5
328.7380	42.00	-.27	16534.792	0.0	46954.153	0.0
328.7396	14.03	-3.15	305641.100	.5	336051.550	1.5
328.7397	10.01	-1.16	276276.850	1.5	306687.290	2.5
328.7458	26.01	-2.71	33466.500	4.5	63876.380	5.5
328.7481	25.02	-1.52	86654.070	4.5	117063.740	4.5
328.7553	27.02	-2.00	77121.100	4.5	107530.100	3.5
328.7574	27.00	-.09	25041.160	1.5	55449.970	2.5
328.7577	22.01	-2.69	9518.050	2.5	39926.830	2.5
328.7583	8.01	-.23	208484.240	2.5	238892.960	2.5
328.7590	41.00	-.83	1129.205	0.0	31546.623	0.0
328.7590	77.00	-1.22	7017.204	0.0	37434.622	0.0
328.7627	25.01	-2.41	73395.120	3.0	103803.440	3.0
328.7645	22.01	.53	15265.600	3.5	45673.750	4.5
328.7718	25.01	-4.09	73395.970	2.0	103803.440	3.0
328.7779	28.01	-4.28	68154.310	1.5	98561.220	2.5
328.7790	90.01	-1.03	1451.835	0.0	31867.403	0.0
328.7834	27.00	-3.76	13795.520	2.5	44201.920	2.5
328.7920	41.00	-.34	5887.999	0.0	36302.364	0.0
328.8003	27.00	-4.94	16467.900	4.5	46872.740	3.5
328.8034	24.01	-2.75	34813.060	5.5	65217.610	4.5
328.8040	25.01	-2.41	39826.570	1.0	70231.070	2.0
328.8136	22.01	-2.26	1087.210	3.5	31490.820	3.5
328.8212	28.01	-2.10	105499.050	3.5	135901.960	2.5
328.8281	25.01	-3.43	36274.290	2.0	66676.560	2.0
328.8320	23.01	-1.25	19191.500	6.0	49593.410	5.0
328.8370	8.01	-4.93	231296.050	1.5	261697.500	1.5
328.8395	22.01	-3.00	32767.020	3.5	63168.230	2.5
328.8412	22.01	-1.14	10024.740	2.5	40425.800	1.5
328.8440	23.00	-2.25	9824.580	2.5	40225.380	1.5
328.8444	23.00	-1.33	11100.650	4.5	41501.410	4.5
328.8446	25.00	-3.28	30419.610	2.5	60820.350	2.5
328.8533	25.00	-2.31	34423.270	3.5	64823.210	2.5
328.8537	30.02	-1.79	234384.000	3.0	264783.900	4.0
328.8544	25.00	-4.80	23818.870	.5	54218.710	1.5
328.8553	28.01	-1.92	98467.250	3.5	128867.000	3.5
328.8579	22.01	-1.01	9930.740	1.5	40330.250	.5
328.8579	9.02	-3.21	360435.080	1.5	390834.600	2.5
328.8591	22.00	-2.43	7255.369	2.0	37654.770	2.0
328.8598	25.02	-1.56	109780.400	2.5	140179.740	2.5
328.8633	23.01	-5.08	16340.970	3.0	46739.980	2.0
328.8642	25.00	-.64	37420.240	5.5	67819.170	4.5
328.8647	26.00	-2.03	19552.474	1.0	49951.360	0.0
328.8682	25.01	-4.74	72306.810	2.0	102705.370	3.0
328.8689	16.01	-4.69	109831.280	1.5	140229.780	2.5
328.8799	26.02	-1.56	83237.860	3.0	113635.340	4.0
328.8800	40.01	-1.02	725.918	0.0	31132.145	0.0
328.8830	28.01	-4.93	106369.300	1.5	136766.490	2.5
328.8833	28.01	-2.71	105588.890	4.5	135986.060	3.5
328.8840	76.00	.93	28230.132	0.0	58635.989	0.0
328.8876	22.00	-3.97	11531.760	2.0	41928.528	2.0
328.8886	22.00	-2.21	18462.830	0.0	48859.510	1.0
328.8967	26.00	-1.59	17726.985	2.0	48122.913	3.0
328.8969	26.01	-4.39	36126.410	1.5	66522.320	2.5
328.8979	23.01	-1.84	20343.000	2.0	50738.820	1.0
328.8984	25.01	-2.06	49517.580	5.0	79913.350	4.0
328.9020	42.00	.33	11372.710	0.0	41776.903	0.0
328.9041	28.01	-1.11	98467.250	3.5	128862.490	4.5
328.9046	19.02	.20	212725.400	1.5	243120.600	2.5
328.9106	25.00	-2.08	30425.710	1.5	60820.350	2.5
328.9140	45.00	-1.08	3387.616	0.0	33790.700	0.0
328.9217	28.00	-3.96	14728.847	0.0	45122.460	1.0
328.9344	26.01	-1.47	30764.460	3.5	61156.900	3.5
328.9370	70.01	-.65	0.000	0.0	30400.958	0.0
328.9378	28.01	-4.77	99844.130	3.5	130236.260	2.5
328.9383	23.01	-.95	8841.970	3.0	39234.050	3.0
328.9384	18.00	-3.19	95399.870	1.0	125791.940	2.0
328.9431	23.00	-3.18	11100.650	4.5	41492.290	3.5
328.9433	26.00	-1.93	22838.320	2.0	53229.940	1.0
328.9551	23.00	-2.53	9544.540	.5	39935.070	1.5
328.9609	22.00	-1.11	18525.070	2.0	48915.070	2.0
328.9640	45.00	-.47	14679.669	0.0	45078.132	0.0
328.9780	28.01	-1.00	105588.890	4.5	135977.310	4.5
328.9825	17.02	-.18	173736.000	.5	204124.000	1.5
328.9840	42.00	.22	16696.107	0.0	47092.722	0.0
328.9875	29.01	-3.73	108014.660	3.0	138402.200	3.0
328.9970	28.01	-.57	98467.250	3.5	128853.910	4.5
328.9974	28.01	-2.87	98467.250	3.5	128853.870	2.5
328.9995	15.01	-3.36	107923.570	2.0	138310.000	2.0
329.0072	28.01	-2.17	105668.780	2.5	136054.500	1.5
329.0110	8.01	-.65	208346.170	.5	238731.540	1.5
329.0127	25.00	-2.65	30354.210	3.5	60739.420	3.5
329.0154	28.01	-2.53	106007.890	2.5	136392.850	3.5
329.0220	78.00	-.79	10082.190	0.0	40475.294	0.0
329.0236	23.01	-.85	20089.560	1.0	50473.760	1.0
329.0249	22.01	-1.15	32025.500	2.5	62409.580	3.5
329.0260	76.00	-.67	2661.698	0.0	33054.433	0.0
329.0265	18.00	-3.58	95399.870	1.0	125783.800	1.0
329.0340	58.01	-.71	3548.931	0.0	33940.927	0.0
329.0421	29.01	.11	115569.200	5.0	145951.700	6.0
329.0423	29.01	-1.69	115639.020	2.0	146021.500	3.0
329.0502	28.01	-2.50	105668.780	2.5	136050.530	2.5
329.0510	28.00	-3.42	29481.020	4.0	59862.690	5.0
329.0534	28.01	-3.12	25036.380	2.5	55417.830	3.5
329.0541	29.00	-.19	40893.363	0.0	71283.502	0.0
329.0580	58.01	-.91	4758.794	0.0	35148.573	0.0
329.0613	23.00	-8.82	2311.370	3.5	32692.090	3.5
329.0683	28.01	-2.97	23796.180	1.5	54176.260	.5
329.0713	26.00	-1.47	17550.180	3.0	47929.981	4.0
329.0778	27.01	-3.72	17771.500	3.0	48150.700	3.0
329.0820	42.00	.31	11775.998	0.0	42163.561	0.0
329.0970	18.00	-3.89	95399.870	1.0	125777.300	1.0
329.0990	26.00	-2.66	17927.378	1.0	48304.623	2.0
329.1000	69.01	-.80	0.000	0.0	30385.901	0.0
329.1030	23.01	-1.92	18353.890	3.0	48730.760	4.0
329.1050	72.00	-.84	6533.259	0.0	36918.698	0.0
329.1054	22.00	-1.88	18482.860	1.0	48859.510	1.0
329.1060	29.01	-1.70	115569.200	5.0	145945.800	5.0
329.1060	41.01	-1.00	3468.273	0.0	33853.620	0.0
329.1260	22.00	-7.08	11531.760	2.0	41906.510	2.0
329.1261	23.01	-1.90	34228.790	3.0	64603.530	3.0
329.1391	24.00	-2.36	24833.860	3.0	55207.400	4.0
329.1428	25.01	-2.68	49427.320	4.0	79800.520	4.0
329.1438	18.01	-1.81	174820.930	.5	205194.040	1.5
329.1439	26.00	-4.67	29798.960	4.0	60172.060	4.0
329.1480	64.00	.17	1693.808	0.0	32075.278	0.0
329.1490	29.01	-3.05	118142.970	3.0	148515.600	4.0
329.1646	28.01	-2.03	105588.890	4.5	135960.080	4.5
329.1675	23.00	-.81	323.420	3.5	30694.340	3.5
329.1722	25.01	-3.79	36274.290	2.0	66644.780	1.0
329.1740	90.01	-.29	6129.972	0.0	36509.042	0.0
329.1754	24.01	-.57	34659.480	.5	65029.670	.5
329.1804	29.01	-2.56	115662.770	4.0	146032.500	5.0
329.1840	17.01	-4.26	147053.700	2.0	177423.100	1.0
329.1853	14.03	-2.89	305682.270	1.5	336051.550	2.5
329.1853	14.03	-3.85	305682.270	1.5	336051.550	1.5
329.1858	24.00	-3.88	20520.920	3.0	50890.150	2.0
329.1904	10.01	-1.87	252953.540	1.5	283322.350	1.5
329.2014	26.00	-.28	26224.961	3.0	56592.760	4.0
329.2020	41.01	.75	15405.586	0.0	45782.072	0.0
329.2045	26.02	-2.44	83237.860	3.0	113605.370	3.0
329.2078	22.00	-.56	7255.369	2.0	37622.573	3.0
329.2080	27.00	-1.23	16195.680	.5	46562.870	1.5
329.2087	28.01	-.47	105588.890	4.5	135956.010	5.5
329.2100	15.04	-1.43	445814.000	1.5	476181.000	1.5
329.2100	15.04	-.47	445814.000	2.5	476181.000	1.5
329.2100	15.04	-.73	445814.000	1.5	476181.000	.5
329.2129	29.01	-2.70	115662.770	4.0	146029.500	4.0
329.2153	28.01	-4.71	70778.120	3.5	101144.630	3.5
329.2162	25.00	-2.33	34938.700	4.5	65305.130	3.5
329.2210	64.01	.20	8791.670	0.0	39166.403	0.0
329.2212	25.02	-4.13	109841.120	3.5	140207.090	2.5
329.2215	27.00	-.74	25041.160	1.5	55407.100	1.5
329.2310	42.01	.96	25165.146	0.0	55538.956	0.0
329.2393	29.00	-1.25	41538.623	0.0	71911.668	0.0
329.2409	27.00	-1.71	18389.570	1.5	48753.720	1.5
329.2469	24.02	-4.44	71736.000	5.0	102099.600	4.0
329.2480	73.00	-1.31	9920.875	0.0	40293.117	0.0
329.2486	28.01	-3.64	106369.300	1.5	136732.740	1.5
329.2520	90.01	-.40	6613.917	0.0	36985.790	0.0
329.2541	23.00	-2.22	9636.960	1.5	39999.890	2.5
329.2572	28.01	-1.49	105668.780	2.5	136031.430	2.5
329.2591	26.00	-1.25	17927.378	1.0	48289.852	1.0
329.2630	25.01	-2.52	52373.180	3.0	82735.290	2.0
329.2661	27.00	-1.70	24627.790	4.5	54989.620	3.5
329.2681	26.02	-4.05	93388.750	4.0	123750.390	3.0
329.2726	29.01	-.77	115662.770	4.0	146024.000	4.0
329.2819	28.01	-1.03	104298.230	4.5	134658.600	4.5
329.2827	29.00	-3.22	11211.395	0.0	41580.437	0.0
329.2870	28.01	-.35	98467.250	3.5	128827.150	3.5
329.2877	25.00	-1.53	34463.370	1.5	64823.210	2.5
329.2921	18.01	-4.41	174820.930	.5	205180.360	.5
329.2964	24.01	-1.66	47354.630	2.5	77713.660	1.5
329.2997	29.01	-1.82	115662.770	4.0	146021.500	3.0
329.3060	29.01	-2.69	117747.450	3.0	148105.600	4.0
329.3077	13.01	-4.97	95348.200	0.0	125706.200	1.0
329.3083	26.02	-4.75	93392.450	3.0	123750.390	3.0
329.3137	23.01	-.25	34228.790	3.0	64586.230	2.0
329.3142	26.00	-3.10	12968.552	2.0	43325.946	3.0
329.3206	27.00	-.15	24326.110	3.5	54682.910	4.5
329.3228	27.01	-3.73	18031.500	2.0	48388.100	2.0
329.3267	25.00	-2.39	37148.660	5.5	67504.900	5.5
329.3320	29.01	-1.04	117747.450	3.0	148103.200	3.0
329.3338	9.01	-2.55	240152.710	1.0	270508.290	2.0
329.3346	28.01	-1.70	105588.890	4.5	135944.400	3.5
329.3370	62.01	-1.09	1935.780	0.0	32299.814	0.0
329.3474	22.01	-1.85	9975.920	1.5	40330.250	.5
329.3575	23.03	-2.20	255445.500	3.0	285798.900	2.0
329.3590	58.01	-.96	4436.164	0.0	34798.170	0.0
329.3638	18.01	-.34	160239.350	1.5	190592.170	1.5
329.3659	28.00	-.39	27414.893	2.0	57767.520	1.0
329.3710	74.00	-.55	12098.628	0.0	42459.528	0.0
329.3724	28.01	-4.29	100309.290	5.5	130661.320	5.5
329.3835	24.00	-1.18	27816.880	5.0	58167.890	4.0
329.3857	27.00	-1.15	16778.160	2.5	47128.960	2.5
329.3921	18.01	-4.33	170530.310	3.5	200880.520	3.5
329.3940	90.01	-.50	9114.300	0.0	39473.080	0.0
329.4039	25.00	-2.28	30411.740	.5	60760.870	1.5
329.4065	23.00	-3.90	2311.370	3.5	32660.260	2.5
329.4080	64.00	.03	483.945	0.0	30841.435	0.0
329.4099	27.00	-.44	25041.160	1.5	55389.730	1.5
329.4110	44.00	-1.05	0.000	0.0	30357.213	0.0
329.4131	14.02	-.80	227665.090	2.0	258013.370	3.0
329.4224	8.01	-3.79	231350.080	2.5	261697.500	1.5
329.4280	23.03	-.12	226796.300	2.0	257143.200	2.0
329.4280	45.00	-.07	12663.231	0.0	43018.878	0.0
329.4337	29.01	-1.20	115639.020	2.0	145985.400	2.0
329.4342	26.02	-3.88	83237.860	3.0	113584.200	2.0
329.4360	41.01	.53	15808.874	0.0	46163.784	0.0
329.4376	22.00	-7.39	11639.804	3.0	41985.830	3.0
329.4401	22.01	-3.65	34768.500	4.5	65094.290	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
329.4454	24.00	-1.61	25106.340	3.0	55451.640	3.0
329.4476	9.02	-2.64	466978.150	1.5	497323.250	2.5
329.4525	26.02	-3.24	87901.870	3.0	118246.520	3.0
329.4542	27.00	-.64	25232.790	.5	55577.280	1.5
329.4581	23.00	-4.16	2112.320	.5	32456.450	1.5
329.4611	28.01	-2.16	104298.230	4.5	134642.090	3.5
329.4750	26.02	-3.57	90483.590	3.0	120826.170	2.0
329.4830	75.00	-.29	15647.559	0.0	45998.139	0.0
329.4850	42.00	-.65	11050.080	0.0	41400.475	0.0
329.4890	22.01	-.59	34543.360	3.5	64884.650	2.5
329.4893	25.00	-3.80	30419.610	2.5	60760.870	1.5
329.4896	22.00	.07	18695.230	4.0	49036.460	4.0
329.4931	24.01	-.75	47372.750	1.5	77713.660	1.5
329.4959	25.00	-2.30	37164.250	6.5	67504.900	5.5
329.4977	26.02	-3.97	105895.350	1.0	136235.840	1.0
329.4988	9.02	-3.79	466982.860	2.5	497323.250	2.5
329.5001	28.01	-2.85	105861.190	2.5	136201.460	3.5
329.5006	28.01	-4.53	106620.530	3.5	136960.750	2.5
329.5042	23.00	-2.82	9544.540	.5	39884.430	1.5
329.5058	26.01	-3.50	31811.870	2.5	62151.610	2.5
329.5073	9.02	-2.51	466982.860	2.5	497322.460	3.5
329.5097	29.01	-.55	115639.020	2.0	145978.400	3.0
329.5098	25.01	-3.44	52373.180	3.0	82712.550	3.0
329.5103	28.01	-1.84	106620.530	3.5	136959.860	2.5
329.5109	8.01	-1.03	208392.270	1.5	238731.540	1.5
329.5116	28.01	-3.48	99442.860	4.5	129782.070	3.5
329.5135	29.01	-4.86	118142.970	3.0	148482.000	3.0
329.5137	24.00	-1.48	31048.850	1.0	61387.860	0.0
329.5180	25.02	-2.89	109841.120	3.5	140179.740	2.5
329.5235	26.01	-2.65	31387.980	2.5	61726.090	3.5
329.5290	58.01	-.27	3952.218	0.0	34298.561	0.0
329.5320	90.01	-.98	6210.629	0.0	36556.696	0.0
329.5330	73.00	-.50	11130.738	0.0	41476.712	0.0
329.5355	25.01	-3.09	39813.380	2.0	70150.390	1.0
329.5423	24.01	-.36	33694.470	5.5	64030.850	6.5
329.5450	27.01	-4.88	56010.600	2.0	86346.730	3.0
329.5460	28.01	-2.47	68131.210	3.5	98467.250	3.5
329.5467	28.01	-.58	98467.250	3.5	128803.230	2.5
329.5472	23.00	-2.19	11100.650	4.5	41436.580	3.5
329.5508	23.03	.09	255463.300	2.0	285798.900	2.0
329.5520	90.01	-.80	8952.985	0.0	39297.210	0.0
329.5531	25.01	-1.55	49465.130	3.0	79800.520	4.0
329.5537	25.00	-1.71	17052.290	4.5	47387.620	3.5
329.5556	25.00	-4.86	30425.710	1.5	60760.870	1.5
329.5582	25.00	-2.09	34250.520	5.5	64585.440	4.5
329.5634	22.00	-1.52	18525.070	2.0	48859.510	1.0
329.5634	24.01	-1.90	38509.070	3.5	68843.510	3.5
329.5657	21.01	-3.75	27917.690	1.0	58251.920	2.0
329.5684	24.00	-2.92	27223.050	2.0	57557.030	3.0
329.5752	28.01	-4.15	100609.010	2.5	130942.360	1.5
329.5759	28.01	-4.44	100609.010	2.5	130942.300	1.5
329.5761	25.01	-3.57	51553.060	5.0	81886.330	5.0
329.5782	23.00	-2.94	9544.540	.5	39877.620	.5
329.5810	62.01	-.98	806.575	0.0	31148.130	0.0
329.5811	26.01	-3.00	8680.470	1.5	39013.280	1.5
329.5834	25.00	.33	37420.240	5.5	67752.840	5.5
329.5904	28.01	-1.23	104646.520	3.5	134978.470	2.5
329.5997	25.02	-4.15	90936.220	1.5	121267.320	2.5
329.6010	41.00	-.44	2742.356	0.0	33082.070	0.0
329.6017	25.00	-2.44	17451.520	2.5	47782.430	1.5
329.6035	25.02	-2.49	86520.940	2.5	116851.690	3.5
329.6054	23.01	-2.47	22273.540	1.0	52604.110	1.0
329.6067	28.00	-3.81	28542.113	5.0	58872.570	4.0
329.6110	44.00	-.30	13550.463	0.0	43889.256	0.0
329.6190	58.01	-.10	7178.519	0.0	37516.576	0.0
329.6203	22.00	-1.81	18695.230	4.0	49024.430	3.0
329.6227	26.01	-3.46	30764.460	3.5	61093.440	2.5
329.6233	23.00	-.76	9824.580	2.5	40153.510	2.5
329.6244	25.01	-2.72	52383.720	4.0	82712.550	3.0
329.6257	28.00	-1.46	27414.893	2.0	57743.596	3.0
329.6348	22.00	-.90	18037.225	4.0	48365.090	3.0
329.6400	40.01	-.47	7662.464	0.0	37998.588	0.0
329.6400	42.00	-.66	11775.998	0.0	42112.122	0.0
329.6459	26.00	-2.09	20874.482	3.0	51201.330	2.0
329.6517	26.00	-3.18	21038.987	2.0	51365.300	3.0
329.6600	90.01	-.24	12824.546	0.0	43158.680	0.0
329.6637	23.00	-4.15	9636.960	1.5	39962.170	2.5
329.6700	75.00	.17	18793.202	0.0	49126.566	0.0
329.6720	45.00	-.73	12663.231	0.0	42996.411	0.0
329.6770	2.00	-2.36	166278.000	0.0	196610.720	0.0
329.6788	25.01	-2.83	39826.570	1.0	70150.390	1.0
329.6814	25.00	-1.58	34938.700	4.5	65262.280	4.5
329.6823	17.02	-2.99	209182.800	1.5	239506.300	1.5
329.6836	26.01	-2.66	31999.120	3.5	62322.500	3.5
329.6839	26.00	-4.40	22845.856	5.0	53169.210	6.0
329.6877	25.00	-.93	17451.520	2.5	47774.520	3.5
329.6880	58.01	-.05	6452.602	0.0	36784.310	0.0
329.6959	22.00	-6.41	11531.760	2.0	41854.010	1.0
329.6990	75.00	-.08	16212.162	0.0	46542.858	0.0
329.7028	28.01	-3.28	100010.170	.5	130331.780	1.5
329.7028	18.01	-3.39	172829.580	1.5	203151.200	2.5
329.7086	22.00	-1.11	18593.990	3.0	48915.070	2.0
329.7169	28.01	-2.35	91800.050	4.5	122120.370	5.5
329.7204	29.01	-.68	115665.400	1.0	145985.400	2.0
329.7215	27.00	-1.18	24627.790	4.5	54947.680	5.5
329.7262	22.00	-.80	18482.860	1.0	48802.320	0.0
329.7329	29.01	-2.34	117747.450	3.0	148066.300	2.0
329.7334	13.01	-4.52	95547.900	2.0	125866.700	1.0
329.7337	24.00	-2.09	24833.860	3.0	55152.630	2.0
329.7347	25.01	-4.49	40759.500	0.0	71078.180	1.0
329.7431	13.01	-5.00	95548.800	1.0	125866.700	1.0
329.7473	24.00	-1.31	35862.820	4.0	66180.340	5.0
329.7499	28.01	-.94	105668.780	2.5	135986.060	3.5
329.7517	23.01	-2.20	20156.640	0.0	50473.760	1.0
329.7565	29.01	-2.01	115639.020	2.0	145955.700	1.0
329.7604	28.01	-.64	104298.230	4.5	134614.550	5.5
329.7607	28.01	-1.07	106620.530	3.5	136936.820	3.5
329.7670	22.00	-7.70	11776.806	4.0	42092.520	4.0
329.7679	29.01	-3.28	115662.770	4.0	145978.400	3.0
329.7724	10.01	-.33	219130.780	2.5	249445.990	2.5
329.7783	22.00	-.51	18525.070	2.0	48839.740	3.0
329.7808	28.01	-4.17	105668.780	2.5	135983.220	1.5
329.7826	25.00	-2.26	30354.210	3.5	60668.490	4.5
329.7829	29.01	-4.09	117747.450	3.0	148061.700	3.0
329.7830	90.01	-.50	9194.957	0.0	39517.927	0.0
329.7879	26.01	-2.26	31811.870	2.5	62125.660	1.5
329.7881	24.01	-3.43	38269.670	3.5	68583.440	2.5
329.7915	27.00	-4.92	26232.050	3.5	56545.510	2.5
329.7960	44.00	-.85	9033.642	0.0	39355.417	0.0
329.8000	8.04	-1.75	677847.000	0.0	708168.407	0.0
329.8013	25.01	-1.30	49427.320	4.0	79739.880	5.0
329.8018	28.00	-1.82	28212.997	0.0	58525.507	1.0
329.8045	25.01	-3.92	36364.300	1.0	66676.560	2.0
329.8054	23.00	-2.36	323.420	3.5	30635.600	2.5
329.8133	26.00	-2.25	17927.378	1.0	48238.832	2.0
329.8140	24.00	-4.12	31364.330	3.0	61675.720	2.0
329.8148	23.00	.13	553.020	4.5	30864.340	5.5
329.8190	22.01	-2.49	9363.710	.5	39674.640	.5
329.8224	25.00	-.57	27201.540	2.5	57512.160	1.5
329.8308	24.00	-1.89	24897.550	4.0	55207.400	4.0
329.8310	28.01	-3.37	103663.500	1.5	133973.330	2.5
329.8312	24.00	-3.73	35870.530	4.0	66180.340	5.0
329.8315	25.01	-2.21	51553.060	5.0	81862.840	4.0
329.8367	23.03	.29	255747.600	3.0	286056.900	3.0
329.8370	26.00	-4.83	22845.856	5.0	53155.130	4.0
329.8385	28.01	-1.34	104298.230	4.5	134607.370	4.5
329.8518	26.02	-2.46	199262.440	3.0	229570.360	2.0
329.8528	26.00	-2.65	27666.334	1.0	57974.160	2.0
329.8676	27.00	-.86	16195.680	.5	46502.150	.5
329.8731	23.01	-1.00	9097.810	4.0	39403.770	4.0
329.8751	28.01	-3.00	98561.220	2.5	128867.000	3.5
329.8803	25.00	-1.89	34343.900	4.5	64649.200	3.5
329.8861	28.01	-1.68	68735.980	2.5	99040.750	1.5
329.8862	28.01	-4.86	106022.790	.5	136327.550	1.5
329.9002	25.02	-3.86	115762.600	1.5	146066.070	1.5
329.9026	23.00	-5.18	2153.200	1.5	32456.450	1.5
329.9053	12.02	-0.00	531833.100	3.0	562136.100	2.0
329.9063	26.00	-2.73	27394.676	3.0	57697.590	4.0
329.9086	23.00	-.48	9544.540	.5	39847.240	1.5
329.9102	27.00	-2.83	23855.620	4.5	54158.170	4.5
329.9110	25.01	-1.82	55759.270	3.0	86061.750	3.0
329.9111	25.00	-1.96	17451.520	2.5	47753.990	2.5
329.9116	25.01	-4.86	55371.300	3.0	85673.720	4.0
329.9208	9.01	-4.54	264969.270	2.0	295270.850	3.0
329.9248	23.00	-2.11	9824.580	2.5	40125.790	3.5
329.9302	10.02	-1.36	379834.000	1.0	410134.720	1.0
329.9357	8.02	-1.32	267257.290	0.0	297557.500	1.0
329.9411	21.01	-2.16	27443.650	2.0	57743.370	3.0
329.9418	22.00	-2.62	7255.369	2.0	37555.021	3.0
329.9437	22.01	-2.96	907.960	1.5	31207.440	2.5
329.9467	28.01	-1.14	104298.230	4.5	134597.430	5.5
329.9508	26.00	-3.89	12560.933	3.0	42859.756	2.0
329.9586	23.00	-3.90	9636.960	1.5	39935.070	1.5
329.9610	41.00	-.82	2097.096	0.0	32403.708	0.0
329.9700	28.01	-3.28	71457.740	3.5	101754.800	2.5
329.9724	26.02	-2.53	199212.720	4.0	229509.560	3.0
329.9770	73.00	-1.19	5968.656	0.0	36273.798	0.0
329.9775	26.01	-1.79	54063.530	.5	84359.900	1.5
329.9801	26.02	-4.46	121241.670	4.0	151537.800	4.0
329.9822	24.00	-3.16	35884.400	5.0	66180.340	5.0
329.9959	23.00	-1.92	9824.580	2.5	40119.260	2.5
329.9976	28.00	-1.57	28578.046	3.0	58872.570	4.0
330.0044	26.02	-3.62	105906.230	2.0	136200.130	3.0
330.0057	26.01	-4.49	68000.820	4.5	98294.600	5.5
330.0075	9.01	-.19	258930.110	2.0	289223.730	1.0
330.0125	24.01	-3.35	34631.140	4.5	64924.300	3.5
330.0150	58.01	-.09	5726.684	0.0	36028.337	0.0
330.0181	28.01	-2.50	98561.220	2.5	128853.870	2.5
330.0195	29.01	-3.39	116643.960	3.0	146936.480	2.0
330.0201	26.02	-3.87	121241.670	4.0	151534.130	3.0
330.0430	29.01	-4.17	118071.340	1.0	148361.700	1.0
330.0437	29.01	-.83	115665.400	1.0	145955.700	1.0
330.0460	45.00	-.28	10243.505	0.0	40542.312	0.0
330.0505	25.00	-2.36	34423.270	3.5	64712.940	2.5
330.0608	22.00	-3.80	11639.804	3.0	41928.528	2.0
330.0610	90.01	-2.08	1451.835	0.0	31749.265	0.0
330.0635	29.01	-.65	115639.020	2.0	145927.500	2.0
330.0820	74.00	-.75	4758.794	0.0	35054.296	0.0
330.0878	29.01	-.09	117747.450	3.0	148033.700	4.0
330.0895	23.01	-2.00	18293.870	2.0	48579.960	3.0
330.0895	27.00	-3.28	25269.250	3.5	55555.340	2.5
330.0930	18.01	-4.71	143107.600	2.5	173393.380	2.5
330.0949	17.02	-.88	173736.000	.5	204021.600	.5
330.0955	25.00	-1.73	27201.540	2.5	57487.080	2.5
330.0970	75.00	-.80	14921.641	0.0	45215.767	0.0
330.0980	62.01	-1.31	1451.835	0.0	31745.869	0.0
330.1096	26.02	-4.89	93412.930	2.0	123697.180	2.0
330.1114	26.00	-4.20	17550.180	3.0	47834.260	3.0
330.1198	24.01	-1.23	39824.520	4.5	70107.830	4.5
330.1218	26.00	-2.04	22946.810	1.0	53229.940	1.0
330.1229	29.01	.02	115662.770	4.0	145945.800	5.0
330.1239	25.01	-3.05	49517.580	5.0	79800.520	4.0
330.1344	26.02	-1.89	199139.760	5.0	229421.730	4.0
330.1347	26.02	-3.35	158729.890	3.0	189011.840	4.0
330.1348	11.01	-1.43	300510.920	1.0	330792.850	2.0
330.1348	11.01	-1.43	300510.920	1.0	330792.850	2.0
330.1383	37.00	-7.66	0.000	0.0	30290.336	0.0
330.1427	9.01	-3.83	240092.550	2.0	270373.760	1.0
330.1455	26.00	-4.56	17550.180	3.0	47831.132	2.0
330.1507	25.01	-3.79	36364.300	1.0	66644.780	1.0
330.1520	24.01	-.60	38563.150	4.5	68843.510	3.5
330.1523	24.00	-.78	35813.730	3.0	66094.060	4.0
330.1543	8.01	-1.40	208346.170	.5	238626.320	.5
330.1547	37.00	-7.84	0.000	0.0	30288.831	0.0
330.1560	76.00	-.23	0.000	0.0	30288.712	0.0
330.1590	44.00	-1.17	0.000	0.0	30288.437	0.0
330.1600	75.00	-.31	14518.354	0.0	44806.699	0.0
330.1680	62.01	-.72	3871.561	0.0	34159.172	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
330.1681	22.01	-1.64	9395.760	1.5	39674.640	.5
330.1689	28.01	-4.11	106620.530	3.5	136899.340	2.5
330.1730	38.00	-.53	14195.724	0.0	44482.876	0.0
330.1788	24.02	-2.93	128753.900	2.0	159031.800	2.0
330.1806	25.00	-2.15	38008.700	5.5	68286.440	4.5
330.1821	24.02	-2.41	71166.100	2.0	101443.700	2.0
330.1860	78.00	-.62	6533.259	0.0	36819.219	0.0
330.1913	26.00	-1.92	26105.908	6.0	56382.664	5.0
330.1921	26.02	-4.99	84671.870	3.0	114948.550	3.0
330.1950	63.01	.61	24035.941	0.0	54321.076	0.0
330.2037	28.01	-1.80	105668.780	2.5	135944.400	3.5
330.2078	22.01	-2.12	1215.580	4.5	31490.820	3.5
330.2123	28.01	-3.97	106620.530	3.5	136895.360	3.5
330.2130	46.00	-.01	10001.532	0.0	40285.016	0.0
330.2186	24.00	-2.48	25177.390	4.0	55451.640	3.0
330.2187	18.02	.24	174375.000	2.0	204649.240	2.0
330.2230	75.00	-.32	14921.641	0.0	45204.208	0.0
330.2274	25.02	-1.68	86578.240	3.5	116851.690	3.5
330.2277	26.02	-3.73	90423.680	2.0	120697.100	1.0
330.2368	11.00	-1.70	0.000	.5	30272.580	1.5
330.2450	69.01	-.84	161.315	0.0	30441.864	0.0
330.2544	26.02	-3.66	105929.160	3.0	136200.130	3.0
330.2590	30.00	.47	32343.666	0.0	62622.932	0.0
330.2627	26.02	-2.41	199300.150	2.0	229570.360	2.0
330.2628	24.01	-4.00	39684.000	3.5	69954.200	2.5
330.2663	28.01	-2.80	103653.030	3.5	133922.910	4.5
330.2670	40.01	-.20	9920.875	0.0	40199.407	0.0
330.2720	26.01	-4.10	36252.960	2.5	66522.320	2.5
330.2764	23.02	-4.82	56669.050	1.5	86938.010	2.5
330.2783	27.00	-1.28	24627.790	4.5	54896.570	3.5
330.2820	24.01	-2.71	38315.000	2.5	68583.440	2.5
330.2855	26.01	-3.60	8391.920	2.5	38660.040	3.5
330.2867	24.00	-1.07	24833.860	3.0	55101.870	3.0
330.2894	26.01	-3.47	69650.540	2.5	99918.300	1.5
330.2940	30.00	-.04	32343.666	0.0	62619.723	0.0
330.2956	23.00	-7.68	2424.890	4.5	32692.090	3.5
330.2978	11.00	-2.00	0.000	.5	30266.990	.5
330.3009	22.00	-5.93	11639.804	3.0	41906.510	2.0
330.3094	28.01	-.91	98561.220	2.5	128827.150	3.5
330.3110	57.01	-.65	1855.123	0.0	32129.622	0.0
330.3210	75.01	.69	14760.326	0.0	45033.908	0.0
330.3241	26.00	-3.49	24435.764	2.0	54600.350	3.0
330.3243	25.01	-2.74	43131.400	2.0	73395.970	2.0
330.3269	14.00	-4.93	49399.670	1.0	79664.000	1.0
330.3287	25.00	-1.01	27248.000	1.5	57512.160	1.5
330.3331	25.00	-2.14	35041.370	3.5	65305.130	3.5
330.3335	25.01	-3.60	43131.400	2.0	73395.120	3.0
330.3340	42.00	-.07	16615.449	0.0	46887.840	0.0
330.3421	25.01	-2.91	59537.400	4.0	89800.340	4.0
330.3460	26.01	-3.34	8846.760	.5	39109.340	.5
330.3512	29.01	-1.52	115665.400	1.0	145927.500	2.0
330.3514	29.01	-1.08	115639.020	2.0	145901.100	1.0
330.3523	22.00	-.78	18462.830	0.0	48724.830	1.0
330.3531	26.00	-2.78	17550.180	3.0	47812.104	4.0
330.3557	26.02	-4.23	87901.870	3.0	118163.560	2.0
330.3569	26.00	-1.21	24338.766	3.0	54600.350	3.0
330.3600	92.01	-1.38	241.973	0.0	30511.981	0.0
330.3631	28.01	-2.46	98561.220	2.5	128822.230	1.5
330.3634	25.01	-3.47	36364.300	1.0	66625.280	0.0
330.3661	25.00	-.64	37630.620	4.5	67891.360	3.5
330.3663	24.00	-3.78	24056.110	5.0	54316.830	6.0
330.3720	23.03	-.72	226521.600	0.0	256781.800	1.0
330.3738	28.01	-.53	106620.530	3.5	136880.560	4.5
330.3750	75.00	-.68	11534.025	0.0	41802.659	0.0
330.3821	27.00	-1.21	16195.680	.5	46454.950	1.5
330.3878	27.00	-1.50	14399.280	.5	44658.030	1.5
330.4141	27.00	.03	24733.280	2.5	54989.620	3.5
330.4219	26.02	-1.83	98661.880	1.0	128917.510	2.0
330.4220	42.00	-.52	11050.080	0.0	41314.409	0.0
330.4239	21.01	-1.26	30815.650	1.0	61071.100	1.0
330.4240	90.00	-.47	0.000	0.0	30264.145	0.0
330.4299	7.02	-.45	311691.300	.5	341946.200	1.5
330.4353	26.00	-2.52	27559.568	2.0	57813.970	3.0
330.4376	24.00	-2.16	24282.340	4.0	54536.530	5.0
330.4380	73.00	-.96	9920.875	0.0	40183.738	0.0
330.4424	25.01	-3.33	43131.400	2.0	73385.150	1.0
330.4429	26.01	-3.23	31811.870	2.5	62065.570	3.5
330.4470	23.01	-1.20	20522.140	1.0	50775.470	2.0
330.4506	28.01	-4.04	100078.780	1.5	130331.780	1.5
330.4520	62.01	-1.20	0.000	0.0	30261.581	0.0
330.4550	27.02	-4.99	139743.400	2.5	169996.000	1.5
330.4682	27.00	-1.87	25269.250	3.5	55520.640	3.5
330.4732	24.01	-2.69	38509.070	3.5	68760.000	3.5
330.4789	27.00	-1.84	18775.010	.5	49025.420	1.5
330.4830	41.00	.39	13066.518	0.0	43325.261	0.0
330.4840	58.01	-.07	5646.026	0.0	35904.677	0.0
330.4877	24.02	-3.81	128782.200	3.0	159031.800	2.0
330.4881	25.00	-.56	34463.370	1.5	64712.940	2.5
330.4886	25.01	-1.03	51553.060	5.0	81802.580	6.0
330.4942	11.01	-.81	300391.590	0.0	330640.600	1.0
330.4942	11.01	-.81	300391.590	0.0	330640.600	1.0
330.4944	28.00	-.20	27580.411	5.0	57829.405	5.0
330.5008	30.02	-2.00	234384.000	3.0	264632.400	3.0
330.5110	23.00	-2.10	9636.960	1.5	39884.430	1.5
330.5128	8.01	-.69	208484.240	2.5	238731.540	1.5
330.5148	26.02	-2.25	199262.440	3.0	229509.560	3.0
330.5150	40.01	-.54	241.973	0.0	30497.786	0.0
330.5180	62.01	-.87	2661.698	0.0	32917.236	0.0
330.5217	26.02	-1.83	83358.880	2.0	113605.370	3.0
330.5236	24.00	-.14	35934.020	6.0	66180.340	5.0
330.5271	27.02	-1.90	76518.900	5.5	106764.900	4.5
330.5298	22.01	-1.41	32025.500	2.5	62271.250	2.5
330.5298	22.00	-.38	18593.990	3.0	48839.740	3.0
330.5499	25.01	-3.39	43636.900	4.0	73780.810	3.0
330.5560	42.00	-.31	10646.793	0.0	40898.853	0.0
330.5611	26.01	-2.77	31483.200	3.5	61726.090	3.5
330.5663	26.02	-3.23	199327.950	1.0	229570.360	2.0
330.5707	28.01	-.52	98561.220	2.5	128803.230	2.5
330.5711	22.00	-1.62	18482.860	1.0	48724.830	1.0
330.5723	27.00	-.54	25041.160	1.5	55283.020	2.5
330.5730	70.01	.06	31456.433	0.0	61706.937	0.0
330.5740	26.00	-4.13	26351.049	5.0	56592.760	4.0
330.5758	25.00	-2.85	34343.900	4.5	64585.440	4.5
330.5765	22.00	-.60	18482.860	1.0	48724.340	2.0
330.5767	26.00	-4.04	12968.552	2.0	43210.011	2.0
330.5835	26.00	-1.59	24506.902	2.0	54747.740	1.0
330.5838	8.02	-2.36	294221.650	3.0	324462.460	2.0
330.5854	23.00	-4.27	9636.960	1.5	39877.620	.5
330.5900	42.00	.44	21454.900	0.0	51703.849	0.0
330.5901	18.01	-4.06	143107.600	2.5	173347.830	1.5
330.5930	92.01	-.86	0.000	0.0	30248.674	0.0
330.5972	26.00	-.66	17726.985	2.0	47966.571	3.0
330.6010	69.01	-.75	8872.327	0.0	39120.269	0.0
330.6015	22.01	-4.65	9363.710	.5	39602.900	1.5
330.6027	25.00	-2.37	27248.080	1.5	57487.080	2.5
330.6120	72.00	-.97	4516.821	0.0	34763.757	0.0
330.6170	44.00	-.34	8711.012	0.0	38957.491	0.0
330.6173	26.02	-3.28	93512.640	4.0	123750.390	3.0
330.6230	76.00	-.15	12663.231	0.0	42909.161	0.0
330.6263	26.01	-3.64	30388.550	4.5	60625.470	5.5
330.6280	40.01	-.32	241.973	0.0	30487.445	0.0
330.6302	23.00	-4.63	2112.320	.5	32348.890	.5
330.6329	23.00	-4.34	2220.130	2.5	32456.450	1.5
330.6346	26.00	-.10	24574.655	4.0	54810.820	4.0
330.6359	26.00	-.98	17927.378	1.0	48163.427	2.0
330.6387	24.00	-3.50	24093.160	2.0	54328.950	3.0
330.6390	62.01	-.02	3871.561	0.0	34116.027	0.0
330.6397	29.01	-2.76	115665.400	1.0	145901.100	1.0
330.6397	12.02	.19	531563.000	4.0	561798.700	3.0
330.6441	18.01	-2.18	174820.930	.5	205056.220	1.5
330.6460	24.00	-1.13	33762.740	6.0	63997.860	6.0
330.6466	25.01	-2.00	53698.700	2.0	83933.770	3.0
330.6473	17.01	-.55	131754.800	1.0	161989.800	1.0
330.6482	26.00	-1.62	26623.726	2.0	56858.650	2.0
330.6500	3.01	-1.38	561749.000	0.0	591992.460	0.0
330.6577	8.01	-.67	208392.270	1.5	238626.320	.5
330.6630	58.01	-.27	5887.999	0.0	36130.270	0.0
330.6664	22.00	-4.79	16961.420	3.0	47194.680	4.0
330.6670	24.01	-3.29	54444.190	3.5	84677.390	3.5
330.6672	28.01	-1.20	105668.780	2.5	135901.960	2.5
330.6677	27.00	-4.34	24627.790	4.5	54860.930	4.5
330.6704	26.00	-1.45	24180.848	3.0	54413.740	3.0
330.6789	25.01	-3.14	52373.180	3.0	82605.290	4.0
330.6800	26.01	-1.21	73751.340	4.5	103983.350	3.5
330.6823	7.02	-.20	311716.100	1.5	341947.900	2.5
330.6867	22.00	.42	17215.440	5.0	47446.840	6.0
330.6885	24.00	-1.46	35862.820	4.0	66094.060	4.0
330.6905	9.01	-4.78	265357.560	1.0	295588.610	1.0
330.6910	69.01	-.78	8711.012	0.0	38950.722	0.0
330.6943	21.01	-1.86	28021.210	2.0	58251.920	2.0
330.6957	26.02	-2.29	114339.950	4.0	144570.530	3.0
330.6960	24.01	-1.55	39877.280	3.5	70107.830	4.5
330.6963	26.02	-2.65	199300.150	2.0	229530.670	1.0
330.6964	28.01	-3.90	24788.200	1.5	55018.710	2.5
330.6980	28.01	-.68	100845.410	.5	131075.780	1.5
330.6986	25.00	-1.43	27281.850	.5	57512.160	1.5
330.7002	26.00	-2.67	23783.617	5.0	54013.780	5.0
330.7009	7.02	-1.15	311716.100	1.5	341946.200	1.5
330.7010	75.00	.08	27020.269	0.0	57259.065	0.0
330.7011	28.00	-1.08	27580.411	5.0	57810.494	4.0
330.7022	24.01	-.46	33619.130	4.5	63849.110	5.5
330.7037	25.01	-3.31	55759.270	3.0	85989.120	2.0
330.7120	42.00	-.18	11775.998	0.0	42013.788	0.0
330.7122	22.01	-.49	34748.500	4.5	64977.570	3.5
330.7129	28.01	-1.42	104298.230	4.5	134527.240	3.5
330.7153	27.00	-.53	15774.040	1.5	46002.830	2.5
330.7228	26.00	-.33	26105.908	6.0	56334.010	6.0
330.7229	18.01	-.29	159706.460	.5	189934.550	.5
330.7230	58.01	-.68	2581.041	0.0	32817.825	0.0
330.7265	16.01	-4.40	128599.110	3.5	158826.870	2.5
330.7277	25.00	-.88	37737.220	3.5	67964.870	2.5
330.7450	23.01	-2.85	18353.890	3.0	48579.960	3.0
330.7456	26.01	-4.00	70523.730	3.5	100749.750	2.5
330.7459	27.00	-1.88	18389.570	1.5	48615.560	2.5
330.7466	25.00	-2.45	34423.270	3.5	64649.200	3.5
330.7530	38.00	-.48	14437.696	0.0	44671.738	0.0
330.7532	26.02	-2.66	83358.880	2.0	113584.200	2.0
330.7565	26.01	-3.16	30764.460	3.5	60989.480	4.5
330.7655	29.01	-1.70	115665.400	1.0	145889.600	0.0
330.7716	22.01	-3.25	983.800	2.5	31207.440	2.5
330.7728	24.00	-2.23	35870.530	4.0	66094.060	4.0
330.7761	24.00	-3.10	28637.000	3.0	58860.230	2.0
330.7794	25.01	-.46	59537.400	4.0	89760.330	5.0
330.7815	28.01	-4.06	99559.330	2.5	129782.070	3.5
330.7831	26.02	-3.66	105895.350	1.0	136117.940	2.0
330.7845	29.01	-.93	117883.140	4.0	148105.600	4.0
330.7852	17.01	-.42	131767.400	0.0	161989.800	1.0
330.7863	25.01	-2.82	49517.580	5.0	79739.880	5.0
330.7918	17.01	-1.72	131768.000	2.0	161989.800	1.0
330.7943	25.01	-2.69	52383.720	4.0	82605.290	4.0
330.7948	29.00	.64	40893.363	0.0	71123.584	0.0
330.7959	25.01	-3.04	49291.310	3.0	79512.730	3.0
330.8000	9.01	-4.05	240152.710	1.0	270373.760	1.0
330.8009	27.00	.19	23152.570	3.5	53373.530	3.5
330.8015	25.00	-2.33	35041.370	3.5	65262.280	4.5
330.8016	20.01	-1.74	60533.020	.5	90753.920	1.5
330.8018	24.01	-4.22	38362.560	1.5	68583.440	2.5
330.8020	58.01	-.46	2500.383	0.0	32729.946	0.0
330.8020	63.01	.58	24035.941	0.0	54265.504	0.0
330.8050	41.00	-1.03	1532.493	0.0	31761.782	0.0
330.8051	25.00	-.75	34463.370	1.5	64683.950	1.5
330.8093	25.01	-3.42	52718.800	0.0	82939.000	1.0
330.8108	29.01	-2.47	117883.140	4.0	148103.200	3.0
330.8135	10.02	-4.36	409845.080	2.0	440064.900	1.0
330.8148	22.00	-3.78	18145.400	2.0	48365.090	3.0
330.8174	24.01	-2.08	39684.000	3.5	69903.460	3.5
330.8214	26.00	-4.70	24772.019	1.0	54991.110	1.0
330.8257	23.00	-1.01	553.020	4.5	30771.720	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
330.8267	26.02	-4.00	114351.920	3.0	144570.530	3.0
330.8285	28.01	-3.56	100845.410	.5	131063.850	.5
330.8289	25.00	-4.00	38120.180	4.5	68338.590	3.5
330.8376	22.00	-.88	8436.618	0.0	38654.230	1.0
330.8399	26.01	-4.12	69606.640	3.5	99824.040	2.5
330.8455	25.01	-2.98	36427.890	0.0	66644.780	1.0
330.8470	39.01	.09	28552.762	0.0	58778.214	0.0
330.8477	27.00	-1.56	24733.280	2.5	54949.970	1.5
330.8478	23.01	-1.42	20522.140	1.0	50738.820	1.0
330.8585	27.02	-3.90	73286.000	4.5	103501.700	3.5
330.8616	26.00	-4.48	22845.856	5.0	53061.280	5.0
330.8681	27.00	-1.22	16470.600	1.5	46685.430	1.5
330.8746	26.00	-2.19	19390.165	6.0	49604.402	5.0
330.8763	26.00	-4.59	21999.132	4.0	52213.207	3.0
330.8777	25.00	-2.27	17568.480	1.5	47782.430	1.5
330.8794	12.02	-2.91	532725.700	2.0	562939.500	2.0
330.8803	22.01	-1.10	1087.210	3.5	31300.920	4.5
330.8813	27.00	-.92	24733.280	2.5	54946.900	2.5
330.8903	28.00	-2.40	29013.228	2.0	59226.030	1.0
330.8929	15.01	.04	77711.000	2.0	107923.570	2.0
330.8939	28.01	-3.48	105838.060	3.5	136050.530	2.5
330.8988	24.00	-2.23	24940.610	2.0	55152.630	2.0
330.9008	24.01	-2.94	39742.360	2.5	69954.200	2.5
330.9019	27.00	-2.07	20500.710	1.5	50712.450	2.5
330.9022	26.02	-3.61	105906.230	2.0	136117.940	2.0
330.9078	17.01	-3.44	147605.700	3.0	177816.900	2.0
330.9140	90.01	-1.02	7259.177	0.0	37478.509	0.0
330.9179	23.00	-.46	9636.960	1.5	39847.240	1.5
330.9190	72.00	-.70	8872.327	0.0	39091.202	0.0
330.9245	10.02	-2.16	409855.230	1.0	440064.900	1.0
330.9247	24.00	-.18	35884.400	5.0	66094.060	4.0
330.9270	58.01	-.46	5646.026	0.0	35864.171	0.0
330.9274	26.02	-3.07	199300.150	2.0	229509.560	3.0
330.9297	28.00	-1.00	27580.411	5.0	57789.611	4.0
330.9317	22.00	-5.81	11776.806	4.0	41985.830	3.0
330.9318	26.02	-1.80	199212.720	4.0	229421.730	4.0
330.9341	18.01	-4.47	172335.520	2.5	202544.320	2.5
330.9360	90.00	-1.05	0.000	0.0	30217.323	0.0
330.9429	25.00	-2.15	17451.520	2.5	47659.520	2.5
330.9440	30.02	-1.66	234576.000	4.0	264783.900	4.0
330.9490	24.01	-4.15	38269.670	3.5	68477.110	4.5
330.9500	22.00	-.58	8492.421	1.0	38699.767	2.0
330.9502	24.00	-1.51	21856.940	3.0	52064.270	4.0
330.9520	62.01	-1.10	806.575	0.0	31022.437	0.0
330.9523	22.01	-1.98	9395.760	1.5	39602.900	1.5
330.9549	28.01	-3.56	100609.010	2.5	130815.910	3.5
330.9716	22.00	.30	17075.310	4.0	47280.690	5.0
330.9717	25.02	-2.63	86486.770	1.5	116692.140	2.5
330.9738	22.00	-5.93	14028.470	2.0	44233.650	3.0
330.9739	10.01	-1.16	224087.020	1.5	254292.190	.5
330.9780	73.00	-1.90	1935.780	0.0	32149.269	0.0
330.9789	24.00	-4.38	24200.230	6.0	54404.940	7.0
330.9832	24.00	-1.27	24897.550	4.0	55101.870	3.0
330.9847	25.02	-4.38	146066.070	1.5	176270.250	2.5
330.9890	40.01	-.77	7743.122	0.0	37955.606	0.0
331.0007	26.02	-2.66	199327.950	1.0	229530.670	1.0
331.0130	24.00	-2.23	21810.840	1.0	52012.440	2.0
331.0159	27.00	-1.24	16470.600	1.5	46671.940	2.5
331.0190	24.00	-.59	35807.900	2.0	66008.950	3.0
331.0197	28.00	-4.26	3409.925	2.0	33610.916	2.0
331.0240	90.01	-1.00	6210.629	0.0	36419.919	0.0
331.0270	72.00	-.53	6533.259	0.0	36742.275	0.0
331.0324	29.01	-3.66	116375.470	3.0	146575.300	2.0
331.0332	22.00	-.62	18525.070	2.0	48724.830	1.0
331.0337	25.02	-2.94	146066.070	1.5	176265.780	1.5
331.0340	26.00	-1.05	23783.617	5.0	53983.300	5.0
331.0377	55.00	-7.56	0.000	0.0	30208.040	0.0
331.0385	22.00	-1.00	18525.070	2.0	48724.340	2.0
331.0470	41.00	-.88	2742.356	0.0	32949.547	0.0
331.0490	26.00	-.20	26224.961	3.0	56423.276	4.0
331.0507	10.01	-1.08	251522.120	1.5	281720.280	1.5
331.0520	77.00	-.45	11775.998	0.0	41982.733	0.0
331.0566	25.02	-3.03	86654.070	4.5	116851.690	3.5
331.0632	55.00	-7.74	0.000	0.0	30205.713	0.0
331.0645	24.01	-.79	40202.140	6.5	70399.040	5.5
331.0660	62.01	-.53	2177.753	0.0	32383.211	0.0
331.0743	28.01	-4.23	107082.210	2.5	137278.220	1.5
331.0770	42.00	-.61	10646.793	0.0	40851.247	0.0
331.0778	23.00	-5.45	2153.200	1.5	32348.890	.5
331.0829	24.00	-1.59	35813.730	3.0	66008.950	3.0
331.0860	72.01	-.74	13389.148	0.0	43592.781	0.0
331.0904	9.01	-4.53	240179.220	0.0	270373.760	1.0
331.0910	76.00	.03	10969.423	0.0	41172.600	0.0
331.0952	28.02	-4.22	103306.100	3.0	133500.200	2.0
331.0963	10.03	-3.26	641908.000	.5	672102.000	1.5
331.1003	26.02	-2.87	109570.840	2.0	139764.480	2.0
331.1032	28.01	-1.38	105838.060	3.5	136031.430	2.5
331.1037	25.01	-2.53	55759.270	3.0	85952.600	3.0
331.1039	28.01	-1.15	105861.190	2.5	136054.500	1.5
331.1082	22.00	-5.23	12118.394	4.0	42311.310	3.0
331.1143	26.01	-2.85	30764.460	3.5	60956.820	3.5
331.1158	24.00	-2.24	21810.840	1.0	52003.060	1.0
331.1160	73.00	-.31	5565.369	0.0	35766.265	0.0
331.1179	28.00	-.77	26665.903	3.0	56857.933	4.0
331.1272	10.01	-1.03	219648.440	1.5	249839.630	.5
331.1340	41.00	.22	12905.203	0.0	43104.458	0.0
331.1340	40.01	-1.03	5646.026	0.0	35845.281	0.0
331.1380	74.00	-1.20	2903.671	0.0	33102.561	0.0
331.1386	25.00	-4.00	35114.980	2.5	65305.130	3.5
331.1419	7.01	-2.12	166521.690	1.0	196711.540	2.0
331.1451	26.00	-3.59	7985.783	2.0	38175.332	3.0
331.1474	28.01	-4.22	105861.190	2.5	136050.530	2.5
331.1479	27.00	-4.60	23184.230	2.5	53373.530	3.5
331.1500	58.01	-.59	3306.958	0.0	33504.754	0.0
331.1536	24.00	-2.66	21810.840	1.0	51999.620	0.0
331.1536	26.02	-4.03	105929.160	3.0	136117.940	2.0
331.1560	27.00	-2.80	24326.110	3.5	54514.670	3.5
331.1561	25.00	.11	37630.620	4.5	67819.170	4.5
331.1563	18.02	.02	174375.000	2.0	204563.530	1.0
331.1622	10.03	-2.70	643239.000	.5	673427.000	1.5
331.1672	23.02	-4.94	56529.300	.5	86716.840	1.5
331.1720	92.01	-.78	5162.081	0.0	35357.870	0.0
331.1724	28.01	-.96	100010.170	.5	130197.230	1.5
331.1725	21.01	-.12	29742.120	1.0	59929.180	2.0
331.1895	25.00	-1.59	17568.480	1.5	47753.990	2.5
331.1908	24.01	-.54	33521.230	3.5	63706.620	4.5
331.2024	29.01	-1.72	116375.470	3.0	146559.800	4.0
331.2078	24.00	-1.78	21847.880	2.0	52031.720	3.0
331.2110	71.00	-.64	0.000	0.0	30192.234	0.0
331.2130	77.00	-.75	11775.998	0.0	41968.050	0.0
331.2143	27.00	-.78	15774.040	1.5	45957.290	.5
331.2148	8.01	-4.15	245767.800	.5	275951.000	1.5
331.2160	24.01	-.62	33418.110	2.5	63601.200	3.5
331.2220	26.00	-2.53	24118.815	4.0	54301.360	4.0
331.2220	58.01	.23	8791.670	0.0	38982.901	0.0
331.2258	27.00	-2.00	18389.570	1.5	48571.770	.5
331.2290	75.00	-.64	16212.162	0.0	46402.755	0.0
331.2297	8.02	-.69	267375.650	1.0	297557.500	1.0
331.2313	28.00	.32	27580.411	5.0	57762.106	6.0
331.2330	42.00	-.11	16615.449	0.0	46805.678	0.0
331.2375	29.01	-3.53	116375.470	3.0	146556.600	3.0
331.2411	24.00	-3.53	28679.430	1.0	58860.230	2.0
331.2420	27.00	-1.73	25269.250	3.5	55449.970	2.5
331.2420	62.01	-.77	1451.835	0.0	31641.243	0.0
331.2420	68.00	-.09	403.288	0.0	30592.696	0.0
331.2600	41.00	-.43	2097.096	0.0	32284.864	0.0
331.2657	29.01	-2.22	117883.140	4.0	148061.700	3.0
331.2665	26.01	-4.67	8680.470	1.5	38858.960	2.5
331.2670	22.00	.17	16961.420	3.0	47139.860	4.0
331.2697	26.00	-3.32	23051.744	0.0	53229.940	1.0
331.2702	25.01	-4.41	71323.150	2.0	101501.300	3.0
331.2707	18.01	-3.53	172829.580	1.5	203007.690	1.5
331.2713	24.00	-1.93	28682.180	2.0	58860.230	2.0
331.2754	21.01	.15	29823.920	2.0	60001.600	3.0
331.2776	25.01	-1.39	52653.270	4.0	82830.750	4.0
331.2796	26.01	-2.50	70314.740	4.5	100492.040	3.5
331.2829	27.00	-4.34	23611.780	5.5	53788.780	4.5
331.2840	17.01	-2.51	119842.100	1.0	150019.000	0.0
331.2860	72.00	-.75	2339.068	0.0	32524.467	0.0
331.2863	25.01	-4.79	71323.150	2.0	101499.840	2.0
331.2872	23.00	-4.44	9824.580	2.5	40001.180	3.5
331.2897	22.01	-1.59	9850.900	.5	40027.280	1.5
331.2988	28.00	-1.14	29013.228	2.0	59188.780	3.0
331.3014	25.00	-1.62	34463.370	1.5	64638.680	.5
331.3014	23.00	-1.71	9824.580	2.5	39999.890	2.5
331.3055	25.00	-.14	37789.930	2.5	67964.870	2.5
331.3057	24.00	-3.67	31352.420	1.0	61527.340	1.0
331.3066	24.01	-1.45	38563.150	4.5	68737.990	5.5
331.3072	24.00	-2.35	21856.940	3.0	52031.720	3.0
331.3124	27.00	-1.68	25232.790	.5	55407.100	1.5
331.3213	26.01	-3.80	69650.540	2.5	99824.040	2.5
331.3300	58.01	-.61	5887.999	0.0	36069.389	0.0
331.3330	63.01	.58	24035.941	0.0	54217.058	0.0
331.3355	13.01	-1.72	95546.800	3.0	125719.000	2.0
331.3363	24.00	-3.13	31355.210	2.0	61527.340	1.0
331.3399	28.00	-2.75	27414.893	2.0	57586.700	2.0
331.3409	27.00	-2.69	24733.280	2.5	54904.990	2.5
331.3465	25.02	-1.85	86520.940	2.5	116692.140	2.5
331.3476	13.01	-2.47	95547.900	2.0	125719.000	2.0
331.3508	28.01	-.41	98561.220	2.5	128732.030	1.5
331.3531	24.01	-2.41	40228.440	5.5	70399.040	5.5
331.3565	21.01	-.88	27443.650	2.0	57613.940	2.0
331.3571	28.01	-1.19	105861.190	2.5	136031.430	2.5
331.3575	13.01	-3.65	95548.800	1.0	125719.000	2.0
331.3620	42.01	.81	28714.077	0.0	58892.553	0.0
331.3700	40.01	-.21	7420.492	0.0	37598.239	0.0
331.3716	26.00	-3.76	12968.552	2.0	43137.472	3.0
331.3730	24.00	-1.55	25038.610	5.0	55207.400	4.0
331.3730	64.01	-.53	3387.616	0.0	33565.090	0.0
331.3919	25.01	-1.51	49291.310	3.0	79458.380	2.0
331.3943	28.01	-1.09	104503.220	2.5	134670.070	1.5
331.3950	75.00	-.24	15647.559	0.0	45823.029	0.0
331.3979	26.01	-3.93	8846.760	.5	39013.280	1.5
331.4008	25.00	-3.16	38120.180	4.5	68286.440	4.5
331.4034	24.01	-.83	40228.440	5.5	70394.460	4.5
331.4040	58.01	-1.16	0.000	0.0	30174.651	0.0
331.4063	26.00	-2.43	27543.000	1.0	57708.760	2.0
331.4076	27.00	-3.20	14036.280	1.5	44201.920	2.5
331.4179	23.03	-.85	226617.100	1.0	256781.800	1.0
331.4195	24.00	-2.17	21847.880	2.0	52012.440	2.0
331.4198	24.00	-2.17	33762.740	6.0	63927.270	5.0
331.4256	25.02	-1.88	109780.400	2.5	139944.400	3.5
331.4271	26.00	-4.76	22996.661	4.0	53160.530	3.0
331.4272	28.01	-2.79	100010.170	.5	130174.030	1.5
331.4300	27.02	-4.83	76791.100	1.5	106954.700	2.5
331.4334	27.00	-.64	24733.280	2.5	54896.570	3.5
331.4370	22.00	-4.55	16875.190	2.0	47038.160	3.0
331.4422	22.00	-.25	8602.340	2.0	38764.832	3.0
331.4438	26.00	-2.08	21038.987	2.0	51201.330	2.0
331.4457	25.00	-4.14	34423.270	3.5	64585.440	4.5
331.4497	22.00	-.97	8492.421	1.0	38654.230	1.0
331.4497	16.01	-4.84	113461.220	1.5	143623.030	1.5
331.4500	40.01	-.28	5726.684	0.0	35897.147	0.0
331.4557	24.00	-2.99	24940.610	2.0	55101.870	3.0
331.4575	24.01	-.45	39742.360	2.5	69903.460	3.5
331.4608	24.01	-4.57	54444.190	3.5	84604.990	2.5
331.4668	27.00	-4.26	17233.680	3.5	47393.930	2.5
331.4674	10.01	-.86	251011.180	2.5	281171.380	2.5
331.4720	58.01	-.29	3952.218	0.0	34120.679	0.0
331.4742	26.00	-.05	26623.726	2.0	56783.306	3.0
331.4774	26.02	-3.22	199262.440	3.0	229421.730	4.0
331.4779	25.00	-1.40	27201.540	2.5	57360.780	1.5
331.4798	26.01	-4.61	31999.120	3.5	62158.190	4.5
331.4798	24.00	-1.24	24833.860	3.0	54992.930	2.0
331.4803	24.00	-3.87	24093.160	2.0	54252.190	2.0
331.4855	23.01	-1.95	25191.080	2.0	55349.630	3.0
331.4864	26.00	-4.80	22996.661	4.0	53155.130	4.0
331.4870	23.01	-1.88	20617.050	2.0	50775.470	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
331.4883	27.01	-5.44	19189.900	4.0	49348.200	4.0
331.4883	13.01	-1.99	95547.900	2.0	125706.200	1.0
331.4982	13.01	-2.47	95548.800	1.0	125706.200	1.0
331.5032	27.00	-.22	25232.790	.5	55389.730	1.5
331.5050	44.00	-1.00	7985.094	0.0	38150.552	0.0
331.5050	78.00	-2.35	0.000	0.0	30165.458	0.0
331.5055	28.01	-4.51	103653.030	3.5	133809.760	3.5
331.5070	25.00	-2.93	37420.240	5.5	67576.840	4.5
331.5081	27.00	-2.75	18389.570	1.5	48546.070	1.5
331.5088	27.00	-3.29	14399.280	.5	44555.710	1.5
331.5108	28.01	-4.34	100609.010	2.5	130765.260	3.5
331.5169	26.00	-2.18	26627.612	4.0	56783.306	3.0
331.5171	23.01	-.66	19112.930	4.0	49268.610	4.0
331.5174	28.00	-3.13	26665.903	3.0	56821.553	3.0
331.5191	24.00	-3.43	21856.940	3.0	52012.440	2.0
331.5220	41.00	.09	8711.012	0.0	38874.923	0.0
331.5226	24.00	-2.91	21847.880	2.0	52003.060	1.0
331.5230	44.00	-1.14	1129.205	0.0	31293.025	0.0
331.5236	22.00	.03	16875.190	2.0	47030.280	3.0
331.5261	25.02	-4.17	90936.220	1.5	121091.080	1.5
331.5266	25.01	-2.58	43528.300	5.0	73683.110	4.0
331.5285	24.01	-1.70	33694.470	5.5	63849.110	5.5
331.5298	22.01	-2.62	32025.500	2.5	62180.020	1.5
331.5310	22.01	-.73	9872.870	.5	40027.280	1.5
331.5340	25.00	-.03	37737.220	3.5	67891.360	3.5
331.5348	28.01	-4.83	107082.210	2.5	137236.280	3.5
331.5420	76.00	-1.32	5726.684	0.0	35888.775	0.0
331.5422	17.01	-1.65	119799.000	2.0	149952.400	1.0
331.5477	17.01	-.06	131754.800	1.0	161907.700	2.0
331.5522	26.01	-4.50	31999.120	3.5	62151.610	2.5
331.5523	23.01	-1.96	20622.990	3.0	50775.470	2.0
331.5568	25.01	-4.27	53781.700	3.0	83933.770	3.0
331.5590	64.01	-.76	3387.616	0.0	33548.161	0.0
331.5598	23.03	-2.05	255146.800	2.0	285298.600	1.0
331.5609	13.01	-2.34	95548.800	1.0	125700.500	0.0
331.5660	28.00	-.83	879.813	2.0	31031.042	3.0
331.5685	24.03	-3.63	127218.000	3.5	157369.000	2.5
331.5690	27.00	-2.34	24326.110	3.5	54477.070	3.5
331.5690	76.00	-.50	13308.491	0.0	43468.126	0.0
331.5734	29.01	-1.62	117883.140	4.0	148033.700	4.0
331.5815	26.02	-2.40	114351.920	3.0	144501.740	2.0
331.5934	28.01	-1.21	100078.780	1.5	130227.520	2.5
331.6015	28.01	-1.69	105838.060	3.5	135986.060	3.5
331.6090	74.00	-2.15	1613.150	0.0	31769.147	0.0
331.6125	27.02	-3.09	77383.100	3.5	107530.100	3.5
331.6175	26.01	-4.93	13474.430	2.5	43620.980	1.5
331.6190	72.00	.16	17825.312	0.0	47980.400	0.0
331.6212	25.01	-3.13	43536.900	4.0	73683.110	4.0
331.6221	24.00	-2.28	35862.820	4.0	66008.950	3.0
331.6240	28.01	-4.95	106620.530	3.5	136766.490	2.5
331.6273	29.01	.02	117883.140	4.0	148028.800	5.0
331.6305	24.00	-3.12	20517.400	2.0	50662.770	1.0
331.6315	25.00	-2.42	17637.150	.5	47782.430	1.5
331.6390	44.00	.02	10566.135	0.0	40719.404	0.0
331.6399	22.00	-.66	18695.230	4.0	48839.740	3.0
331.6418	28.01	-3.41	103025.580	2.5	133169.920	3.5
331.6430	24.00	-3.49	23933.900	4.0	54078.130	5.0
331.6495	24.00	-.43	31048.000	7.0	61191.640	6.0
331.6509	20.01	-1.49	60611.280	1.5	90754.800	2.5
331.6553	26.00	-4.18	17550.180	3.0	47693.289	3.0
331.6571	24.00	-2.99	24282.340	4.0	54425.290	4.0
331.6605	26.01	-4.29	49101.090	.5	79243.730	1.5
331.6605	20.01	-2.44	60611.280	1.5	90753.920	1.5
331.6632	23.01	-1.72	20980.920	2.0	51123.310	2.0
331.6641	24.00	-3.63	31049.330	6.0	61191.640	6.0
331.6750	23.00	-2.55	553.020	4.5	30694.340	3.5
331.6769	22.00	-8.54	11639.804	3.0	41780.950	4.0
331.6780	21.01	-.76	27602.320	3.0	57743.370	3.0
331.6871	23.01	-1.42	20522.140	1.0	50662.360	0.0
331.6880	69.01	-1.55	161.315	0.0	30310.130	0.0
331.6928	17.01	-.53	131768.000	2.0	161907.700	2.0
331.6978	28.01	-.90	105838.060	3.5	135977.310	4.5
331.7020	28.01	-1.41	104503.220	2.5	134642.090	3.5
331.7026	28.01	-4.31	100332.090	4.5	130470.900	4.5
331.7045	28.01	-2.86	70706.770	1.5	100845.410	.5
331.7052	21.01	-.49	29736.220	0.0	59874.790	1.0
331.7069	24.00	-.27	35870.530	4.0	66008.950	3.0
331.7072	30.02	-.79	234866.900	1.0	265005.300	2.0
331.7120	26.00	-2.03	18378.187	2.0	48516.150	1.0
331.7135	29.01	-.49	117928.480	1.0	148066.300	2.0
331.7149	28.01	-4.89	100010.170	.5	130147.870	.5
331.7161	23.00	-3.45	9824.580	2.5	39962.170	2.5
331.7186	24.00	-3.06	20517.400	2.0	50654.760	2.0
331.7218	29.00	-.49	41135.335	0.0	71281.078	0.0
331.7304	24.00	-4.23	31055.350	5.0	61191.640	6.0
331.7309	23.01	-3.31	9097.810	4.0	39234.050	3.0
331.7389	18.03	-2.81	256093.290	.5	286228.800	1.5
331.7477	8.01	-4.18	245816.290	1.5	275951.000	2.5
331.7574	24.00	-2.55	20520.920	3.0	50654.760	2.0
331.7598	28.00	-2.61	13521.352	2.0	43654.974	3.0
331.7702	21.01	-.65	29742.120	1.0	59874.790	1.0
331.7730	90.01	-.65	13147.176	0.0	43288.266	0.0
331.7800	58.01	-.17	5646.026	0.0	35786.481	0.0
331.7809	30.02	-1.38	233610.400	2.0	263742.100	2.0
331.7809	30.02	-2.54	233610.400	2.0	263742.100	2.0
331.7818	18.01	-4.16	172335.520	2.5	202467.140	1.5
331.7890	44.00	-.93	8469.040	0.0	38608.677	0.0
331.7913	23.01	-1.52	20343.000	2.0	50473.760	1.0
331.7926	27.00	-1.93	15774.040	1.5	45904.680	1.5
331.7930	73.00	-1.22	3871.561	0.0	34010.835	0.0
331.7958	22.00	-.64	18593.990	3.0	48724.340	2.0
331.7990	72.01	-1.42	2984.328	0.0	33123.057	0.0
331.8017	22.01	-.98	983.800	2.5	31113.610	3.5
331.8031	11.01	-.82	300510.920	1.0	330640.600	1.0
331.8031	11.01	-.82	300510.920	1.0	330640.600	1.0
331.8096	7.01	-.91	166582.450	2.0	196711.540	2.0
331.8116	24.00	-1.57	23498.840	4.0	53627.750	5.0
331.8220	22.00	-7.53	14105.680	3.0	44233.650	3.0
331.8220	25.01	-4.96	53805.800	4.0	83933.770	3.0
331.8254	26.00	-3.23	29798.960	4.0	59926.620	5.0
331.8304	15.01	-.93	101636.490	1.0	131763.700	1.0
331.8358	22.00	-.11	16817.190	1.0	46943.910	2.0
331.8396	27.00	-1.86	13795.520	2.5	43921.890	2.5
331.8468	25.01	-3.14	68284.380	3.0	98410.100	2.0
331.8510	40.01	-.69	6049.314	0.0	36183.320	0.0
331.8530	73.00	-1.51	5565.369	0.0	35699.193	0.0
331.8561	28.01	-2.12	105861.190	2.5	135986.060	3.5
331.8602	28.02	-4.89	82277.000	1.0	112401.500	1.0
331.8606	27.00	-2.97	25041.160	1.5	55165.630	2.5
331.8612	26.01	-4.78	36252.960	2.5	66377.370	3.5
331.8670	75.00	-.66	13711.778	0.0	43844.331	0.0
331.8718	27.00	-1.62	23152.570	3.5	53276.020	4.5
331.8780	68.00	-1.53	0.000	0.0	30131.554	0.0
331.8790	23.03	-.72	226617.100	1.0	256739.900	0.0
331.8820	44.00	-.18	14599.011	0.0	44730.202	0.0
331.8840	73.00	-.95	1935.780	0.0	32066.790	0.0
331.8849	26.01	-3.07	36126.410	1.5	66246.670	.5
331.8853	25.00	-1.03	37630.620	4.5	67752.840	5.5
331.8874	28.01	-4.53	105861.190	2.5	135983.220	1.5
331.8875	28.01	-1.48	105838.060	3.5	135960.080	4.5
331.8889	24.02	-3.95	71321.800	3.0	101443.700	2.0
331.8891	9.02	-3.96	395268.130	1.5	425390.010	.5
331.8903	23.01	-1.47	20617.050	2.0	50738.820	1.0
331.8931	28.01	-3.71	100609.010	2.5	130730.530	2.5
331.8949	24.00	-2.35	24303.940	3.0	54425.290	4.0
331.8960	58.01	-.38	5404.054	0.0	35533.974	0.0
331.8970	90.01	-1.46	6613.917	0.0	36743.746	0.0
331.8980	41.00	-.80	1532.493	0.0	31662.232	0.0
331.9012	23.00	-6.22	0.000	1.5	30120.780	2.5
331.9018	29.01	-1.91	116375.470	3.0	146496.200	3.0
331.9020	40.01	-1.10	241.973	0.0	30371.349	0.0
331.9062	25.01	-2.67	73683.110	4.0	103803.440	3.0
331.9073	22.01	-2.63	1087.210	3.5	31207.440	2.5
331.9153	27.00	-.88	24326.110	3.5	54445.610	2.5
331.9186	27.01	-3.45	18031.500	2.0	48150.700	3.0
331.9247	26.00	-1.14	24118.815	4.0	54237.460	4.0
331.9260	41.00	-.89	2742.356	0.0	32869.553	0.0
331.9269	28.01	-1.41	100078.780	1.5	130197.230	1.5
331.9341	18.00	-2.73	93143.800	2.0	123261.593	2.0
331.9385	25.00	-3.74	25287.740	3.5	55405.140	2.5
331.9473	24.00	-3.15	24200.230	6.0	54316.830	6.0
331.9475	27.00	.48	23611.780	5.5	53728.360	6.5
331.9557	27.00	-2.47	13795.520	2.5	43911.360	1.5
331.9580	41.01	-.42	7178.519	0.0	37302.812	0.0
331.9590	42.00	.02	16615.449	0.0	46739.651	0.0
331.9608	28.01	-3.05	92325.850	3.5	122441.220	4.5
331.9682	29.00	-.66	41135.335	0.0	71258.702	0.0
331.9723	10.01	-.25	246397.490	1.5	276511.820	.5
331.9737	24.00	-2.21	31009.000	3.0	61123.200	4.0
331.9770	25.02	-2.82	86578.240	3.5	116692.140	2.5
331.9790	42.00	.01	16534.792	0.0	46657.179	0.0
331.9823	27.00	.02	23611.780	5.5	53725.200	4.5
331.9880	66.01	-.66	0.000	0.0	30121.571	0.0
331.9890	63.01	.25	24035.941	0.0	54157.421	0.0
331.9894	25.00	-1.21	27248.000	1.5	57360.780	1.5
331.9978	24.00	-2.12	31049.330	6.0	61161.350	5.0
332.0070	18.00	-3.69	93143.800	2.0	123254.990	1.0
332.0072	25.01	-4.78	71390.140	3.0	101501.300	3.0
332.0122	24.00	-3.73	20517.400	2.0	50628.110	3.0
332.0146	23.00	-2.46	9824.580	2.5	39935.070	1.5
332.0150	26.00	-5.73	12968.552	2.0	43079.013	1.0
332.0160	62.01	-.92	1451.835	0.0	31570.865	0.0
332.0168	17.01	-2.21	119842.100	1.0	149952.400	1.0
332.0199	10.01	-.68	249108.640	3.5	279218.660	2.5
332.0241	26.02	-3.05	109570.840	2.0	139680.470	3.0
332.0254	28.00	-1.53	1332.153	3.0	31441.665	2.0
332.0290	90.01	-.76	6613.917	0.0	36731.768	0.0
332.0323	25.01	-4.42	71390.140	3.0	101499.030	4.0
332.0370	18.01	-3.62	174820.930	.5	204929.400	.5
332.0370	74.00	-1.19	9436.930	0.0	39554.056	0.0
332.0420	58.01	-1.07	3629.588	0.0	33746.260	0.0
332.0440	64.01	-.09	9033.642	0.0	39150.133	0.0
332.0442	21.01	-.24	27443.650	2.0	57551.460	1.0
332.0501	26.00	-3.81	17726.985	2.0	47834.260	3.0
332.0510	24.00	-2.54	20520.920	3.0	50628.110	3.0
332.0565	17.02	.14	179076.100	1.5	209182.800	1.5
332.0578	25.01	-2.48	53805.800	4.0	83912.380	5.0
332.0604	28.01	-.97	105838.060	3.5	135944.400	3.5
332.0642	24.00	-3.82	31055.350	5.0	61161.350	5.0
332.0646	26.00	-2.58	19621.004	5.0	49726.964	4.0
332.0649	26.02	-3.89	183457.150	4.0	213563.080	5.0
332.0685	28.01	-1.19	100078.780	1.5	130184.390	2.5
332.0723	21.01	-.70	29823.920	2.0	59929.180	2.0
332.0744	24.00	-4.88	24093.160	2.0	54198.230	1.0
332.0768	23.01	-1.11	20980.920	2.0	51085.770	3.0
332.0770	28.00	-2.65	29013.228	2.0	59118.060	2.0
332.0772	26.00	-1.60	24506.902	2.0	54611.720	2.0
332.0810	41.01	.15	15405.586	0.0	45518.721	0.0
332.0816	24.00	-2.14	20523.690	4.0	50628.110	3.0
332.0829	28.00	-3.53	29084.478	4.0	59188.780	3.0
332.0846	26.00	-3.31	17726.985	2.0	47831.132	2.0
332.0889	22.00	-4.19	7255.369	2.0	37359.130	2.0
332.0900	42.01	.95	25003.831	0.0	55116.150	0.0
332.0942	25.02	-3.62	109841.120	3.5	139944.400	3.5
332.1027	26.02	-4.25	105906.230	2.0	136008.740	3.0
332.1049	12.02	-.69	534197.700	1.0	564300.000	0.0
332.1146	25.00	-1.17	37789.930	2.5	67891.360	3.5
332.1180	62.01	-.28	2984.328	0.0	33094.108	0.0
332.1187	24.00	-1.36	25106.340	3.0	55207.400	4.0
332.1200	4.00	-.51	21980.000	0.0	52089.599	0.0
332.1226	27.02	-4.14	73286.000	4.5	103386.700	4.5
332.1235	28.00	-2.06	26665.903	3.0	56766.523	4.0
332.1281	24.01	-.76	54625.760	2.5	84725.960	3.5
332.1411	24.01	-4.74	35610.500	4.5	65709.530	5.5
332.1440	90.01	-.82	4032.876	0.0	34140.299	0.0
332.1491	26.01	-2.22	48039.230	2.5	78137.530	3.5
332.1514	22.00	-6.31	13981.750	1.0	44079.840	2.0
332.1519	29.01	-1.24	120684.550	3.0	150782.600	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
332.1541	23.01	-.35	19112.930	4.0	49210.780	3.0
332.1567	14.02	-1.37	204330.790	2.0	234428.400	1.0
332.1574	26.00	-4.65	18378.187	2.0	48475.740	3.0
332.1587	22.00	-.91	8602.340	2.0	38699.767	2.0
332.1596	18.00	-3.14	94553.707	0.0	124651.050	1.0
332.1608	28.00	-.96	27580.411	5.0	57677.649	5.0
332.1667	28.01	-1.82	70748.700	.5	100845.410	.5
332.1685	22.01	-.55	9930.740	1.5	40027.280	1.5
332.1828	28.01	-.75	100078.780	1.5	130174.030	1.5
332.1860	63.01	-.85	11050.080	0.0	41153.697	0.0
332.1902	27.00	-.70	16778.160	2.5	46872.740	3.5
332.1908	23.00	-5.37	0.000	1.5	30094.520	1.5
332.1992	25.01	-2.94	53781.700	3.0	83875.460	4.0
332.2032	25.02	-2.00	86486.770	1.5	116580.170	1.5
332.2090	90.00	-1.10	2500.383	0.0	32601.915	0.0
332.2117	23.01	-3.85	32040.760	2.0	62133.390	3.0
332.2157	27.00	-1.95	16470.600	1.5	46562.870	1.5
332.2175	12.02	-2.66	534197.700	1.0	564289.800	1.0
332.2260	63.00	-1.00	0.000	0.0	30099.992	0.0
332.2265	24.00	-2.58	28637.000	3.0	58728.290	4.0
332.2292	25.00	-2.64	17568.480	1.5	47659.520	2.5
332.2294	28.01	-4.63	100389.520	2.5	130480.550	3.5
332.2305	28.00	-1.56	3409.925	2.0	33500.854	3.0
332.2309	21.01	-2.96	28161.030	3.0	58251.920	2.0
332.2379	28.01	-1.67	75917.630	3.5	106007.890	2.5
332.2396	19.02	.17	207421.900	2.5	237512.000	2.5
332.2426	18.00	-3.41	94553.707	0.0	124643.540	1.0
332.2467	26.00	-1.11	23711.443	4.0	53800.900	5.0
332.2480	75.00	-.34	11695.340	0.0	41793.339	0.0
332.2600	77.00	-.21	12985.861	0.0	43082.773	0.0
332.2624	23.00	-.38	10892.500	3.5	40980.540	4.5
332.2648	29.01	-1.19	117928.480	1.0	148016.300	1.0
332.2670	25.00	-3.90	25281.040	2.5	55368.660	1.5
332.2684	24.01	-1.57	33619.130	4.5	63706.620	4.5
332.2870	77.00	.07	18954.517	0.0	49048.984	0.0
332.2914	25.01	-2.35	49427.320	4.0	79512.730	3.0
332.2922	22.01	-.01	1215.580	4.5	31300.920	4.5
332.2963	25.01	-2.76	43311.000	1.0	73395.970	2.0
332.2976	22.01	-2.24	9518.050	2.5	39602.900	1.5
332.2990	40.01	.01	6049.314	0.0	36142.694	0.0
332.2993	28.02	-3.83	103806.100	3.0	133390.800	3.0
332.2997	25.00	-3.19	37420.240	5.5	67504.900	5.5
332.3000	28.01	-3.11	99418.610	3.5	129503.240	4.5
332.3001	25.01	-3.17	43696.190	3.0	73780.810	3.0
332.3064	26.01	-1.64	31999.120	3.5	62083.170	4.5
332.3090	45.00	-.16	1451.835	0.0	31544.309	0.0
332.3157	28.01	-1.46	105861.190	2.5	135944.400	3.5
332.3193	25.01	-4.45	73785.250	2.0	103868.140	1.0
332.3296	28.01	-4.14	103653.030	3.5	133734.980	3.5
332.3296	25.00	-1.05	37737.220	3.5	67819.170	4.5
332.3340	26.01	-2.89	69606.640	3.5	99688.200	3.5
332.3360	72.01	.17	22987.393	0.0	53077.422	0.0
332.3389	22.01	-2.37	9395.760	1.5	39476.870	2.5
332.3515	24.01	-1.66	33521.230	3.5	63601.200	3.5
332.3558	26.02	-3.89	105929.160	3.0	136008.740	3.0
332.3570	28.01	-4.03	100490.950	1.5	130570.420	.5
332.3578	18.02	-.47	210212.260	3.0	240291.660	2.0
332.3629	24.01	-4.03	39824.520	4.5	69903.460	3.5
332.3630	25.00	-1.35	27281.850	.5	57360.780	1.5
332.3659	22.00	-1.67	18593.990	3.0	48672.660	4.0
332.3711	23.03	-.43	257143.200	2.0	287221.400	2.0
332.3723	23.01	-1.42	19132.690	2.0	49210.780	3.0
332.3734	10.01	-.03	224087.020	1.5	254165.010	1.5
332.3738	26.00	-.84	22838.320	2.0	52916.278	2.0
332.3785	22.00	.11	18287.560	4.0	48365.090	3.0
332.3800	78.00	-1.36	10001.532	0.0	40087.578	0.0
332.3851	18.00	-3.33	93143.800	2.0	123220.730	2.0
332.3852	24.01	-2.74	39877.280	3.5	69954.200	2.5
332.3899	22.00	-1.51	18695.230	4.0	48771.730	5.0
332.3950	42.00	.17	12259.943	0.0	42344.631	0.0
332.4043	24.01	-1.43	19631.280	1.5	49706.470	2.5
332.4053	28.01	-3.26	68965.650	1.5	99040.750	1.5
332.4113	25.01	-1.36	49517.580	5.0	79592.140	6.0
332.4125	26.02	-3.59	183431.280	5.0	213505.730	6.0
332.4134	24.01	-.55	38509.070	3.5	68583.440	2.5
332.4158	25.01	-2.20	43311.000	1.0	73385.150	1.0
332.4210	26.02	-4.97	170310.600	3.0	200384.280	3.0
332.4330	76.00	-.09	13308.491	0.0	43389.740	0.0
332.4335	24.01	-.15	35607.600	3.5	65680.150	4.5
332.4371	26.00	-1.53	26351.049	5.0	56423.276	4.0
332.4539	26.00	-1.88	19390.165	6.0	49460.876	5.0
332.4576	7.01	-.88	166521.690	1.0	196592.070	1.0
332.4613	22.00	-2.51	7255.369	2.0	37325.407	2.0
332.4648	28.01	-3.10	107142.210	1.5	137211.930	.5
332.4655	25.01	-3.65	53805.800	4.0	83875.460	4.0
332.4656	24.01	-4.28	35610.500	4.5	65680.150	4.5
332.4697	24.00	-3.38	31005.000	3.0	61078.280	3.0
332.4717	24.02	-4.55	71676.200	4.0	101745.300	3.0
332.4718	28.01	-.79	100078.780	1.5	130147.870	.5
332.4730	26.02	-3.78	121468.820	5.0	151537.800	4.0
332.4731	23.01	-2.66	19132.690	2.0	49201.660	2.0
332.4743	22.00	-.59	16961.420	3.0	47030.280	3.0
332.4750	90.01	-1.21	1774.465	0.0	31851.914	0.0
332.4759	26.00	-4.99	23783.617	5.0	53852.330	4.0
332.4759	22.00	-.67	16875.190	2.0	46943.910	2.0
332.4760	17.01	-3.21	149798.300	2.0	179867.000	1.0
332.4838	26.01	-2.34	47674.780	1.5	77742.780	2.5
332.4930	75.00	-.71	16212.162	0.0	46287.983	0.0
332.4974	29.01	-3.54	108335.430	2.0	138402.200	3.0
332.5000	44.00	-1.39	3064.986	0.0	33140.174	0.0
332.5010	26.01	-3.02	31999.120	3.5	62065.570	3.5
332.5120	90.01	-.60	4113.534	0.0	36187.637	0.0
332.5142	22.00	-.66	17215.440	5.0	47280.690	5.0
332.5220	22.00	-.50	17075.310	4.0	47139.860	4.0
332.5243	27.00	-.43	16195.680	.5	46260.020	1.5
332.5292	28.01	-1.80	105838.060	3.5	135901.960	2.5
332.5330	58.01	.07	8065.752	0.0	38137.955	0.0
332.5368	22.00	-1.86	18525.070	2.0	48588.280	3.0
332.5413	25.01	-3.57	55696.500	4.0	85759.300	4.0
332.5423	27.00	-1.21	18775.010	.5	48837.720	.5
332.5462	26.00	-1.79	19788.248	4.0	49850.610	3.0
332.5491	28.01	-1.38	103653.030	3.5	133715.130	4.5
332.5498	18.00	-2.47	93143.800	2.0	123205.630	3.0
332.5562	26.02	-3.53	105929.160	3.0	135990.620	4.0
332.5653	28.00	-3.32	28569.210	2.0	58629.840	2.0
332.5660	92.01	-1.74	0.000	0.0	30069.219	0.0
332.5670	42.00	-.27	10646.793	0.0	40715.922	0.0
332.5740	23.00	-.84	9824.580	2.5	39884.430	1.5
332.5803	25.01	-4.23	52653.270	4.0	82712.550	3.0
332.5808	25.02	-2.86	86520.940	2.5	116580.170	1.5
332.5809	29.01	-1.76	117928.480	1.0	147987.700	2.0
332.5822	25.01	-3.52	37851.150	3.0	67910.260	4.0
332.5906	29.01	-2.30	120684.550	3.0	150742.900	3.0
332.5967	27.02	-4.89	77472.300	2.5	107530.100	3.5
332.6070	25.01	-1.99	43339.100	2.0	73395.970	2.0
332.6072	14.02	-1.67	204330.790	2.0	234387.640	1.0
332.6082	22.00	-7.89	14105.680	3.0	44162.440	4.0
332.6118	8.02	-.97	368526.370	1.0	398582.800	1.0
332.6122	30.02	-3.18	234576.000	4.0	264632.400	3.0
332.6164	25.01	-2.71	43339.100	2.0	73395.120	3.0
332.6174	25.01	-3.89	52718.800	0.0	82774.730	1.0
332.6190	74.00	-.81	6129.972	0.0	36194.400	0.0
332.6203	28.01	-3.19	99418.610	3.5	129474.270	3.5
332.6237	25.01	-3.48	73780.810	3.0	103836.170	2.0
332.6251	27.00	-4.21	14399.280	.5	44454.510	.5
332.6263	27.00	-.78	24627.790	4.5	54682.910	4.5
332.6366	27.00	-2.27	18389.570	1.5	48443.760	2.5
332.6408	25.01	-3.14	53017.160	1.0	83070.970	2.0
332.6410	40.00	-1.12	4113.534	0.0	34175.974	0.0
332.6443	27.02	-3.94	73540.200	3.5	103593.700	2.5
332.6445	22.00	-3.53	11531.760	2.0	41585.240	3.0
332.6450	90.01	-1.49	4436.164	0.0	34498.242	0.0
332.6457	24.00	-2.79	27223.050	2.0	57276.420	3.0
332.6558	27.00	-2.33	13795.520	2.5	43847.980	3.5
332.6573	24.00	-.77	24940.610	2.0	54992.930	2.0
332.6620	41.00	.22	9275.615	0.0	39336.157	0.0
332.6621	22.00	-2.06	8602.340	2.0	38654.230	1.0
332.6631	28.00	-1.60	28578.046	3.0	58629.840	2.0
332.6644	22.00	-3.25	16106.080	4.0	46157.760	5.0
332.6663	28.00	-2.30	28578.046	3.0	58629.550	3.0
332.6678	22.00	-6.71	14028.470	2.0	44079.840	2.0
332.6679	22.01	-.68	9975.920	1.5	40027.280	1.5
332.6686	23.03	-.70	255747.600	3.0	285798.900	2.0
332.6728	25.01	-3.72	73785.250	2.0	103836.170	2.0
332.6734	21.01	-1.97	29823.920	2.0	59874.790	1.0
332.6748	22.01	-1.10	907.960	1.5	30958.700	2.5
332.6770	24.00	-2.49	31987.060	4.0	62037.600	5.0
332.6778	16.01	-3.73	110268.330	2.5	140318.800	3.5
332.6800	40.01	.77	12259.943	0.0	42318.858	0.0
332.6833	22.01	-1.47	10024.740	2.5	40074.710	3.5
332.6835	24.00	-2.74	31028.330	2.0	61078.280	3.0
332.6874	27.01	-3.99	18338.500	1.0	48388.100	2.0
332.6883	25.00	-1.47	34938.700	4.5	64988.220	3.5
332.6986	27.00	.37	23611.780	5.5	53660.370	5.5
332.7059	29.01	-3.25	116375.470	3.0	146423.400	4.0
332.7075	23.02	-4.53	56669.050	1.5	86716.840	1.5
332.7084	9.00	-3.25	118936.797	1.5	148984.500	.5
332.7096	25.01	-3.63	49465.130	3.0	79512.730	3.0
332.7103	26.00	-3.15	22249.430	3.0	52296.960	2.0
332.7124	28.01	-1.58	98822.550	6.5	128869.890	5.5
332.7152	10.01	-.20	219648.440	1.5	249695.530	1.5
332.7180	90.01	-.40	12340.601	0.0	42396.083	0.0
332.7205	24.00	-4.18	24282.340	4.0	54328.950	3.0
332.7213	26.01	-4.33	37227.320	.5	67273.860	1.5
332.7240	25.01	-1.89	52373.180	3.0	82419.480	3.0
332.7241	24.00	-2.22	25106.340	3.0	55152.630	2.0
332.7244	28.00	-1.31	31786.210	3.0	61832.470	4.0
332.7267	25.01	-2.37	43339.100	2.0	73385.150	1.0
332.7289	24.00	-2.18	28679.430	1.0	58725.280	1.0
332.7300	42.00	-.25	10888.765	0.0	40943.163	0.0
332.7385	28.00	-.43	26665.903	3.0	56710.889	2.0
332.7420	76.00	.18	14760.326	0.0	44813.641	0.0
332.7445	24.00	-4.99	27176.220	1.0	57220.670	2.0
332.7451	28.01	-4.94	106283.160	2.5	136327.550	1.5
332.7466	23.01	-4.05	32040.760	2.0	62085.020	2.0
332.7497	26.00	-3.89	19390.165	6.0	49434.142	6.0
332.7526	27.00	-1.18	25269.250	3.5	55312.960	4.5
332.7560	27.00	-1.47	23152.570	3.5	53195.980	2.5
332.7580	69.01	-1.17	8872.327	0.0	38924.197	0.0
332.7594	24.00	-2.65	28682.180	2.0	58725.280	1.0
332.7625	26.01	-4.57	30764.460	3.5	60807.280	4.5
332.7627	27.02	-4.68	140492.400	4.5	170535.200	4.5
332.7627	27.02	-4.68	140492.400	4.5	170535.200	4.5
332.7650	23.03	-1.00	257690.800	3.0	287733.400	2.0
332.7660	58.01	-1.21	2581.041	0.0	32632.188	0.0
332.7687	11.01	-.92	300510.920	1.0	330553.180	0.0
332.7687	11.01	-.92	300510.920	1.0	330559.180	0.0
332.7776	28.01	-4.47	101754.800	2.5	131796.260	2.5
332.7852	28.01	-1.62	105861.190	2.5	135901.960	2.5
332.7890	39.01	.08	3226.301	0.0	33275.371	0.0
332.7900	58.01	-.66	5646.026	0.0	35695.006	0.0
332.7912	29.01	-2.38	116375.470	3.0	146415.700	2.0
332.7926	25.01	-4.86	52379.380	2.0	82419.480	3.0
332.7945	28.01	-1.79	72985.650	1.5	103025.580	2.5
332.7950	26.00	-4.00	17550.180	3.0	47590.070	4.0
332.7968	24.00	-4.21	24093.160	2.0	54132.880	3.0
332.7996	25.01	-1.10	48435.960	6.0	78479.430	7.0
332.8156	25.02	-4.44	90936.220	1.5	120974.250	.5
332.8197	26.01	-3.51	69650.540	2.5	99688.200	3.5
332.8210	72.01	-1.33	4839.451	0.0	34885.632	0.0
332.8250	90.01	-.66	13147.176	0.0	43192.996	0.0
332.8280	60.01	-1.10	0.000	0.0	30045.549	0.0
332.8310	24.00	-2.67	20520.920	3.0	50557.560	4.0
332.8334	24.01	-1.53	19528.380	.5	49564.800	1.5
332.8342	22.00	-2.10	18482.860	1.0	48519.210	2.0
332.8364	28.01	-3.66	104503.220	2.5	134539.370	2.5
332.8407	25.01	-1.61	52383.720	4.0	82419.480	3.0
332.8414	27.01	-3.45	17771.500	3.0	47807.200	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
332.8439	23.01	-1.72	19166.190	1.0	49201.660	2.0
332.8443	24.00	-4.09	31352.420	1.0	61387.860	0.0
332.8514	23.03	.41	256251.700	4.0	286286.500	4.0
332.8617	24.00	-1.61	20523.690	4.0	50557.560	4.0
332.8643	25.01	-2.71	59537.400	4.0	89571.030	3.0
332.8644	24.00	-1.16	20523.940	5.0	50557.560	4.0
332.8708	28.01	-.54	98822.550	6.5	128855.600	6.5
332.8710	28.00	-2.40	879.813	2.0	30912.838	1.0
332.8724	7.01	-.10	166678.640	3.0	196711.540	2.0
332.8777	23.00	-6.07	8578.520	2.5	38610.940	3.5
332.8821	22.00	-2.97	15975.590	3.0	46007.620	4.0
332.8856	28.01	-4.48	106022.790	.5	136054.500	1.5
332.8867	26.00	-.36	26351.049	5.0	56382.664	5.0
332.8874	27.00	-2.52	16470.600	1.5	46502.150	.5
332.8913	25.01	-3.43	49882.150	4.0	79913.350	4.0
332.9000	58.01	-.44	4678.136	0.0	34717.187	0.0
332.9008	27.00	-1.00	24326.110	3.5	54356.450	4.5
332.9023	17.02	-.68	174093.800	1.5	204124.000	1.5
332.9045	24.00	-.70	25177.390	4.0	55207.400	4.0
332.9104	26.01	-2.48	31483.200	3.5	61512.670	4.5
332.9129	24.00	-3.50	23512.000	1.0	53541.250	2.0
332.9150	24.00	-2.58	24299.890	2.0	54328.950	3.0
332.9158	10.01	.08	249108.640	3.5	279137.620	3.5
332.9212	17.01	.22	131768.000	2.0	161796.500	3.0
332.9235	18.00	-2.94	98143.800	2.0	123172.090	1.0
332.9335	16.01	-4.14	113461.220	1.5	143488.610	.5
332.9340	64.01	-.26	9033.642	0.0	39069.625	0.0
332.9360	41.00	0.00	8711.012	0.0	38746.815	0.0
332.9445	22.01	-.18	1087.210	3.5	31113.610	3.5
332.9468	27.00	-1.73	24326.110	3.5	54352.300	3.5
332.9469	24.01	-1.15	39877.280	3.5	69903.460	3.5
332.9523	26.00	-1.53	24574.655	4.0	54600.350	3.0
332.9599	24.00	-2.88	24303.940	3.0	54328.950	3.0
332.9620	62.01	-1.34	3871.561	0.0	33905.018	0.0
332.9636	29.00	-1.04	41135.335	0.0	71168.648	0.0
332.9709	28.01	-2.68	104503.220	2.5	134527.240	3.5
332.9768	25.01	-3.25	49889.860	3.0	79913.350	4.0
332.9860	23.00	-1.32	9824.580	2.5	39847.240	1.5
332.9863	25.01	-2.92	73780.810	3.0	103803.440	3.0
332.9891	26.02	-3.49	88663.870	4.0	118686.250	4.0
332.9919	12.00	-1.93	21850.405	0.0	51872.526	1.0
332.9931	24.00	-1.03	24056.110	5.0	54078.130	5.0
332.9981	23.00	-5.71	0.000	1.5	30021.570	.5
332.9990	38.00	-.53	14437.696	0.0	44467.816	0.0
333.0018	10.02	-3.48	379834.000	1.0	409855.230	1.0
333.0174	25.00	-2.57	33825.490	2.5	63845.320	1.5
333.0208	26.00	-4.44	22838.320	2.0	52857.840	1.0
333.0255	28.02	-3.46	103306.100	3.0	133325.200	4.0
333.0270	28.00	-3.99	28569.210	2.0	58588.168	3.0
333.0317	7.01	-.69	166521.690	1.0	196540.230	0.0
333.0355	25.01	-4.32	73785.250	2.0	103803.440	3.0
333.0384	8.02	-.50	368526.370	1.0	398544.300	2.0
333.0403	8.02	-.23	338565.870	1.0	368583.630	2.0
333.0480	90.00	-.77	0.000	0.0	30025.702	0.0
333.0519	25.02	-3.44	109841.120	3.5	139857.840	4.5
333.0590	22.00	-3.02	15877.180	2.0	45893.260	3.0
333.0601	24.00	-2.28	24940.610	2.0	54956.590	1.0
333.0620	50.00	-.49	8549.697	0.0	38574.137	0.0
333.0653	23.02	-4.71	56922.500	2.5	86938.010	2.5
333.0694	25.00	-1.67	17451.520	2.5	47466.660	1.5
333.0736	10.01	-2.41	251011.180	2.5	281025.940	2.5
333.0758	28.01	-2.00	98822.550	6.5	128837.110	5.5
333.0767	25.01	-.79	37851.150	3.0	67865.630	4.0
333.0846	27.00	-1.93	25269.250	3.5	55283.020	2.5
333.1026	24.01	-2.99	33694.470	5.5	63706.620	4.5
333.1034	28.01	-.81	104646.520	3.5	134658.600	4.5
333.1070	27.00	-2.13	23184.230	2.5	53195.980	2.5
333.1085	21.01	-.08	27602.320	3.0	57613.940	2.0
333.1090	45.00	-1.52	5565.369	0.0	35585.573	0.0
333.1145	10.02	-4.50	379834.000	1.0	409845.080	2.0
333.1220	58.01	-1.00	4274.849	0.0	34293.881	0.0
333.1240	45.00	-1.18	9114.300	0.0	39133.152	0.0
333.1251	28.00	-2.25	28578.046	3.0	58588.168	3.0
333.1307	7.01	-.35	166582.450	2.0	196592.070	1.0
333.1380	64.01	-.35	0.000	0.0	30017.590	0.0
333.1400	42.00	-.29	16615.449	0.0	46632.859	0.0
333.1470	25.01	-3.78	52379.380	2.0	82387.530	3.0
333.1520	75.00	-.52	14115.066	0.0	44131.395	0.0
333.1524	25.01	-1.14	48333.060	5.0	78340.720	6.0
333.1613	26.00	-1.87	19621.004	5.0	49627.861	4.0
333.1613	26.02	-3.42	114325.350	5.0	144332.210	4.0
333.1670	74.00	-1.22	2903.671	0.0	32918.648	0.0
333.1675	27.00	-3.11	23611.780	5.5	53618.080	6.5
333.1771	26.00	-1.88	20037.815	0.0	50043.250	1.0
333.1787	26.01	-1.26	73603.530	5.5	103608.820	4.5
333.1850	28.01	-4.55	100475.820	3.5	130480.550	3.5
333.1868	28.01	-3.85	105981.500	4.5	135986.060	3.5
333.1875	28.01	.19	98822.550	6.5	128827.050	7.5
333.1890	72.00	-.94	10404.820	0.0	40417.816	0.0
333.1907	8.01	-4.10	231350.080	2.5	261354.300	2.5
333.1915	22.00	-7.69	11776.806	4.0	41780.950	4.0
333.1964	13.01	-2.37	110087.500	2.0	140091.200	1.0
333.2050	44.00	.69	31214.460	0.0	61226.014	0.0
333.2093	22.01	-.15	10024.740	2.5	40027.280	1.5
333.2130	64.01	.48	8469.040	0.0	38479.874	0.0
333.2146	12.00	-1.45	21870.464	1.0	51872.526	1.0
333.2160	41.00	-1.01	2097.096	0.0	32107.660	0.0
333.2167	24.01	-2.38	35707.660	5.5	65709.530	5.5
333.2267	28.01	-4.49	99418.610	3.5	129419.580	4.5
333.2362	26.02	-4.37	89697.520	3.0	119697.640	2.0
333.2372	25.01	-4.85	55759.270	3.0	85759.300	4.0
333.2400	90.01	-.55	12098.628	0.0	42107.030	0.0
333.2410	73.00	-.99	9194.957	0.0	39203.269	0.0
333.2420	92.01	-1.33	5726.684	0.0	35734.906	0.0
333.2430	27.00	-4.48	25269.250	3.5	55268.750	3.5
333.2453	17.01	-2.73	119799.000	2.0	149798.300	2.0
333.2468	8.02	-.50	368583.630	2.0	398582.800	1.0
333.2500	25.00	-4.45	25281.040	2.5	55279.910	1.5
333.2539	24.00	-1.53	27703.840	4.0	57702.360	5.0
333.2548	24.01	-3.30	54678.950	4.5	84677.390	3.5
333.2575	28.01	-4.33	99844.130	3.5	129842.330	2.5
333.2639	24.00	-2.56	27223.050	2.0	57220.670	2.0
333.2700	62.01	-1.49	2661.698	0.0	32667.399	0.0
333.2730	72.00	-.93	0.000	0.0	30005.431	0.0
333.2758	25.01	-4.28	55371.300	3.0	85367.850	2.0
333.2809	22.01	-1.59	9930.740	1.5	39926.830	2.5
333.2835	28.01	-1.61	98822.550	6.5	128818.410	6.5
333.2840	28.01	-2.14	105981.500	4.5	135977.310	4.5
333.2867	28.01	-.91	104646.520	3.5	134642.090	3.5
333.2871	24.00	-1.23	25106.340	3.0	55101.870	3.0
333.2921	28.01	-4.39	100475.820	3.5	130470.900	4.5
333.2940	25.00	-4.15	23296.670	3.5	53291.580	2.5
333.2986	24.01	-.70	54499.700	1.5	84494.200	2.5
333.2996	8.02	-.21	338690.340	2.0	368684.750	3.0
333.3009	22.00	-2.23	18593.990	3.0	48588.280	3.0
333.3026	22.00	-2.25	18525.070	2.0	48519.210	2.0
333.3040	58.01	-1.18	0.000	0.0	30002.640	0.0
333.3046	22.00	-6.81	13981.750	1.0	43975.710	1.0
333.3060	70.01	-.35	33472.871	0.0	63475.331	0.0
333.3076	24.00	-1.49	23933.900	4.0	53927.590	4.0
333.3125	25.01	-1.84	49465.130	3.0	79458.380	2.0
333.3130	90.00	-.59	2823.013	0.0	32824.843	0.0
333.3139	14.01	-1.27	81191.600	.5	111184.720	.5
333.3179	25.01	-3.35	68417.340	2.0	98410.100	2.0
333.3187	26.02	-3.80	189011.840	4.0	219004.530	4.0
333.3235	26.02	-3.53	114339.950	4.0	144332.210	4.0
333.3327	27.00	-3.61	17233.680	3.5	47225.110	3.5
333.3383	27.00	-1.86	4142.660	3.5	34133.590	3.5
333.3405	27.00	-1.94	16195.680	.5	46186.410	1.5
333.3405	24.01	-4.45	38315.000	2.5	68305.730	1.5
333.3470	24.00	-1.75	27597.220	3.0	57587.360	4.0
333.3548	24.00	-1.31	31987.060	4.0	61976.500	4.0
333.3585	24.00	-1.85	23386.350	3.0	53375.460	4.0
333.3603	28.01	-2.72	101144.630	3.5	131133.580	2.5
333.3621	23.01	-2.88	18269.490	1.0	48258.280	0.0
333.3640	62.01	-.98	4355.506	0.0	34352.746	0.0
333.3660	58.01	-.47	5726.684	0.0	35723.744	0.0
333.3664	17.01	-1.86	119809.900	3.0	149798.300	2.0
333.3684	27.00	-2.48	23207.760	1.5	53195.980	2.5
333.3828	25.01	-3.35	43696.190	3.0	73683.110	4.0
333.3884	25.00	-4.40	34423.270	3.5	64409.690	3.5
333.3910	22.00	-4.63	0.000	2.0	29986.185	3.0
333.3931	24.01	-3.12	45730.740	2.5	75716.740	3.5
333.3940	10.01	-.58	276276.850	1.5	306262.770	1.5
333.3986	23.03	-.71	226796.300	2.0	256781.800	1.0
333.4114	27.00	-2.11	16470.600	1.5	46454.950	1.5
333.4117	22.00	-1.82	11639.804	3.0	41624.130	4.0
333.4148	27.00	-1.29	3482.820	4.5	33466.870	3.5
333.4160	77.00	-.40	12985.861	0.0	42978.423	0.0
333.4164	25.00	-3.10	30411.740	.5	60395.640	1.5
333.4220	26.00	-2.81	19621.004	5.0	49604.402	5.0
333.4220	23.00	-5.01	137.380	2.5	30120.780	2.5
333.4250	40.01	.24	7985.094	0.0	37976.846	0.0
333.4269	26.00	-2.00	26351.049	5.0	56334.010	6.0
333.4321	22.00	-1.84	16961.420	3.0	46943.910	2.0
333.4330	63.00	.04	0.000	0.0	29991.033	0.0
333.4368	24.01	-2.97	33619.130	4.5	63601.200	3.5
333.4417	25.00	-2.86	34938.700	4.5	64920.330	3.5
333.4460	58.01	.35	10001.532	0.0	39991.395	0.0
333.4480	60.01	-1.07	1451.835	0.0	31441.519	0.0
333.4561	28.01	-1.28	101144.630	3.5	131124.960	3.5
333.4565	25.00	-2.05	27248.000	1.5	57228.300	.5
333.4566	26.02	-4.11	114351.920	3.0	144332.210	4.0
333.4598	26.02	-3.02	189024.530	5.0	219004.530	4.0
333.4610	90.01	-.49	6129.972	0.0	36118.486	0.0
333.4620	40.01	-.44	4436.164	0.0	34424.588	0.0
333.4673	24.00	-2.29	23305.010	2.0	53284.340	3.0
333.4677	28.00	-.43	29013.228	2.0	58992.520	2.0
333.4683	22.00	-4.54	17215.440	5.0	47194.680	4.0
333.4730	28.00	-2.81	28542.113	5.0	58520.923	5.0
333.4756	28.01	-3.17	105981.500	4.5	135960.080	4.5
333.4779	24.00	-1.00	27176.220	1.0	57154.590	0.0
333.4782	10.01	-1.16	251011.180	2.5	280989.530	1.5
333.4787	23.03	.39	227712.500	4.0	257690.800	3.0
333.4809	30.02	-.35	230606.000	0.0	260584.100	1.0
333.4836	10.01	.39	219130.780	2.5	249108.640	3.5
333.4838	23.00	-2.88	20606.430	.5	50584.270	1.5
333.4884	22.00	-2.36	18695.230	4.0	48672.660	4.0
333.4990	26.02	-4.03	189679.070	3.0	219655.550	2.0
333.5040	25.00	-1.60	30419.610	2.5	60395.640	1.5
333.5060	90.01	-.88	8549.697	0.0	38534.165	0.0
333.5115	25.01	-2.60	55759.270	3.0	85734.620	3.0
333.5148	26.02	-4.62	199595.300	3.0	229570.360	2.0
333.5165	22.01	-.35	983.800	2.5	30958.700	2.5
333.5209	28.01	-1.61	105981.500	4.5	135956.010	5.5
333.5215	29.00	-1.03	41135.335	0.0	71116.410	0.0
333.5248	22.00	-7.63	14105.680	3.0	44079.840	2.0
333.5252	22.00	-8.69	12118.394	4.0	42092.520	4.0
333.5261	24.01	-.21	35569.020	2.5	65543.060	3.5
333.5360	75.00	-.95	11534.025	0.0	41515.796	0.0
333.5387	26.00	-2.93	20641.110	4.0	50614.020	4.0
333.5434	24.01	-.66	35707.660	5.5	65680.150	4.5
333.5440	26.00	-2.33	18378.187	2.0	48350.620	1.0
333.5473	23.01	-5.96	22273.540	1.0	52245.680	2.0
333.5511	26.00	-3.81	12560.933	3.0	42532.729	3.0
333.5638	28.01	-.90	101144.630	3.5	131115.280	4.5
333.5690	44.00	-.25	11695.340	0.0	41674.145	0.0
333.5710	26.00	-2.04	21999.132	4.0	51969.140	3.0
333.5718	25.00	-2.18	30425.710	1.5	60395.640	1.5
333.5770	26.00	-1.19	22946.810	1.0	52916.278	2.0
333.5773	28.01	-4.63	71770.830	2.5	101740.270	3.5
333.5779	24.00	-.98	27163.200	0.0	57132.590	1.0
333.5811	27.02	-4.71	78434.300	.5	108403.400	1.5
333.5842	28.01	-4.85	106620.530	3.5	136589.350	3.5
333.5894	26.01	-3.92	31364.470	1.5	61332.820	1.5
333.5899	26.01	-4.94	70523.730	3.5	100492.040	3.5
333.5900	12.02	-.20	532971.200	3.0	562939.500	2.0
333.5929	24.01	-2.52	38509.070	3.5	68477.110	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
333.5987	26.02	-4.76	188955.560	3.0	218923.080	3.0
333.6048	23.00	-2.82	20687.750	1.5	50654.720	2.5
333.6093	10.01	-.03	276276.850	1.5	306243.420	2.5
333.6104	26.01	-2.35	69606.640	3.5	99573.110	4.5
333.6117	24.01	-2.42	21822.860	2.5	51789.210	3.5
333.6120	62.01	-1.25	2177.753	0.0	32152.694	0.0
333.6122	26.00	-3.63	17726.985	2.0	47693.289	3.0
333.6127	18.02	.50	196679.800	3.0	226646.060	4.0
333.6149	28.01	-3.94	68156.570	1.5	98122.630	.5
333.6150	76.00	-.65	4113.534	0.0	34088.205	0.0
333.6152	24.01	-4.98	44307.440	.5	74273.480	1.5
333.6156	17.02	-.56	179076.100	1.5	209042.100	.5
333.6180	64.01	-.46	0.000	0.0	29974.402	0.0
333.6195	24.00	-2.80	24286.540	1.0	54252.190	2.0
333.6195	8.01	-4.27	231296.050	1.5	261261.700	1.5
333.6201	12.02	-.89	531833.100	3.0	561798.700	3.0
333.6251	26.00	-.56	26627.612	4.0	56592.760	4.0
333.6295	25.00	-4.41	23296.670	3.5	53261.420	3.5
333.6310	24.01	-1.01	19528.380	.5	49493.000	.5
333.6395	25.01	-1.00	37847.900	2.0	67811.750	3.0
333.6403	26.00	-4.03	22249.430	3.0	52213.207	3.0
333.6501	28.01	-2.84	105981.500	4.5	135944.400	3.5
333.6510	42.00	.16	18147.942	0.0	48119.379	0.0
333.6535	26.00	-4.87	24338.766	3.0	54301.360	4.0
333.6535	26.00	-3.70	24338.766	3.0	54301.360	4.0
333.6657	27.02	-4.03	73540.200	3.5	103501.700	3.5
333.6674	12.00	-1.23	21911.178	2.0	51872.526	1.0
333.6697	28.00	-2.24	28569.210	2.0	58530.350	3.0
333.6729	28.01	-2.62	104646.520	3.5	134607.370	4.5
333.6749	8.02	-1.23	368583.630	2.0	398544.300	2.0
333.6757	25.01	-2.15	37851.150	3.0	67811.750	3.0
333.6768	8.02	-.71	338565.870	1.0	368526.370	1.0
333.6776	28.01	-1.99	106022.790	.5	135983.220	1.5
333.6845	24.00	-1.38	27597.220	3.0	57557.030	3.0
333.6891	30.02	-1.40	234866.900	1.0	264826.300	1.0
333.6935	27.02	-4.14	73286.000	4.5	103245.000	5.5
333.6949	22.00	-2.13	8492.421	1.0	38451.298	2.0
333.6956	22.01	-2.53	9518.050	2.5	39476.870	2.5
333.6964	24.00	-.25	31049.330	6.0	61008.070	5.0
333.6980	64.01	-.50	8469.040	0.0	38436.256	0.0
333.6986	28.01	-2.51	101144.630	3.5	131103.180	2.5
333.6989	26.02	-3.52	189784.520	2.0	219743.040	1.0
333.7007	28.00	-2.98	204.786	3.0	30163.140	2.0
333.7100	28.01	-2.43	70635.460	2.5	100592.980	3.5
333.7143	23.00	-4.92	137.380	2.5	30094.520	1.5
333.7166	28.01	-2.29	103025.580	2.5	132982.510	1.5
333.7169	27.00	-2.43	3482.820	4.5	33439.720	4.5
333.7177	25.01	-4.06	73911.310	1.0	103868.140	1.0
333.7201	27.00	-2.64	24326.110	3.5	54282.730	2.5
333.7228	24.00	-1.17	27176.220	1.0	57132.590	1.0
333.7247	17.01	-4.12	119842.100	1.0	149798.300	2.0
333.7357	28.00	-2.84	29084.478	4.0	59039.693	4.0
333.7381	28.01	-3.38	109148.050	4.5	139103.050	5.5
333.7384	22.00	-1.79	17075.310	4.0	47030.280	3.0
333.7388	25.01	-1.16	37811.570	1.0	67766.510	2.0
333.7414	8.01	-4.31	248185.300	2.5	278140.000	1.5
333.7414	12.02	-4.14	534776.900	2.0	564731.600	1.0
333.7490	57.01	-.25	3226.301	0.0	33188.938	0.0
333.7574	29.01	-1.06	120789.630	4.0	150742.900	3.0
333.7608	26.02	-4.87	199577.710	2.0	229530.670	1.0
333.7635	24.00	-3.20	31055.350	5.0	61008.070	5.0
333.7666	26.00	-1.45	21715.735	5.0	51668.175	4.0
333.7682	24.00	-2.95	24299.890	2.0	54252.190	2.0
333.7682	28.00	-.22	28578.046	3.0	58530.350	3.0
333.7713	25.01	-3.83	52653.270	4.0	82605.290	4.0
333.7723	26.01	-3.06	36126.410	1.5	66078.340	2.5
333.7758	23.01	-5.75	20522.140	1.0	50473.760	1.0
333.7762	24.00	-1.29	31009.000	3.0	60960.580	4.0
333.7790	92.01	-1.28	241.973	0.0	30201.917	0.0
333.7800	73.00	-1.96	1935.780	0.0	31895.634	0.0
333.7803	27.00	-3.23	23152.570	3.5	53103.780	3.5
333.7835	23.01	.04	25191.080	2.0	55142.010	3.0
333.7837	22.01	-.98	9975.920	1.5	39926.830	2.5
333.7845	29.00	-2.29	11211.395	0.0	41170.845	0.0
333.7870	90.01	-1.02	1774.465	0.0	31733.690	0.0
333.8016	25.00	-2.19	34938.700	4.5	64888.000	4.5
333.8039	30.02	-3.35	233610.400	2.0	263559.500	1.0
333.8039	30.02	-2.19	233610.400	2.0	263559.500	1.0
333.8045	29.01	-.26	116080.460	3.0	146029.500	4.0
333.8087	28.01	-.11	101144.630	3.5	131093.300	4.5
333.8133	24.00	-3.90	24303.940	3.0	54252.190	2.0
333.8180	75.00	1.13	20325.695	0.0	50282.138	0.0
333.8187	26.01	-4.35	13673.210	1.5	43620.980	1.5
333.8246	22.00	-7.60	14028.470	2.0	43975.710	1.0
333.8272	26.02	-3.14	189796.030	1.0	219743.040	1.0
333.8289	25.00	-1.15	35041.370	3.5	64988.220	3.5
333.8334	25.00	-2.79	27281.850	.5	57228.300	.5
333.8370	77.00	-1.05	10485.478	0.0	40440.216	0.0
333.8390	90.01	-1.04	7259.177	0.0	37213.736	0.0
333.8410	40.01	-.10	7662.464	0.0	37616.843	0.0
333.8447	22.00	-2.96	11639.804	3.0	41585.240	3.0
333.8480	92.01	-1.63	887.233	0.0	30840.984	0.0
333.8490	73.00	-1.38	5968.656	0.0	35922.318	0.0
333.8513	26.01	-2.33	31387.980	2.5	61332.820	1.5
333.8518	27.00	-1.23	18389.570	1.5	48334.370	1.5
333.8540	45.00	-1.28	1451.835	0.0	31405.048	0.0
333.8633	26.00	-1.42	24180.848	3.0	54124.620	4.0
333.8633	26.02	-2.06	98661.880	1.0	128605.650	1.0
333.8658	29.01	-2.57	116080.460	3.0	146024.000	4.0
333.8663	23.03	-3.74	225804.100	2.0	255747.600	3.0
333.8700	24.01	-4.09	38362.560	1.5	68305.730	1.5
333.8716	25.01	-4.67	70745.080	3.0	100688.100	3.0
333.8720	24.00	-2.31	31987.060	4.0	61930.050	3.0
333.8750	63.01	.22	26697.639	0.0	56648.968	0.0
333.8756	28.00	-2.83	13521.352	2.0	43464.019	1.0
333.8801	28.01	-3.30	100389.520	2.5	130331.780	1.5
333.8826	22.00	-1.70	8602.340	2.0	38544.380	3.0
333.8909	24.01	-.03	54784.670	3.5	84725.960	3.5
333.8937	29.01	-1.53	116080.460	3.0	146021.500	3.0
333.9026	24.00	-2.90	32097.360	6.0	62037.600	5.0
333.9046	28.00	.19	28578.046	3.0	58518.110	4.0
333.9070	60.01	-1.19	483.945	0.0	30432.404	0.0
333.9087	29.01	-1.42	118163.500	2.0	148103.200	3.0
333.9112	24.00	-4.04	24093.160	2.0	54032.630	2.0
333.9119	25.00	-1.71	33825.490	2.5	63764.900	2.5
333.9184	26.00	-1.70	23783.617	5.0	53722.440	5.0
333.9196	26.00	-2.46	19788.248	4.0	49726.964	4.0
333.9363	25.01	-4.08	70745.080	3.0	100682.300	4.0
333.9363	26.02	-2.02	83646.980	1.0	113584.200	2.0
333.9488	25.00	-3.04	17451.520	2.5	47387.620	3.5
333.9509	10.01	-2.76	251011.180	2.5	280947.100	1.5
333.9510	58.01	-.89	2339.068	0.0	32283.581	0.0
333.9518	22.00	-1.85	15877.180	2.0	45813.010	2.0
333.9550	44.00	.27	8711.012	0.0	38655.166	0.0
333.9560	24.01	-2.40	35607.600	3.5	65543.060	3.5
333.9572	26.00	-1.35	24335.764	2.0	54271.110	1.0
333.9630	25.01	-2.89	43850.420	2.0	73785.250	2.0
333.9680	75.00	-.31	17099.394	0.0	47042.383	0.0
333.9702	26.01	-.93	72650.630	4.5	102584.810	5.5
333.9776	24.01	-.82	19631.280	1.5	49564.800	1.5
333.9778	27.00	-.41	23855.620	4.5	53789.120	3.5
333.9816	27.00	-2.23	23855.620	4.5	53788.780	4.5
333.9819	14.01	-.97	81251.580	1.5	111184.720	.5
333.9883	24.01	-.68	35610.500	4.5	65543.060	3.5
333.9910	73.01	-.18	6775.232	0.0	36716.159	0.0
334.0019	29.01	-4.92	116643.960	3.0	146575.300	2.0
334.0125	25.01	-4.04	43850.420	2.0	73780.810	3.0
334.0149	10.02	-3.91	410134.720	1.0	440064.900	1.0
334.0170	42.00	-.46	10646.793	0.0	40585.389	0.0
334.0269	27.02	-4.09	73726.600	2.5	103655.700	1.5
334.0330	22.01	-.47	907.960	1.5	30836.520	1.5
334.0380	39.00	.27	15970.189	0.0	45906.903	0.0
334.0403	25.01	-1.52	59537.400	4.0	89465.300	4.0
334.0414	17.02	-.19	174093.800	1.5	204021.600	.5
334.0470	17.02	.22	174613.900	2.5	204541.200	2.5
334.0560	40.01	-.29	1290.520	0.0	31225.621	0.0
334.0567	26.00	-1.68	18378.187	2.0	48304.623	2.0
334.0580	8.01	-3.26	231427.990	3.5	261354.300	2.5
334.0580	62.01	-.78	322.630	0.0	30257.551	0.0
334.0631	22.00	-1.81	11531.760	2.0	41457.620	3.0
334.0702	22.00	-3.24	18593.990	3.0	48519.210	2.0
334.0737	8.02	-.27	267632.590	2.0	297557.500	1.0
334.0743	25.01	-3.49	73911.310	1.0	103836.170	2.0
334.0785	24.00	-2.25	25177.390	4.0	55101.879	3.0
334.0792	22.00	-2.06	17215.440	5.0	47139.860	4.0
334.0812	29.01	-2.82	108014.660	3.0	137938.900	4.0
334.0890	58.01	-.68	4920.109	0.0	34852.253	0.0
334.0911	23.00	-2.89	20828.480	2.5	50751.830	3.5
334.1080	25.01	-2.76	53017.160	1.0	82939.000	1.0
334.1114	28.01	-3.69	106369.300	1.5	136290.830	.5
334.1155	24.00	-3.09	24277.060	0.0	54198.230	1.0
334.1336	27.00	-1.44	23184.230	2.5	53103.780	3.5
334.1341	28.01	-4.10	67880.160	2.5	97799.660	1.5
334.1430	62.01	-1.72	806.575	0.0	30733.882	0.0
334.1440	25.01	-2.06	37847.900	2.0	67766.510	2.0
334.1467	25.01	-3.17	49882.150	4.0	79800.520	4.0
334.1480	80.00	-.67	43797.033	0.0	73723.892	0.0
334.1485	9.00	-4.87	116987.394	3.5	146905.600	2.5
334.1501	18.01	-4.05	172335.520	2.5	202253.590	1.5
334.1508	10.03	-2.11	642184.000	1.5	672102.000	1.5
334.1545	22.00	-1.69	15975.590	3.0	45893.260	3.0
334.1556	22.00	-2.31	7255.369	2.0	37172.947	1.0
334.1600	41.01	-.04	10082.190	0.0	40007.974	0.0
334.1660	44.00	-.28	9033.642	0.0	38958.889	0.0
334.1660	92.01	-.99	2258.411	0.0	32183.658	0.0
334.1742	18.01	-1.83	157673.320	2.5	187589.230	2.5
334.1750	29.01	-2.07	116643.960	3.0	146559.800	4.0
334.1804	25.01	-3.46	37851.150	3.0	67766.510	2.0
334.1844	10.03	-2.42	643672.000	1.5	673587.000	2.5
334.1870	58.01	-.24	4436.164	0.0	34359.530	0.0
334.1870	66.01	-.71	4274.849	0.0	34198.215	0.0
334.1872	22.01	.38	4628.610	2.5	34543.360	3.5
334.1875	22.00	-.16	0.000	2.0	29914.720	3.0
334.1888	17.01	-2.91	149952.400	1.0	179867.000	1.0
334.1900	26.00	-1.04	21715.735	5.0	51630.230	5.0
334.1905	25.01	-2.98	55759.270	3.0	85673.720	4.0
334.1926	26.02	-4.59	199595.300	3.0	229509.560	3.0
334.1943	27.00	-1.39	15774.040	1.5	45688.150	2.5
334.1960	24.01	-1.86	38563.150	4.5	68477.110	4.5
334.1970	41.00	-.08	1129.205	0.0	31051.676	0.0
334.1986	25.01	-3.59	68496.370	1.0	98410.100	2.0
334.2107	29.01	-4.27	116643.960	3.0	146556.600	3.0
334.2150	22.00	-2.68	0.000	2.0	29912.262	3.0
334.2214	24.00	-3.09	24286.540	1.0	54198.230	1.0
334.2216	26.00	-2.19	18378.187	2.0	48289.852	1.0
334.2221	8.01	-3.56	231350.080	2.5	261261.700	1.5
334.2230	57.00	-.38	1048.548	0.0	30968.691	0.0
334.2237	24.00	-.92	27176.220	1.0	57087.709	2.0
334.2240	75.00	1.03	20325.695	0.0	50245.749	0.0
334.2264	26.02	-4.40	189011.840	4.0	218923.080	3.0
334.2287	26.00	-1.24	22946.810	1.0	52857.840	1.0
334.2319	24.01	-2.88	35707.660	5.5	65618.410	6.5
334.2329	25.01	-3.02	49889.860	3.0	79800.520	4.0
334.2454	24.00	-.95	27223.050	2.0	57132.590	1.0
334.2484	28.01	-3.69	100078.780	1.5	129988.050	2.5
334.2535	27.00	-1.72	25041.160	1.5	54949.970	1.5
334.2570	12.02	-.36	532725.700	2.0	562634.200	1.0
334.2575	24.01	-.70	19798.010	2.5	49706.470	2.5
334.2666	23.01	-6.65	22273.540	1.0	52181.180	1.0
334.2707	22.00	-1.74	0.000	2.0	29907.273	2.0
334.2708	27.00	-1.27	16778.160	2.5	46685.430	1.5
334.2715	27.02	-3.38	77622.900	4.5	107530.100	3.5
334.2746	24.00	-1.65	33934.880	3.0	63841.810	4.0
334.2756	26.00	-1.88	24506.902	2.0	54413.740	3.0
334.2766	29.01	-1.50	120875.850	2.0	150782.600	2.0
334.2826	28.01	-1.84	100309.290	5.5	130215.500	4.5
334.2832	28.01	-2.49	93528.440	3.5	123434.600	4.5
334.2879	27.00	-2.33	25041.160	1.5	54946.900	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
334.2900	45.00	-1.01	9114.300	0.0	39028.446	0.0
334.2936	24.00	-3.14	31055.350	5.0	60960.580	4.0
334.2947	25.00	-4.51	25281.040	2.5	55186.170	2.5
334.2948	10.02	-1.93	409855.230	1.0	439760.350	0.0
334.2968	29.01	-1.76	116080.460	3.0	145985.400	2.0
334.2976	26.02	-4.49	188955.560	3.0	218860.430	2.0
334.2988	25.01	-2.42	48435.960	6.0	78340.720	6.0
334.3070	15.01	-1.71	107923.570	2.0	137827.600	1.0
334.3101	26.00	-3.30	17927.378	1.0	47831.132	2.0
334.3207	29.01	-2.08	118163.500	2.0	148066.300	2.0
334.3220	24.00	-.45	24833.860	3.0	54736.550	4.0
334.3221	9.00	-3.58	119081.820	.5	148984.500	.5
334.3238	26.00	-3.16	17550.180	3.0	47452.702	4.0
334.3253	28.01	-2.75	103025.580	2.5	132927.970	1.5
334.3275	21.01	.12	27841.170	4.0	57743.370	3.0
334.3287	22.01	-2.36	10024.740	2.5	39926.830	2.5
334.3291	23.01	-1.90	34228.790	3.0	64130.840	4.0
334.3338	24.00	-.38	24897.550	4.0	54799.180	5.0
334.3348	22.00	-1.68	16106.080	4.0	46007.620	4.0
334.3353	28.02	-4.32	83033.800	2.0	112935.300	3.0
334.3451	25.01	-3.81	53017.160	1.0	82917.780	2.0
334.3469	24.01	-.87	54418.080	.5	84318.540	1.5
334.3470	28.01	-1.81	98969.440	5.5	128869.890	5.5
334.3470	73.00	-1.12	11695.340	0.0	41604.387	0.0
334.3515	27.00	-3.63	23611.780	5.5	53511.830	5.5
334.3522	28.00	-.87	28068.091	4.0	57968.080	3.0
334.3533	55.00	-7.42	0.000	0.0	29908.483	0.0
334.3577	26.00	-2.81	25091.620	0.0	54991.110	1.0
334.3660	28.01	-4.94	106620.530	3.5	136519.280	4.5
334.3666	26.00	-2.23	24338.766	3.0	54237.460	4.0
334.3696	25.00	-3.71	25287.740	3.5	55186.170	2.5
334.3706	24.00	-3.94	24299.890	2.0	54198.230	1.0
334.3710	41.00	-.02	1532.493	0.0	31439.393	0.0
334.3722	29.01	-.31	118163.500	2.0	148061.700	3.0
334.3724	25.00	-2.80	17568.480	1.5	47466.660	1.5
334.3741	22.01	-1.13	1215.580	4.5	31113.610	3.5
334.3745	24.00	-1.97	23386.350	3.0	53284.340	3.0
334.3751	29.01	-.53	116080.460	3.0	145978.400	3.0
334.3788	28.01	-2.01	100309.290	5.5	130206.900	4.5
334.3860	58.01	.05	5726.684	0.0	35632.242	0.0
334.3867	23.03	-.48	254468.800	2.0	284365.700	1.0
334.3896	55.00	-7.59	0.000	0.0	29905.236	0.0
334.3909	23.00	-3.27	20687.750	1.5	50584.270	1.5
334.3922	24.01	-3.47	39742.360	2.5	69638.770	1.5
334.3925	27.00	-4.67	25269.250	3.5	55165.630	2.5
334.3931	28.01	-.67	100309.290	5.5	130205.620	5.5
334.3960	41.01	-.45	8227.067	0.0	38131.731	0.0
334.4048	27.00	-4.68	17233.680	3.5	47128.960	2.5
334.4055	23.00	-6.84	8715.720	3.5	38610.940	3.5
334.4083	26.00	-4.34	24118.815	4.0	54013.780	5.0
334.4083	26.00	-3.71	24118.815	4.0	54013.780	5.0
334.4200	45.00	-.73	10888.765	0.0	40791.283	0.0
334.4216	28.01	-1.87	100332.090	4.5	130225.870	3.5
334.4216	27.00	-1.88	16778.160	2.5	46671.940	2.5
334.4261	26.02	-3.68	88663.870	4.0	118557.250	5.0
334.4270	8.02	-.96	338690.340	2.0	368583.630	2.0
334.4298	28.01	-2.06	98969.440	5.5	128862.490	4.5
334.4298	22.00	-3.53	18695.230	4.0	48588.280	3.0
334.4320	28.01	-4.11	104646.520	3.5	134539.370	2.5
334.4320	75.00	.73	20325.695	0.0	50227.140	0.0
334.4350	62.01	-1.00	2984.328	0.0	32885.505	0.0
334.4396	10.01	-.27	219947.460	.5	249839.630	.5
334.4504	26.00	-4.84	12968.552	2.0	42859.756	2.0
334.4507	20.00	-1.16	15157.901	0.0	45049.073	1.0
334.4530	44.00	-2.00	0.000	0.0	29899.567	0.0
334.4560	57.01	-.64	1855.123	0.0	31754.422	0.0
334.4562	27.00	-2.49	23184.230	2.5	53074.920	1.5
334.4564	8.02	-.48	368583.630	2.0	398474.300	3.0
334.4611	22.00	-1.84	16267.510	5.0	46157.760	5.0
334.4617	22.00	-4.63	170.132	3.0	30060.328	4.0
334.4637	24.00	-2.08	23305.010	2.0	53195.030	2.0
334.4661	27.02	-4.37	140645.400	3.5	170535.200	4.5
334.4661	27.02	-4.37	140645.400	3.5	170535.200	4.5
334.4716	18.02	.37	196613.910	2.0	226503.220	3.0
334.4750	42.00	.31	11050.080	0.0	40947.681	0.0
334.4760	58.01	-.02	4194.191	0.0	34091.702	0.0
334.4790	40.01	.24	8065.752	0.0	37962.995	0.0
334.4799	9.02	-4.78	357479.350	1.5	387367.920	2.5
334.4870	90.01	-.99	7743.122	0.0	37639.650	0.0
334.4884	20.01	-2.14	56839.250	1.5	86727.060	2.5
334.4896	12.02	-1.07	534776.900	2.0	564664.600	2.0
334.4911	28.01	-4.23	100592.980	3.5	130480.550	3.5
334.4915	22.00	-1.30	15877.180	2.0	45764.710	1.0
334.4974	26.02	-3.74	189679.070	3.0	219566.080	3.0
334.4988	27.00	-4.53	24627.790	4.5	54514.670	3.5
334.5020	30.00	.68	32746.953	0.0	62642.140	0.0
334.5021	24.00	-4.41	25106.340	3.0	54992.930	2.0
334.5023	28.01	-1.32	103025.580	2.5	132912.150	2.5
334.5063	28.01	-.91	101247.370	2.5	131133.580	2.5
334.5069	28.01	-1.07	98969.440	5.5	128855.600	6.5
334.5086	26.00	-4.67	24118.815	4.0	54004.820	3.0
334.5130	27.00	-3.05	14036.280	1.5	43921.890	2.5
334.5145	24.00	-1.12	27816.880	5.0	57702.360	5.0
334.5258	28.01	-1.41	98969.440	5.5	128853.910	4.5
334.5346	25.00	-2.28	17568.480	1.5	47452.160	.5
334.5364	24.00	-1.21	27703.840	4.0	57587.360	4.0
334.5377	28.01	-1.34	100332.090	4.5	130215.500	4.5
334.5454	10.01	.04	246394.130	2.5	276276.850	1.5
334.5515	10.01	-3.26	252798.480	.5	282680.650	.5
334.5555	14.00	-4.48	15394.370	0.0	45276.188	1.0
334.5570	30.00	.01	32746.953	0.0	62637.226	0.0
334.5663	25.02	-4.69	115762.600	1.5	145643.450	2.5
334.5665	25.00	-1.30	34938.700	4.5	64819.530	5.5
334.5678	28.01	-2.19	104646.520	3.5	134527.240	3.5
334.5687	26.00	-3.26	19552.474	1.0	49433.108	2.0
334.5771	23.00	-1.67	11100.650	4.5	40980.540	4.5
334.5827	24.01	-2.13	40228.440	5.5	70107.830	4.5
334.5830	10.01	-1.54	246397.490	1.5	276276.850	1.5
334.5837	28.01	-4.25	99418.610	3.5	129297.910	3.5
334.5860	74.00	-.74	13227.833	0.0	43115.515	0.0
334.5875	25.00	-3.33	35041.370	3.5	64920.330	3.5
334.5881	10.01	-.66	249445.990	2.5	279324.890	1.5
334.5890	92.00	-.79	564.603	0.0	30452.017	0.0
334.5892	23.01	-3.20	36425.070	4.0	66303.880	3.0
334.5922	28.01	-3.41	107082.210	2.5	136960.750	2.5
334.5924	28.01	.13	100309.290	5.5	130187.810	6.5
334.5930	30.00	-.69	32746.953	0.0	62634.010	0.0
334.5980	64.01	-.73	0.000	0.0	29886.610	0.0
334.5991	28.01	-4.24	100592.980	3.5	130470.900	4.5
334.5993	24.00	-.38	24200.230	6.0	54078.130	5.0
334.6021	28.01	-1.02	107082.210	2.5	136959.860	2.5
334.6028	28.01	-.75	101247.370	2.5	131124.960	3.5
334.6040	68.00	-.34	403.288	0.0	30289.362	0.0
334.6117	28.01	-3.40	100332.090	4.5	130208.890	3.5
334.6137	24.00	-2.09	23498.840	4.0	53375.460	4.0
334.6200	75.00	-.38	13711.778	0.0	43596.423	0.0
334.6254	28.01	-.72	101258.010	1.5	131133.580	2.5
334.6282	28.01	-1.57	100309.290	5.5	130184.610	5.5
334.6309	27.00	-2.52	14036.280	1.5	43911.360	1.5
334.6340	28.01	-.91	100332.090	4.5	130206.900	4.5
334.6350	62.01	-1.18	5242.739	0.0	35126.045	0.0
334.6377	25.02	-3.14	146391.300	.5	176265.780	1.5
334.6399	25.00	-2.45	37630.620	4.5	67504.900	5.5
334.6400	42.01	.66	25165.146	0.0	55048.005	0.0
334.6483	28.01	-1.18	100332.090	4.5	130205.620	5.5
334.6515	25.00	-2.12	35114.980	2.5	64988.220	3.5
334.6520	58.01	-.64	4436.164	0.0	34317.952	0.0
334.6550	90.01	-.61	9517.587	0.0	39399.107	0.0
334.6555	26.00	-3.61	26224.961	3.0	56097.850	3.0
334.6712	22.01	-1.02	1087.210	3.5	30958.700	2.5
334.6713	24.00	-.47	24056.110	5.0	53927.590	4.0
334.6763	26.02	-3.50	189784.520	2.0	219655.550	2.0
334.6773	24.00	-.61	23933.900	4.0	53804.840	3.0
334.6891	24.00	-3.91	24093.160	2.0	53963.050	1.0
334.6899	26.00	-2.99	17550.180	3.0	47420.000	2.0
334.6909	22.01	-1.63	9363.710	.5	39233.440	1.5
334.6926	27.00	-1.28	23855.620	4.5	53725.200	4.5
334.6930	41.00	-.61	4920.109	0.0	34798.236	0.0
334.6940	25.02	-4.15	115774.000	3.5	145643.450	2.5
334.7020	42.00	-.29	11050.080	0.0	40927.404	0.0
334.7036	20.01	-1.98	56858.460	2.5	86727.060	3.5
334.7036	20.01	-3.28	56858.460	2.5	86727.060	2.5
334.7053	24.01	-.34	54625.760	2.5	84494.200	2.5
334.7103	28.00	-2.67	29320.782	3.0	59188.780	3.0
334.7140	28.01	-.52	98969.440	5.5	128837.110	5.5
334.7166	22.00	-7.10	12118.394	4.0	41985.830	3.0
334.7197	27.00	-2.33	23207.760	1.5	53074.920	1.5
334.7203	27.02	-4.17	73726.600	2.5	103593.700	2.5
334.7209	29.01	-2.80	120875.850	2.0	150742.900	3.0
334.7228	18.03	-2.82	256093.290	.5	285960.170	.5
334.7300	62.01	-1.05	3871.561	0.0	33746.385	0.0
334.7470	55.00	-2.85	0.000	0.0	29873.307	0.0
334.7478	24.00	-.51	27223.050	2.0	57087.700	2.0
334.7497	26.00	-2.29	24118.815	4.0	53983.300	5.0
334.7530	70.01	-.33	34844.049	0.0	64716.821	0.0
334.7570	27.00	-3.60	25041.160	1.5	54904.990	2.5
334.7638	25.02	-4.09	115780.230	2.5	145643.450	2.5
334.7642	29.01	-1.58	120919.410	1.0	150782.600	2.0
334.7694	10.02	-2.19	409845.080	2.0	439707.810	1.0
334.7696	18.01	-3.73	170530.310	3.5	200393.020	4.5
334.7697	15.03	.30	226888.600	1.0	256751.300	2.0
334.7710	26.02	-2.20	88694.670	5.0	118557.250	5.0
334.7807	24.01	-1.02	19631.280	1.5	49493.000	.5
334.7817	24.00	-3.42	31009.000	3.0	60870.630	4.0
334.7855	28.01	-4.78	100619.260	4.5	130480.550	3.5
334.7898	30.02	-1.79	235452.500	2.0	265313.400	2.0
334.7927	26.00	-2.07	18378.187	2.0	48238.832	2.0
334.8050	8.02	-.48	368684.750	3.0	398544.300	2.0
334.8053	26.02	-3.29	189796.030	1.0	219655.550	2.0
334.8108	27.00	-.82	16470.600	1.5	46329.630	2.5
334.8140	68.00	-1.25	0.000	0.0	29867.329	0.0
334.8178	8.00	-3.15	73768.212	2.0	103626.623	3.0
334.8199	25.01	-4.18	43536.900	4.0	73395.120	3.0
334.8218	22.00	-4.61	17423.853	2.0	47281.900	3.0
334.8233	8.00	-3.30	73768.212	2.0	103626.123	2.0
334.8254	25.01	-3.12	49882.150	4.0	79739.880	5.0
334.8273	8.00	-3.52	73768.212	2.0	103625.766	1.0
334.8282	26.01	-3.43	73751.340	4.5	103608.820	4.5
334.8368	23.01	-2.02	20617.050	2.0	50473.760	1.0
334.8469	28.01	-1.34	101247.370	2.5	131103.180	2.5
334.8505	28.01	-2.22	70635.460	2.5	100490.950	1.5
334.8513	13.02	-.91	165786.320	2.5	195641.740	1.5
334.8532	22.00	-1.05	0.000	2.0	29855.248	1.0
334.8604	28.01	-.88	107082.210	2.5	136936.820	3.5
334.8646	13.02	-1.86	165787.510	1.5	195641.740	1.5
334.8696	37.00	-2.41	0.000	0.0	29862.370	0.0
334.8763	24.00	-2.85	27703.840	4.0	57557.030	3.0
334.8770	90.00	-.69	0.000	0.0	29861.710	0.0
334.8772	28.01	-4.24	99418.610	3.5	129271.720	3.5
334.8801	55.00	-3.90	0.000	0.0	29861.434	0.0
334.8807	29.01	-2.09	118163.500	2.0	148016.300	1.0
334.8816	22.01	-1.14	983.800	2.5	30836.520	1.5
334.8831	10.02	-1.69	409855.230	1.0	439707.810	1.0
334.8838	28.01	.01	100332.090	4.5	130184.610	5.5
334.8848	25.02	-3.00	146066.070	1.5	175918.500	.5
334.8870	29.01	-2.17	116643.960	3.0	146496.200	3.0
334.8902	26.02	-4.99	158257.370	1.0	188109.320	0.0
334.8937	28.01	-4.37	100619.260	4.5	130470.900	4.5
334.9020	22.01	.49	4897.600	3.5	34748.500	4.5
334.9060	24.00	-2.21	24282.340	4.0	54132.880	3.0
334.9060	41.00	.17	2097.096	0.0	31956.221	0.0
334.9123	23.00	-6.03	2112.320	.5	31962.300	.5
334.9190	42.00	-.13	18228.600	0.0	48086.566	0.0
334.9202	27.00	-3.72	24627.790	4.5	54477.070	3.5
334.9210	73.01	.76	14518.354	0.0	44376.141	0.0
334.9237	28.01	.06	98969.440	5.5	128818.410	6.5
334.9238	22.00	-2.64	8602.340	2.0	38451.298	2.0
334.9251	28.01	-4.95	104081.040	4.5	133929.880	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
334.9279	29.00	-.62	42264.541	0.0	72121.713	0.0
334.9294	25.01	-3.00	52383.720	4.0	82232.180	5.0
334.9303	24.00	-3.29	23163.270	0.0	53011.650	1.0
334.9318	24.01	-1.95	19798.010	2.5	49646.250	3.5
334.9322	24.00	-.12	25038.610	5.0	54886.820	6.0
334.9345	17.01	-1.81	150019.000	0.0	179867.000	1.0
334.9406	22.01	.60	393.220	4.5	30240.680	5.5
334.9421	22.00	-.65	11776.806	4.0	41624.130	4.0
334.9453	29.01	-1.27	116080.460	3.0	145927.500	2.0
334.9470	24.01	-3.20	21822.860	2.5	51669.750	2.5
334.9488	25.01	-4.59	55696.500	4.0	85543.230	5.0
334.9499	25.00	-1.31	35041.370	3.5	64888.000	4.5
334.9503	29.02	-4.31	89017.700	4.5	118864.300	3.5
334.9513	27.00	-2.59	23855.620	4.5	53702.130	3.5
334.9520	41.00	.71	11453.368	0.0	41308.392	0.0
334.9663	28.01	-.73	101258.010	1.5	131103.180	2.5
334.9690	24.01	-2.85	21824.820	1.5	51669.750	2.5
334.9726	26.00	-2.13	22838.320	2.0	52682.930	2.0
334.9842	28.01	-.89	103025.580	2.5	132869.160	3.5
334.9853	23.00	-3.18	21032.520	3.5	50876.000	4.5
334.9970	58.01	-.33	5646.026	0.0	35497.040	0.0
334.9990	69.00	-1.01	0.000	0.0	29850.835	0.0
335.0027	28.00	-3.26	32973.414	4.0	62815.340	5.0
335.0033	28.01	-3.64	104081.040	4.5	133922.910	4.5
335.0075	24.02	-4.00	128782.200	3.0	158623.700	4.0
335.0100	64.01	-.06	9275.615	0.0	39125.470	0.0
335.0150	28.01	-3.04	100490.950	1.5	130331.780	1.5
335.0203	28.01	-2.91	70635.460	2.5	100475.820	3.5
335.0203	20.00	-1.22	15210.063	1.0	45050.419	2.0
335.0258	26.00	-2.90	19621.004	5.0	49460.876	5.0
335.0270	68.00	-.35	5081.424	0.0	34929.765	0.0
335.0286	25.00	-3.13	37737.220	3.5	67576.840	4.5
335.0287	26.00	-2.60	19788.248	4.0	49627.861	4.0
335.0300	42.00	-.55	12259.943	0.0	42108.016	0.0
335.0355	20.00	-1.29	15210.063	1.0	45049.073	1.0
335.0356	24.00	-2.19	24897.550	4.0	54736.550	4.0
335.0361	27.00	-4.93	23855.620	4.5	53694.570	3.5
335.0390	25.00	-.72	34845.260	.5	64683.950	1.5
335.0400	63.00	-.89	0.000	0.0	29847.182	0.0
335.0419	28.01	-2.33	23796.180	1.5	53634.620	1.5
335.0468	28.01	-.70	100389.520	2.5	130227.520	2.5
335.0470	64.01	.37	1129.205	0.0	30975.764	0.0
335.0504	22.01	-1.51	9395.760	1.5	39233.440	1.5
335.0533	22.00	-1.16	15975.590	3.0	45813.010	2.0
335.0541	27.00	-3.98	25739.930	2.5	55577.280	1.5
335.0653	28.01	-.46	100389.520	2.5	130225.870	3.5
335.0689	8.02	-.23	338690.340	2.0	368526.370	1.0
335.0771	23.03	-2.60	255463.300	2.0	285298.600	1.0
335.0812	37.00	-2.96	0.000	0.0	29843.513	0.0
335.0894	13.02	-1.17	165787.510	1.5	195621.720	.5
335.0926	18.01	-.02	170400.940	2.5	200234.860	2.5
335.0960	73.00	-.46	13227.833	0.0	43070.027	0.0
335.1002	8.02	.09	338851.500	3.0	368684.750	3.0
335.1031	24.00	-3.54	24299.890	2.0	54132.880	3.0
335.1048	26.02	-2.51	117521.910	4.0	147354.750	5.0
335.1051	28.00	-2.08	0.000	4.0	29832.810	3.0
335.1135	27.00	-2.23	24326.110	3.5	54158.170	4.5
335.1230	90.01	-.87	1451.835	0.0	31291.625	0.0
335.1250	38.00	-.37	14760.326	0.0	44599.938	0.0
335.1376	8.01	-3.38	231350.080	2.5	261180.000	3.5
335.1409	28.01	-1.46	101246.160	.5	131075.780	1.5
335.1422	25.00	-2.40	17637.150	.5	47466.660	1.5
335.1457	13.01	-1.72	110087.500	2.0	139916.700	1.0
335.1479	27.02	-4.29	73861.800	1.5	103690.800	.5
335.1486	24.00	-2.72	24303.940	3.0	54132.880	3.0
335.1510	73.00	-.75	9678.902	0.0	39516.199	0.0
335.1524	23.01	-2.28	34228.790	3.0	64057.390	3.0
335.1524	26.00	-1.96	17726.985	2.0	47555.584	1.0
335.1545	28.01	-2.22	101247.370	2.5	131075.780	1.5
335.1656	25.00	-2.08	23296.670	3.5	53124.090	3.5
335.1676	22.01	-.00	32767.020	3.5	62594.270	4.5
335.1740	76.00	-1.38	6049.314	0.0	35884.564	0.0
335.1746	26.00	-1.84	21999.132	4.0	51825.758	3.0
335.1750	10.00	-3.61	134459.287	1.0	164285.882	0.0
335.1789	23.00	-3.30	20828.480	2.5	50654.720	2.5
335.1886	26.01	-3.99	36252.960	2.5	66078.340	2.5
335.1901	28.01	-4.01	68735.980	2.5	98561.220	2.5
335.1957	24.00	-3.19	0.000	3.0	29824.750	3.0
335.1962	27.02	-3.52	77472.300	2.5	107297.000	1.5
335.2018	29.01	-.94	118163.500	2.0	147987.700	2.0
335.2043	28.00	-2.15	27943.543	1.0	57767.520	1.0
335.2050	21.01	-1.69	0.000	1.0	29823.920	2.0
335.2060	72.01	-.47	8307.725	0.0	38140.127	0.0
335.2070	22.01	-1.20	9850.900	.5	39674.640	.5
335.2106	18.02	-2.89	196679.800	3.0	226503.220	3.0
335.2229	25.01	-4.07	53017.160	1.0	82839.490	0.0
335.2256	25.00	-3.64	25285.430	4.5	55107.520	3.5
335.2280	58.01	-.64	4436.164	0.0	34266.608	0.0
335.2384	28.01	-4.00	103025.580	2.5	132846.530	3.5
335.2443	22.00	-4.86	15220.390	5.0	45040.810	4.0
335.2506	25.01	-2.96	52373.180	3.0	82193.040	2.0
335.2515	25.00	-4.25	25287.740	3.5	55107.520	3.5
335.2561	28.01	-1.03	100389.520	2.5	130208.890	3.5
335.2567	18.02	-3.18	239193.480	1.0	269012.800	2.0
335.2590	41.00	-1.44	2097.096	0.0	31924.781	0.0
335.2600	23.00	-.42	11100.650	4.5	40919.680	5.5
335.2621	24.01	-.68	54499.700	1.5	84318.540	1.5
335.2702	26.02	-3.58	199603.610	4.0	229421.730	4.0
335.2736	22.00	-.76	11639.804	3.0	41457.620	3.0
335.2741	28.01	-1.34	101258.010	1.5	131075.780	1.5
335.2745	25.01	-4.37	67910.260	4.0	97728.000	3.0
335.2748	22.00	-6.23	13981.750	1.0	43799.455	2.0
335.2750	28.01	-.86	101246.160	.5	131063.850	.5
335.2755	28.01	-1.37	107142.210	1.5	136959.860	2.5
335.2813	28.01	-3.81	107082.210	2.5	136899.340	2.5
335.2814	28.01	-4.14	107082.210	2.5	136899.330	1.5
335.2828	27.01	-1.96	18031.500	2.0	47848.500	1.0
335.2923	26.00	-2.33	19788.248	4.0	49604.402	5.0
335.2934	22.00	-2.22	170.132	3.0	29986.185	3.0
335.2940	58.01	-.50	3548.931	0.0	33373.503	0.0
335.2972	22.00	-7.80	6598.749	2.0	36414.470	3.0
335.3007	27.00	-2.08	25739.930	2.5	55555.340	2.5
335.3021	24.00	-.28	31055.350	5.0	60870.630	4.0
335.3041	27.01	-3.08	22414.500	3.0	52229.600	2.0
335.3052	25.00	-4.39	17637.150	.5	47452.160	.5
335.3068	28.01	-3.37	70778.120	3.5	100592.980	3.5
335.3135	24.01	-1.11	39684.000	3.5	69498.270	4.5
335.3137	24.01	-1.33	20024.180	3.5	49838.430	4.5
335.3158	23.00	-5.53	8715.720	3.5	38529.780	4.5
335.3203	25.01	-3.30	52379.380	2.0	82193.040	2.0
335.3210	75.00	-.45	16212.162	0.0	46034.332	0.0
335.3261	28.01	-2.44	107082.210	2.5	136895.360	3.5
335.3262	26.00	-2.81	19621.004	5.0	49434.142	6.0
335.3264	28.01	-.98	99040.750	1.5	128853.870	2.5
335.3270	28.01	-1.35	107142.210	1.5	136955.280	.5
335.3310	22.00	-3.42	15877.180	2.0	45689.890	3.0
335.3329	25.00	-2.73	23296.670	3.5	53109.210	2.5
335.3330	58.01	-.52	6291.287	0.0	36112.390	0.0
335.3559	24.00	-2.24	31009.000	3.0	60819.500	3.0
335.3562	25.00	-1.61	38008.700	5.5	67819.170	4.5
335.3567	10.01	-1.40	251522.120	1.5	281332.550	.5
335.3660	40.00	-.98	1209.863	0.0	31028.032	0.0
335.3677	24.01	-2.76	35610.500	4.5	65419.950	5.5
335.3716	23.00	-7.30	2153.200	1.5	31962.300	.5
335.3726	21.01	.36	2540.970	2.0	32349.980	3.0
335.3728	28.00	-3.87	15609.861	2.0	45418.858	2.0
335.3739	12.02	-.40	530178.200	2.0	559987.100	1.0
335.3750	27.00	-1.89	25138.880	6.5	54947.680	5.5
335.3758	26.02	-1.52	199700.830	4.0	229509.560	3.0
335.3764	24.00	-2.40	23386.350	3.0	53195.030	2.0
335.3766	23.01	-1.16	20089.560	1.0	49898.220	2.0
335.3791	22.00	-1.37	11776.806	4.0	41585.240	3.0
335.3873	28.01	-1.41	100389.520	2.5	130197.230	1.5
335.3950	90.01	-.59	11050.080	0.0	40865.671	0.0
335.3954	24.00	-4.65	31377.960	4.0	61184.950	5.0
335.4052	29.01	-2.93	117130.360	2.0	146936.480	2.0
335.4054	26.00	-1.25	23051.744	0.0	52857.840	1.0
335.4083	28.01	-2.55	101258.010	1.5	131063.850	.5
335.4102	22.00	-.87	11531.760	2.0	41337.430	2.0
335.4138	25.00	-1.42	35114.980	2.5	64920.330	3.5
335.4155	23.03	-.68	256251.700	4.0	286056.900	3.0
335.4180	62.01	-.77	2984.328	0.0	32797.874	0.0
335.4184	26.02	-3.03	117521.910	4.0	147326.850	4.0
335.4206	27.00	-3.13	23855.620	4.5	53660.370	5.5
335.4335	30.02	-2.27	235452.500	2.0	265256.100	3.0
335.4376	27.00	-1.04	4142.660	3.5	33945.900	2.5
335.4390	40.01	-.34	6049.314	0.0	35860.994	0.0
335.4450	74.00	-1.49	4758.794	0.0	34569.940	0.0
335.4474	29.00	-.96	42264.541	0.0	72075.474	0.0
335.4541	22.01	-4.05	9872.870	.5	39674.640	.5
335.4550	2.00	-2.18	166278.000	0.0	196088.258	0.0
335.4593	26.00	-4.26	26105.908	6.0	55907.220	5.0
335.4594	19.02	-2.59	212725.400	1.5	242526.700	.5
335.4600	60.01	-1.60	1613.150	0.0	31422.963	0.0
335.4610	90.01	-.73	8307.725	0.0	38117.450	0.0
335.4634	22.00	-.04	170.132	3.0	29971.078	4.0
335.4740	41.00	-.46	2742.356	0.0	32550.925	0.0
335.4815	26.02	-3.17	105906.230	2.0	135705.570	3.0
335.4939	24.00	-1.27	31393.400	5.0	61191.640	6.0
335.4987	23.01	-2.81	34228.790	3.0	64026.600	4.0
335.4990	42.00	-.74	10646.793	0.0	40453.141	0.0
335.5017	10.01	.14	219648.440	1.5	249445.990	2.5
335.5020	58.01	-.72	1371.178	0.0	31177.260	0.0
335.5038	23.00	-4.50	323.420	3.5	30120.780	2.5
335.5047	28.00	-3.80	29320.782	3.0	59118.060	2.0
335.5105	27.00	-1.27	18775.010	.5	48571.770	.5
335.5110	92.01	-2.02	241.973	0.0	30047.255	0.0
335.5215	24.00	-3.08	24282.340	4.0	54078.130	5.0
335.5229	26.00	-.82	26627.612	4.0	56423.276	4.0
335.5290	75.00	.17	22261.476	0.0	52065.159	0.0
335.5318	28.01	-1.38	100389.520	2.5	130184.390	2.5
335.5354	23.01	-1.74	20980.920	2.0	50775.470	2.0
335.5409	24.01	-3.36	39684.000	3.5	69478.060	2.5
335.5427	27.02	-4.49	73861.800	1.5	103655.700	1.5
335.5481	25.00	-.75	34845.260	.5	64638.680	.5
335.5519	26.00	-4.26	7728.058	3.0	37521.144	2.0
335.5540	26.02	-3.73	189679.070	3.0	219471.970	4.0
335.5642	9.04	-1.46	844112.000	2.5	873904.000	1.5
335.5642	9.04	-2.61	844112.000	2.5	873904.000	2.5
335.5692	24.00	-3.74	31393.400	5.0	61184.950	5.0
335.5735	24.00	-1.63	31028.330	2.0	60819.500	3.0
335.5770	28.01	-2.31	103653.030	3.5	133443.890	2.5
335.5844	24.01	-.90	54418.080	.5	84208.280	.5
335.5918	8.02	-.18	368684.750	3.0	398474.300	3.0
335.5932	27.00	-1.94	16470.600	1.5	46260.020	1.5
335.6082	28.00	-.74	29084.478	4.0	58872.570	4.0
335.6090	40.01	-.37	725.918	0.0	30522.497	0.0
335.6090	72.01	.01	17260.709	0.0	47057.288	0.0
335.6102	25.01	-1.99	34761.810	5.0	64549.720	6.0
335.6148	8.00	-3.12	101155.422	1.0	130942.923	0.0
335.6184	22.00	-1.02	16106.080	4.0	45893.260	3.0
335.6242	26.01	-2.72	32875.630	6.5	62662.300	5.5
335.6308	10.01	-.33	251011.180	2.5	280797.260	2.5
335.6321	26.00	-4.00	7376.762	4.0	37162.729	3.0
335.6330	75.00	.33	22019.503	0.0	51813.951	0.0
335.6342	23.01	-3.64	32299.240	1.0	62085.020	2.0
335.6351	23.00	-.73	9636.960	1.5	39422.660	2.5
335.6374	24.00	-2.84	23498.840	4.0	53284.340	3.0
335.6394	18.02	-2.65	239193.480	1.0	268978.800	1.0
335.6403	26.00	-1.65	18378.187	2.0	48163.427	2.0
335.6410	58.01	-.53	3306.958	0.0	33100.696	0.0
335.6463	27.00	-.64	16778.160	2.5	46562.870	1.5
335.6485	28.01	-2.30	100389.520	2.5	130174.030	1.5
335.6486	19.01	-.98	183208.400	1.0	212992.900	1.0
335.6522	28.01	-1.74	70706.770	1.5	100490.950	1.5
335.6536	26.02	-3.78	117521.910	4.0	147305.970	3.0
335.6561	22.00	-7.59	6556.828	1.0	36340.670	2.0
335.6612	24.00	-1.47	31377.960	4.0	61161.360	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
335.6780	72.00	.12	15566.901	0.0	45357.355	0.0
335.6786	25.00	-2.03	35041.370	3.5	64823.210	2.5
335.6818	26.02	-4.18	189784.520	2.0	219566.080	3.0
335.6827	28.01	-.68	99040.750	1.5	128822.230	1.5
335.6837	27.00	-2.51	24733.280	2.5	54514.670	3.5
335.6888	29.01	-3.55	88362.030	2.0	118142.970	3.0
335.6914	27.00	-1.30	25739.930	2.5	55520.640	3.5
335.7020	20.00	-1.03	15210.063	1.0	44989.830	2.0
335.7040	41.00	-.96	2097.096	0.0	31885.243	0.0
335.7057	29.01	-3.42	116643.960	3.0	146423.400	4.0
335.7220	58.01	-.28	4194.191	0.0	33980.741	0.0
335.7260	40.01	-.61	0.000	0.0	29786.195	0.0
335.7359	22.00	-9.27	12118.394	4.0	41895.150	5.0
335.7367	26.02	-2.82	114339.950	4.0	144116.640	3.0
335.7395	26.00	-3.18	24335.764	2.0	54112.203	2.0
335.7395	24.01	-.47	35607.600	3.5	65384.040	4.5
335.7398	26.02	-2.73	105929.160	3.0	135705.570	3.0
335.7487	28.01	-4.13	104147.290	5.5	133922.910	4.5
335.7610	64.00	-.32	483.945	0.0	30267.035	0.0
335.7636	24.02	-2.34	128849.400	4.0	158623.700	4.0
335.7722	24.01	-3.19	35610.500	4.5	65384.040	4.5
335.7734	26.00	-4.28	24338.766	3.0	54112.203	2.0
335.7814	26.00	-3.61	24118.815	4.0	53891.540	3.0
335.7820	10.01	-.25	249445.990	2.5	279218.660	2.5
335.7840	9.02	-.97	360348.280	.5	390120.770	.5
335.7856	25.01	-4.72	44138.960	1.0	73911.310	1.0
335.7925	29.01	-2.59	116643.960	3.0	146415.700	2.0
335.7928	26.01	-3.00	33501.320	3.5	63273.030	2.5
335.7930	92.01	-1.46	241.973	0.0	30022.225	0.0
335.7970	28.01	-3.46	106283.160	2.5	136054.500	1.5
335.7970	76.00	-.06	13953.751	0.0	43733.648	0.0
335.7988	25.00	-2.14	38120.180	4.5	67891.360	3.5
335.8002	27.00	-1.47	18775.010	.5	48546.070	1.5
335.8010	22.00	-6.60	14028.470	2.0	43799.455	2.0
335.8020	75.00	-.16	17180.052	0.0	46959.505	0.0
335.8067	24.00	-3.84	27816.880	5.0	57587.360	4.0
335.8095	28.01	-3.92	107082.210	2.5	136852.440	1.5
335.8120	42.00	.44	11372.710	0.0	41151.277	0.0
335.8243	26.01	-2.55	31387.980	2.5	61156.900	3.5
335.8273	22.00	-1.52	0.000	2.0	29768.655	2.0
335.8300	72.01	-.09	17260.709	0.0	47037.679	0.0
335.8353	24.00	-2.55	31393.400	5.0	61161.350	5.0
335.8374	28.01	-2.14	101357.200	4.5	131124.960	3.5
335.8410	28.01	-1.36	101366.140	2.5	131133.580	2.5
335.8418	28.01	-3.18	106283.160	2.5	136050.530	2.5
335.8420	25.01	-1.15	48317.850	4.0	78085.200	5.0
335.8420	41.00	.24	2742.356	0.0	32518.263	0.0
335.8426	19.02	-.28	208687.800	1.5	238455.100	.5
335.8430	64.01	-.64	3387.616	0.0	33163.434	0.0
335.8470	73.00	-.32	11130.738	0.0	40906.201	0.0
335.8473	22.00	.46	18695.230	4.0	48462.110	5.0
335.8483	24.01	-.52	19798.010	2.5	49564.800	1.5
335.8487	18.02	.22	196589.200	1.0	226355.960	2.0
335.8549	25.01	-2.81	52653.270	4.0	82419.480	3.0
335.8600	90.01	-1.04	1774.465	0.0	31548.776	0.0
335.8618	27.01	-2.34	17771.500	3.0	47537.100	2.0
335.8620	64.01	.16	241.973	0.0	30016.106	0.0
335.8676	28.01	.04	101357.200	4.5	131122.280	5.5
335.8717	26.02	-2.14	114351.920	3.0	144116.640	3.0
335.8778	26.01	-3.81	13474.430	2.5	43238.610	2.5
335.8821	24.01	-1.30	39742.360	2.5	69506.160	3.5
335.8834	22.00	-4.80	17423.853	2.0	47187.540	2.0
335.8910	72.00	.27	14599.011	0.0	44370.574	0.0
335.8954	24.00	-4.01	27223.050	2.0	56985.670	3.0
335.8970	28.01	-3.08	99040.750	1.5	128803.230	2.5
335.9063	24.00	-2.25	25038.610	5.0	54800.260	6.0
335.9068	27.00	-1.45	16195.680	.5	45957.290	.5
335.9071	24.01	-4.51	21822.860	2.5	51584.440	1.5
335.9101	28.00	-.71	28068.091	4.0	57829.405	5.0
335.9180	26.02	-2.62	114325.350	5.0	144085.970	4.0
335.9185	24.00	-1.53	25038.610	5.0	54799.180	5.0
335.9220	75.00	.23	23471.338	0.0	53240.153	0.0
335.9222	28.01	-2.19	73903.250	.5	103663.500	1.5
335.9228	24.01	-3.65	21824.250	.5	51584.440	1.5
335.9284	27.00	-1.66	13795.520	2.5	43555.220	3.5
335.9293	24.01	-3.54	21824.820	1.5	51584.440	1.5
335.9366	28.01	-.76	99040.750	1.5	128799.720	.5
335.9377	24.00	-1.63	31364.330	3.0	61123.200	4.0
335.9383	28.01	-.51	101366.140	2.5	131124.960	3.5
335.9436	25.00	-1.90	33825.490	2.5	63583.840	1.5
335.9461	26.02	-4.65	160037.900	2.0	189796.030	1.0
335.9466	28.01	-.85	101357.200	4.5	131115.280	4.5
335.9487	23.01	-1.46	20980.920	2.0	50738.820	1.0
335.9487	23.03	-1.79	254468.800	2.0	284226.700	3.0
335.9488	26.00	-3.45	6928.266	5.0	36686.159	4.0
335.9524	25.01	-4.50	53017.160	1.0	82774.730	1.0
335.9560	71.00	-.34	1935.780	0.0	31701.583	0.0
335.9574	28.01	-3.25	107142.210	1.5	136899.340	2.5
335.9575	28.01	-4.93	107142.210	1.5	136899.330	1.5
335.9616	25.01	-3.41	34761.810	5.0	64518.570	5.0
335.9675	21.01	-.55	67.680	2.0	29823.920	2.0
335.9707	29.01	-2.50	117130.360	2.0	146886.310	1.0
335.9725	23.00	-4.40	20828.480	2.5	50584.270	1.5
335.9808	26.00	-1.79	26627.612	4.0	56382.664	5.0
335.9815	10.03	-3.57	643672.000	1.5	673427.000	1.5
335.9900	45.00	-.52	13873.093	0.0	43635.884	0.0
335.9920	28.01	-2.33	70635.460	2.5	100389.520	2.5
335.9960	40.01	.37	11856.655	0.0	41618.914	0.0
335.9987	22.00	-7.20	6661.003	3.0	36414.470	3.0
336.0029	24.01	-1.43	50667.330	3.5	80420.430	2.5
336.0060	72.00	-1.65	0.000	0.0	29761.373	0.0
336.0104	26.01	-2.59	32909.870	5.5	62662.300	5.5
336.0112	25.01	-4.91	70940.240	2.0	100692.600	2.0
336.0135	26.02	-3.83	200504.990	3.0	230257.150	2.0
336.0137	25.01	-2.53	48333.060	5.0	78085.200	5.0
336.0150	90.01	-.54	11453.368	0.0	41213.944	0.0
336.0151	8.01	-2.01	231427.990	3.5	261180.000	3.5
336.0153	22.01	-1.54	9850.900	.5	39602.900	1.5
336.0187	28.01	-1.59	100475.820	3.5	130227.520	2.5
336.0271	10.01	-.23	276511.820	.5	306262.770	1.5
336.0298	24.01	-.25	25033.950	3.5	54784.670	3.5
336.0303	24.01	-2.31	42898.120	2.5	72648.790	3.5
336.0373	28.01	-.75	100475.820	3.5	130225.870	3.5
336.0408	28.01	-3.26	77332.470	2.5	107082.210	2.5
336.0460	40.00	-.43	5000.766	0.0	34758.597	0.0
336.0540	58.01	-.49	11211.395	0.0	40968.517	0.0
336.0574	28.01	-3.57	106283.160	2.5	136031.430	2.5
336.0597	10.01	-.25	219947.460	.5	249695.530	1.5
336.0621	25.01	-4.71	70940.240	2.0	100688.100	3.0
336.0668	25.00	-1.45	30354.210	3.5	60101.650	2.5
336.0709	24.00	-3.23	20517.400	2.0	50264.480	3.0
336.0710	64.01	-.58	241.973	0.0	29997.590	0.0
336.0761	26.02	-3.60	160037.900	2.0	189784.520	2.0
336.0798	22.00	-3.46	15975.590	3.0	45721.878	4.0
336.0800	45.00	-.86	5565.369	0.0	35320.189	0.0
336.0821	24.00	-3.25	24286.540	1.0	54032.630	2.0
336.0822	18.01	-3.46	179592.130	2.5	209338.210	3.5
336.0829	26.02	-2.03	114339.950	4.0	144085.970	4.0
336.0836	8.01	-3.17	231296.050	1.5	261042.000	2.5
336.0889	6.01	-2.11	145549.270	1.5	175294.750	1.5
336.0917	24.00	-3.02	31377.960	4.0	61123.200	4.0
336.0923	26.00	-2.17	19552.474	1.0	49297.660	1.0
336.0975	26.00	-3.62	18378.187	2.0	48122.913	3.0
336.0990	22.00	-1.20	170.132	3.0	29914.720	3.0
336.1025	27.00	-1.58	25568.680	5.5	55312.960	4.5
336.1041	25.00	-.91	38008.700	5.5	67752.840	5.5
336.1051	6.01	-1.16	145550.700	2.5	175294.750	1.5
336.1068	22.01	-1.88	9930.740	1.5	39674.640	.5
336.1081	27.00	-3.38	24733.280	2.5	54477.070	3.5
336.1107	24.00	-2.22	20520.920	3.0	50264.480	3.0
336.1140	75.00	-.69	13711.778	0.0	43463.588	0.0
336.1150	44.00	.60	16938.079	0.0	46689.801	0.0
336.1150	76.00	-.69	8630.355	0.0	38382.077	0.0
336.1214	22.01	.47	225.470	3.5	29968.080	4.5
336.1237	28.00	-2.03	28068.091	4.0	57810.494	4.0
336.1255	28.01	-2.48	70748.700	.5	100490.950	1.5
336.1261	27.00	-1.97	13795.520	2.5	43537.710	1.5
336.1268	22.00	-1.43	170.132	3.0	29912.262	3.0
336.1269	21.01	-.57	0.000	1.0	29742.120	1.0
336.1277	18.02	-1.54	196613.910	2.0	226355.960	2.0
336.1292	22.00	-6.70	6598.749	2.0	36340.670	2.0
336.1317	22.00	-4.32	17540.205	3.0	47281.900	3.0
336.1328	22.00	-6.84	6556.828	1.0	36298.430	1.0
336.1370	42.00	-.25	12259.943	0.0	42009.718	0.0
336.1396	12.02	-.17	534923.600	3.0	564664.600	2.0
336.1405	10.02	-2.49	409845.080	2.0	439586.000	2.0
336.1420	24.00	-2.12	20523.690	4.0	50264.480	3.0
336.1496	23.01	-.82	19112.930	4.0	48853.040	5.0
336.1496	22.00	-.89	16267.510	5.0	46007.620	4.0
336.1545	28.01	-1.28	100475.820	3.5	130215.500	4.5
336.1550	27.00	-.48	24627.790	4.5	54367.430	5.5
336.1551	28.00	-2.07	879.813	2.0	30619.440	2.0
336.1561	26.00	-3.50	20874.482	3.0	50614.020	4.0
336.1640	73.00	-.18	13227.833	0.0	42975.218	0.0
336.1682	10.02	-2.09	409847.530	3.0	439586.000	2.0
336.1716	28.01	-3.47	106007.890	2.5	135746.060	3.5
336.1721	6.01	-1.41	145549.270	1.5	175287.390	.5
336.1745	18.01	-.97	170400.940	2.5	200138.850	3.5
336.1760	58.01	-.48	3710.246	0.0	33456.569	0.0
336.1777	24.01	-.99	25047.040	2.5	54784.670	3.5
336.1832	22.00	-.71	170.132	3.0	29907.273	2.0
336.1836	28.01	-.40	99132.780	5.5	128869.890	5.5
336.1843	28.01	-1.02	101366.140	2.5	131103.180	2.5
336.1877	26.01	-3.71	49506.990	1.5	79243.730	1.5
336.1897	28.01	-.95	100490.950	1.5	130227.520	2.5
336.1912	20.00	-.54	15315.943	2.0	45052.374	3.0
336.1936	21.01	-.49	0.000	1.0	29736.220	0.0
336.1948	26.00	-2.69	22946.810	1.0	52682.930	2.0
336.1950	28.01	-1.57	101357.200	4.5	131093.300	4.5
336.1995	24.01	-3.00	39742.360	2.5	69478.060	2.5
336.1996	22.00	-3.27	15975.590	3.0	45711.280	4.0
336.2000	44.00	-.61	11372.710	0.0	41116.910	0.0
336.2000	39.01	0.00	14760.326	0.0	44504.526	0.0
336.2054	27.00	-4.14	0.000	4.5	29735.180	3.5
336.2094	22.00	.29	18593.990	3.0	48328.810	4.0
336.2133	20.00	-1.68	15315.943	2.0	45050.419	2.0
336.2158	25.01	-2.15	52653.270	4.0	82387.530	3.0
336.2162	10.01	-.18	276276.850	1.5	306011.070	.5
336.2180	45.00	-1.83	3226.301	0.0	32968.908	0.0
336.2182	26.02	-3.50	114351.920	3.0	144085.970	4.0
336.2225	24.00	-.43	20519.600	6.0	50253.270	5.0
336.2230	64.01	.30	564.603	0.0	30306.768	0.0
336.2240	23.01	-4.93	36425.070	4.0	66158.600	4.0
336.2251	25.01	-2.90	52383.720	4.0	82117.160	5.0
336.2286	20.00	-2.46	15315.943	2.0	45049.073	1.0
336.2292	28.01	-.76	100475.820	3.5	130208.690	3.5
336.2323	24.01	-2.10	50687.630	2.5	80420.430	2.5
336.2330	24.00	-2.72	24299.890	2.0	54032.630	2.0
336.2370	42.00	-.72	10888.765	0.0	40629.692	0.0
336.2399	8.02	-.22	338851.500	3.0	368583.630	2.0
336.2411	25.01	-2.75	34761.810	5.0	64493.830	4.0
336.2411	9.02	-1.69	360348.280	.5	390080.300	1.5
336.2500	90.01	-.77	9598.245	0.0	39338.022	0.0
336.2514	28.01	-1.86	76402.030	2.5	106133.140	1.5
336.2517	28.01	-.27	100475.820	3.5	130206.900	4.5
336.2530	73.00	-1.29	9678.902	0.0	39418.414	0.0
336.2548	25.00	-3.42	17568.480	1.5	47299.290	.5
336.2553	10.02	-2.99	409855.230	1.0	439586.000	2.0
336.2612	25.00	-2.38	30411.740	.5	60141.980	.5
336.2620	69.01	-.58	161.315	0.0	29900.031	0.0
336.2636	22.01	-3.83	9872.870	.5	39602.900	1.5
336.2662	24.00	-4.93	31393.400	5.0	61123.200	4.0
336.2672	28.01	-1.74	99132.780	5.5	128862.490	4.5
336.2680	40.01	-.38	7985.094	0.0	37723.279	0.0
336.2687	24.00	-2.15	20523.690	4.0	50253.270	5.0
336.2688	27.00	-4.22	21215.900	.5	50945.470	.5
336.2708	10.01	-.96	254165.010	1.5	283894.410	.5
336.2715	24.00	-1.07	20523.940	5.0	50253.270	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
336.2740	75.00	-.87	11534.025	0.0	41271.679	0.0
336.2756	26.01	-3.62	31364.470	1.5	61093.440	2.5
336.2784	28.01	-1.73	104081.040	4.5	133809.760	3.5
336.2788	24.00	-2.58	24303.940	3.0	54032.630	2.0
336.2791	27.00	-2.22	24627.790	4.5	54356.450	4.5
336.2800	28.00	-2.02	1713.080	1.0	31441.665	2.0
336.2938	10.01	-.89	249695.530	1.5	279422.890	.5
336.2967	10.01	-.94	252953.540	1.5	282680.650	.5
336.3012	26.00	-3.70	24574.655	4.0	54301.360	4.0
336.3019	25.01	-.69	51553.060	5.0	81279.710	4.0
336.3045	22.00	-4.42	16106.080	4.0	45832.500	5.0
336.3060	90.01	-.93	8307.725	0.0	38042.550	0.0
336.3137	28.02	-4.38	82172.900	3.0	111898.500	4.0
336.3160	9.02	-3.75	414897.720	3.5	444623.120	3.5
336.3167	28.00	-2.13	29500.690	1.0	59226.030	1.0
336.3170	26.01	-1.44	69606.640	3.5	99331.950	4.5
336.3204	28.01	-3.22	100845.410	.5	130570.420	.5
336.3261	27.00	-1.18	24627.790	4.5	54352.300	3.5
336.3302	18.01	-2.73	174409.830	1.5	204133.980	2.5
336.3340	74.00	-1.63	6129.972	0.0	35862.321	0.0
336.3424	24.00	-1.83	31355.210	2.0	61078.280	3.0
336.3452	28.01	-.01	99132.780	5.5	128855.600	6.5
336.3469	18.00	-4.25	95399.870	1.0	125122.540	0.0
336.3527	21.01	-.88	28021.210	2.0	57743.370	3.0
336.3538	23.00	-1.68	9544.540	.5	39266.600	1.5
336.3599	28.00	.02	28068.091	4.0	57789.611	4.0
336.3643	28.01	-1.25	99132.780	5.5	128853.910	4.5
336.3658	17.01	-4.82	129065.400	2.0	158786.400	3.0
336.3669	26.02	-3.47	199700.830	4.0	229421.730	4.0
336.3679	25.00	-1.96	33825.490	2.5	63546.300	3.5
336.3694	24.01	-2.19	19631.280	1.5	49351.960	2.5
336.3700	90.01	-1.96	0.000	0.0	29729.167	0.0
336.3729	27.00	-.91	25269.250	3.5	54989.620	3.5
336.3780	42.00	.13	10646.793	0.0	40375.253	0.0
336.3804	26.00	-2.33	22249.430	3.0	51969.140	3.0
336.3808	8.02	-3.17	297557.500	1.0	327277.180	2.0
336.3820	40.01	-.81	2823.013	0.0	32551.120	0.0
336.3849	23.00	-3.65	21032.520	3.5	50751.830	3.5
336.3894	28.00	-1.78	29320.782	3.0	59039.693	4.0
336.3952	27.02	-4.97	138970.500	1.5	168688.900	2.5
336.3983	25.01	-3.91	53017.160	1.0	82735.290	2.0
336.4090	27.00	-2.46	25232.790	.5	54949.970	1.5
336.4112	24.00	-2.13	33113.270	4.0	62830.260	5.0
336.4120	76.00	-1.54	2661.698	0.0	32387.154	0.0
336.4193	25.00	-1.86	30425.710	1.5	60141.980	.5
336.4211	26.01	-4.37	13904.870	.5	43620.980	1.5
336.4213	25.01	-2.62	52383.720	4.0	82099.820	4.0
336.4245	27.00	-1.69	16470.600	1.5	46186.410	1.5
336.4293	22.01	-3.01	9518.050	2.5	39233.440	1.5
336.4301	23.02	-3.16	56160.420	2.5	85875.740	3.5
336.4325	19.02	-.66	214232.300	.5	243947.400	1.5
336.4328	28.01	-.50	99154.810	4.5	128869.890	5.5
336.4350	58.01	-1.08	967.890	0.0	30691.314	0.0
336.4353	28.01	-4.21	98276.700	4.5	127991.560	3.5
336.4406	26.02	-4.95	158417.310	2.0	188131.700	1.0
336.4416	22.00	-2.60	15975.590	3.0	45689.890	3.0
336.4439	15.03	.07	226888.600	1.0	256602.700	1.0
336.4456	24.00	-2.42	31364.330	3.0	61078.280	3.0
336.4584	28.00	-.65	27260.891	6.0	56973.707	5.0
336.4634	26.00	-2.86	20874.482	3.0	50586.857	3.0
336.4639	27.00	-1.27	24733.280	2.5	54445.610	2.5
336.4644	24.01	-2.47	35707.660	5.5	65419.950	5.5
336.4655	28.01	-2.21	99154.810	4.5	128867.000	3.5
336.4713	24.00	-4.05	24093.160	2.0	53804.840	3.0
336.4718	22.01	-.22	32697.940	2.5	62409.580	3.5
336.4847	25.00	-1.61	34938.700	4.5	64649.200	3.5
336.4877	28.01	-3.11	107142.210	1.5	136852.440	1.5
336.4899	27.00	-1.16	25739.930	2.5	55449.970	2.5
336.4937	24.02	-3.90	128753.900	2.0	158463.600	3.0
336.4943	26.02	-2.53	98661.880	1.0	128371.530	0.0
336.4944	28.01	-2.23	101366.140	2.5	131075.780	1.5
336.4957	24.01	-.92	54784.670	3.5	84494.200	2.5
336.4993	27.00	-2.30	21215.900	.5	50925.110	1.5
336.5017	27.00	-4.24	16195.680	.5	45904.680	1.5
336.5064	24.01	-.95	54499.700	1.5	84208.280	.5
336.5065	28.01	-1.21	100475.820	3.5	130184.390	2.5
336.5071	22.00	-3.14	8492.421	1.0	38200.940	0.0
336.5104	25.00	-1.79	35114.980	2.5	64823.210	2.5
336.5166	28.01	-4.62	99154.810	4.5	128862.490	4.5
336.5318	25.00	-4.45	37148.660	5.5	66855.000	4.5
336.5325	28.01	-1.01	100490.950	1.5	130197.230	1.5
336.5330	90.00	-.74	2823.013	0.0	32537.781	0.0
336.5342	29.00	-.55	41135.335	0.0	70849.997	0.0
336.5418	26.01	-2.74	31387.980	2.5	61093.440	2.5
336.5521	18.01	-1.50	170530.310	3.5	200234.860	2.5
336.5542	23.00	-1.53	9544.540	.5	39248.900	1.5
336.5546	28.01	-2.49	99132.780	5.5	128837.110	5.5
336.5549	21.01	-1.85	29823.920	2.0	59528.220	3.0
336.5560	28.02	-4.91	82194.300	5.0	111898.500	4.0
336.5580	41.01	-.29	8227.067	0.0	37939.628	0.0
336.5590	64.01	-1.19	241.973	0.0	29954.445	0.0
336.5594	28.01	-3.09	103025.580	2.5	132729.480	2.5
336.5597	18.01	-3.85	174409.830	1.5	204113.710	1.5
336.5634	26.01	-2.85	48039.230	2.5	77742.780	2.5
336.5658	29.01	-1.74	116326.160	3.0	146029.500	4.0
336.5674	17.01	-4.06	129065.400	2.0	158768.600	2.0
336.5697	25.00	-2.93	17451.520	2.5	47154.510	1.5
336.5708	28.01	-3.27	106283.160	2.5	135986.060	3.5
336.5730	75.00	.21	22987.393	0.0	52698.629	0.0
336.5759	28.00	-1.45	3409.925	2.0	33112.368	3.0
336.5873	22.00	-2.58	19322.988	2.0	49024.430	3.0
336.5887	24.00	-2.50	33060.740	3.0	62762.060	4.0
336.6000	24.00	-3.81	31377.960	4.0	61078.280	3.0
336.6030	28.01	-1.51	106283.160	2.5	135983.220	1.5
336.6061	25.01	-3.08	43696.190	3.0	73395.970	2.0
336.6072	22.00	-6.59	6598.749	2.0	36298.430	1.0
336.6138	28.01	-.29	99154.810	4.5	128853.910	4.5
336.6144	22.00	-.77	16458.710	6.0	46157.760	5.0
336.6150	8.03	-.45	576472.500	1.5	606171.500	2.5
336.6151	25.00	-1.69	38120.180	4.5	67819.170	4.5
336.6158	25.01	-2.26	43696.190	3.0	73395.120	3.0
336.6162	28.00	-1.77	1332.153	3.0	31031.042	3.0
336.6181	22.01	-1.07	9975.920	1.5	39674.640	.5
336.6226	25.00	-1.73	33825.490	2.5	63523.820	2.5
336.6270	24.00	-3.99	25038.610	5.0	54736.550	4.0
336.6281	29.01	-.19	116326.160	3.0	146024.000	4.0
336.6297	28.01	-3.81	70778.120	3.5	100475.820	3.5
336.6305	22.00	-2.47	11639.804	3.0	41337.430	2.0
336.6330	38.00	-.51	14760.326	0.0	44466.267	0.0
336.6462	21.01	-.90	27917.690	1.0	57613.940	2.0
336.6520	90.01	-.04	13147.176	0.0	42851.440	0.0
336.6550	58.01	-.27	4436.164	0.0	34140.164	0.0
336.6565	29.01	-.70	116326.160	3.0	146021.500	3.0
336.6581	18.01	-1.19	160239.350	1.5	189934.550	.5
336.6620	23.00	-3.90	10892.500	3.5	40587.350	3.5
336.6680	72.00	-.02	13953.751	0.0	43656.604	0.0
336.6720	26.02	-3.40	167207.300	4.0	196901.270	5.0
336.6742	22.00	-7.06	14105.680	3.0	43799.455	2.0
336.6779	26.00	-1.82	21715.735	5.0	51409.180	4.0
336.6780	28.01	-1.42	100490.950	1.5	130184.390	2.5
336.6799	28.00	.24	27260.891	6.0	56954.167	6.0
336.6828	26.00	-1.72	17726.985	2.0	47420.000	2.0
336.6838	22.00	-3.22	16267.510	5.0	45960.439	6.0
336.6855	24.01	-.82	54625.760	2.5	84318.540	1.5
336.6879	25.01	-3.30	49820.160	2.0	79512.730	3.0
336.6880	23.00	-1.37	9544.540	.5	39237.100	.5
336.6934	24.00	-4.46	31364.330	3.0	61056.410	4.0
336.6953	8.01	-1.87	231350.080	2.5	261042.000	2.5
336.6955	26.01	-1.63	44915.070	3.5	74606.970	2.5
336.6960	41.00	.33	9275.615	0.0	38975.998	0.0
336.6986	10.01	-2.12	249445.990	2.5	279137.620	3.5
336.7025	28.01	-2.80	99040.750	1.5	128732.030	1.5
336.7109	27.00	-1.26	3482.820	4.5	33173.360	3.5
336.7147	26.00	-2.25	19552.474	1.0	49242.680	2.0
336.7176	24.00	-2.11	20520.920	3.0	50210.870	4.0
336.7217	10.01	.38	251011.180	2.5	280700.770	3.5
336.7227	30.02	-2.08	235623.900	3.0	265313.400	2.0
336.7270	62.01	-1.13	3871.561	0.0	33569.209	0.0
336.7277	28.00	-3.01	27414.893	2.0	57103.946	3.0
336.7296	14.02	-2.98	176487.190	1.0	206176.080	1.0
336.7380	41.00	-.34	8630.355	0.0	38327.033	0.0
336.7396	24.01	-.88	35569.020	2.5	65257.030	3.5
336.7411	27.00	-3.23	24627.790	4.5	54315.670	5.5
336.7412	26.02	-4.91	200504.990	3.0	230192.860	3.0
336.7443	17.02	-3.99	179495.200	2.5	209182.800	1.5
336.7490	24.00	-1.10	20523.690	4.0	50210.870	4.0
336.7518	24.00	-.69	20523.940	5.0	50210.870	4.0
336.7582	26.02	-2.25	88663.870	4.0	118350.240	4.0
336.7625	24.00	-3.20	24277.060	0.0	53963.050	1.0
336.7640	63.01	-1.31	10001.532	0.0	39695.917	0.0
336.7654	23.01	-1.97	23391.090	5.0	53076.820	6.0
336.7659	9.02	-1.29	360435.080	1.5	390120.770	.5
336.7660	64.01	-.11	10001.532	0.0	39695.741	0.0
336.7666	28.01	-.78	99132.780	5.5	128818.410	6.5
336.7666	26.02	-4.95	117950.320	4.0	147635.950	3.0
336.7710	25.01	-2.22	49427.320	4.0	79112.560	5.0
336.7755	28.00	-3.28	15734.018	1.0	45418.858	2.0
336.7797	20.02	-1.59	247696.390	1.0	277380.860	2.0
336.7810	90.01	-.92	4436.164	0.0	34129.050	0.0
336.7819	28.01	-4.07	107082.210	2.5	136766.490	2.5
336.7820	40.01	-.85	2500.383	0.0	32193.181	0.0
336.7873	22.00	.09	18525.070	2.0	48208.870	3.0
336.7880	9.01	-4.36	254541.450	2.0	284225.190	1.0
336.7883	28.00	-2.54	204.786	3.0	29888.505	2.0
336.7890	9.01	-4.98	254541.540	1.0	284225.190	1.0
336.7893	9.02	-3.96	414894.890	4.5	444578.510	4.5
336.7955	28.01	-1.53	100490.950	1.5	130174.030	1.5
336.7993	28.01	-2.80	70706.770	1.5	100389.520	2.5
336.8044	28.01	-.48	99154.810	4.5	128837.110	5.5
336.8045	24.01	-.04	20024.180	3.5	49706.470	2.5
336.8070	68.00	-.32	403.288	0.0	30093.882	0.0
336.8073	25.00	-1.71	30419.610	2.5	60101.650	2.5
336.8118	24.01	-2.91	39824.520	4.5	69506.160	3.5
336.8146	24.02	-2.52	128782.200	3.0	158463.600	3.0
336.8165	28.01	-3.25	106369.300	1.5	136050.530	2.5
336.8193	25.00	-2.14	24779.320	1.5	54460.300	2.5
336.8212	22.00	-2.54	11776.806	4.0	41457.620	3.0
336.8215	9.02	-3.82	414897.720	3.5	444578.510	4.5
336.8237	26.00	-2.27	26224.961	3.0	55905.560	4.0
336.8342	22.00	-6.39	6661.003	3.0	36340.670	2.0
336.8380	45.00	-1.06	2581.041	0.0	32266.903	0.0
336.8395	24.00	-2.79	27597.220	3.0	57276.420	3.0
336.8450	44.00	-.89	2661.698	0.0	32348.943	0.0
336.8452	9.01	-2.46	254546.490	2.0	284225.190	1.0
336.8475	26.01	-3.23	36252.960	2.5	65931.460	3.5
336.8480	77.00	-1.06	2823.013	0.0	32509.993	0.0
336.8481	24.00	-4.04	31377.960	4.0	61056.410	4.0
336.8486	26.02	-3.64	200514.460	4.0	230192.860	3.0
336.8570	62.01	-.97	2177.753	0.0	31863.940	0.0
336.8571	27.00	-.58	25269.250	3.5	54946.900	2.5
336.8602	26.01	-2.96	44929.590	2.5	74606.970	2.5
336.8610	26.01	-3.70	31364.470	1.5	61041.780	2.5
336.8640	40.00	-1.84	0.000	0.0	29685.570	0.0
336.8660	28.01	-1.82	105439.850	1.5	135116.720	2.5
336.8669	27.00	-1.60	16778.160	2.5	46454.950	1.5
336.8690	58.01	-1.13	2581.041	0.0	32266.171	0.0
336.8701	24.00	-2.88	24286.540	1.0	53963.050	1.0
336.8715	24.01	-1.08	35707.660	5.5	65384.040	4.5
336.8740	18.02	-2.94	196679.800	3.0	226355.960	2.0
336.8765	25.00	-3.52	30425.710	1.5	60101.650	2.5
336.8815	28.00	-.82	28068.091	4.0	57743.596	3.0
336.8869	18.00	-3.99	95399.870	1.0	125074.900	2.0
336.8884	27.02	-4.79	138774.700	2.5	166449.600	3.5
336.8936	21.01	-.16	67.680	2.0	29742.120	1.0
336.8970	26.00	-2.52	22838.320	2.0	52512.460	1.0
336.8980	92.00	-1.10	564.603	0.0	30247.178	0.0
336.8998	20.00	-1.51	15315.943	2.0	44989.830	2.0
336.9000	23.00	-5.16	2112.320	.5	31786.190	.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
336.9014	24.01	-1.99	39824.520	4.5	69498.270	4.5
336.9020	26.01	-4.54	31483.200	3.5	61156.900	3.5
336.9030	24.01	-.80	35356.060	1.5	65029.670	.5
336.9048	22.00	-2.75	386.874	4.0	30060.328	4.0
336.9060	63.01	-.77	10566.135	0.0	40248.005	0.0
336.9130	18.00	-3.86	95399.870	1.0	125072.600	1.0
336.9141	26.00	-4.65	19788.248	4.0	49460.876	5.0
336.9160	41.01	.64	15808.874	0.0	45489.863	0.0
336.9174	28.01	-.78	99154.810	4.5	128827.150	3.5
336.9184	25.00	-1.96	24788.050	2.5	54460.300	2.5
336.9195	22.01	-1.39	9930.740	1.5	39602.900	1.5
336.9245	22.00	-6.79	6742.757	4.0	36414.470	3.0
336.9250	42.00	-.14	18228.600	0.0	47908.796	0.0
336.9260	40.01	-.55	9920.875	0.0	39600.983	0.0
336.9262	25.00	-2.76	35041.370	3.5	64712.940	2.5
336.9280	73.00	-1.27	5968.656	0.0	35648.588	0.0
336.9293	28.00	-2.90	15609.861	2.0	45281.152	3.0
336.9338	26.01	-2.64	31364.470	1.5	61035.370	.5
336.9390	8.02	-4.07	297557.500	1.0	327227.940	1.0
336.9460	62.01	-.91	2661.698	0.0	32340.044	0.0
336.9519	12.03	-1.96	582571.000	2.5	612240.300	1.5
336.9547	26.00	-1.89	24335.764	2.0	54004.820	3.0
336.9549	26.00	-.51	21999.132	4.0	51668.175	4.0
336.9555	25.00	-3.03	38669.600	3.5	68338.590	3.5
336.9563	28.00	-.89	0.000	4.0	29668.918	3.0
336.9583	22.01	-.37	32602.510	1.5	62271.250	2.5
336.9620	64.01	-.26	8791.670	0.0	38468.607	0.0
336.9659	28.01	-4.31	106620.530	3.5	136288.600	2.5
336.9680	45.00	-1.07	10243.505	0.0	39919.913	0.0
336.9755	23.00	-7.34	8578.520	2.5	38245.750	3.5
336.9761	27.00	-.44	25739.930	2.5	55407.100	1.5
336.9790	26.01	-2.98	31368.450	.5	61035.370	.5
336.9808	10.00	-3.71	134041.840	2.0	163708.599	2.0
336.9815	24.00	-4.79	20517.400	2.0	50184.100	2.0
336.9830	41.00	-.40	8952.985	0.0	38628.072	0.0
336.9888	26.00	-4.68	24338.766	3.0	54004.820	3.0
336.9908	10.00	-2.89	134041.840	2.0	163707.721	1.0
337.0014	29.01	-4.10	95565.650	4.0	125230.600	3.0
337.0128	29.01	-1.50	121078.960	3.0	150742.900	3.0
337.0130	92.01	-1.20	5162.081	0.0	34834.527	0.0
337.0176	23.00	-3.09	9636.960	1.5	39300.480	2.5
337.0200	76.00	-.34	13953.751	0.0	43625.581	0.0
337.0215	24.00	-2.67	20520.920	3.0	50184.100	2.0
337.0217	24.00	-3.08	24299.890	2.0	53963.050	1.0
337.0234	24.00	-4.81	31393.400	5.0	61056.410	4.0
337.0241	8.01	-1.96	231296.050	1.5	260959.000	1.5
337.0257	26.00	-4.22	24574.655	4.0	54237.460	4.0
337.0321	27.00	-1.97	4690.180	2.5	34352.420	1.5
337.0333	25.00	-3.92	17637.150	.5	47299.290	.5
337.0334	28.01	-3.66	106369.300	1.5	136031.430	2.5
337.0401	23.01	-2.43	19191.500	6.0	48853.040	5.0
337.0435	28.01	-3.45	106283.160	2.5	135944.400	3.5
337.0436	22.00	-.64	0.000	2.0	29661.232	1.0
337.0452	29.01	-.08	116371.410	4.0	146032.500	5.0
337.0496	24.02	-2.69	128782.200	3.0	158442.900	4.0
337.0534	24.00	-4.52	25548.640	5.0	55209.010	4.0
337.0537	26.02	-3.75	88694.670	5.0	118355.010	6.0
337.0584	18.00	-3.65	95399.870	1.0	125059.800	2.0
337.0590	40.00	-.44	5000.766	0.0	34669.162	0.0
337.0590	62.01	-1.50	322.630	0.0	29991.026	0.0
337.0590	76.00	-.55	5081.424	0.0	34749.820	0.0
337.0652	18.01	-1.08	179592.130	2.5	209251.460	3.5
337.0662	29.01	-1.63	116326.160	3.0	145985.400	2.0
337.0667	23.03	-.92	225804.100	2.0	255463.300	2.0
337.0677	28.01	-3.82	99844.130	3.5	129503.240	4.5
337.0769	17.01	-3.18	129065.400	2.0	158723.700	1.0
337.0785	25.00	-2.10	35165.050	1.5	64823.210	2.5
337.0785	26.00	-.36	21715.735	5.0	51373.894	5.0
337.0793	29.01	-.56	116371.410	4.0	146029.500	4.0
337.0798	25.00	-1.83	24802.250	3.5	54460.300	2.5
337.0915	18.01	-1.50	157233.930	3.5	186890.950	2.5
337.0926	28.01	-1.87	100490.950	1.5	130147.870	.5
337.0962	27.01	-1.84	18338.500	1.0	47995.100	0.0
337.0983	18.01	-2.25	179592.130	2.5	209248.550	2.5
337.1007	27.00	-2.14	23855.620	4.5	53511.830	5.5
337.1050	74.00	-1.48	4758.794	0.0	34423.142	0.0
337.1079	26.02	-4.81	88694.670	5.0	118350.240	4.0
337.1088	15.03	-.40	226888.600	1.0	256544.100	0.0
337.1170	58.01	-.35	4436.164	0.0	34099.456	0.0
337.1210	62.01	-.71	4355.506	0.0	34018.446	0.0
337.1217	9.02	-4.84	414897.720	3.5	444552.080	3.5
337.1248	24.01	-4.42	55023.300	2.5	84677.390	3.5
337.1265	28.01	-3.72	104081.040	4.5	133734.980	3.5
337.1330	41.00	-.85	2097.096	0.0	31758.980	0.0
337.1350	74.00	-2.14	1613.150	0.0	31274.858	0.0
337.1418	29.01	-2.14	116371.410	4.0	146024.000	4.0
337.1447	22.00	.09	386.874	4.0	30039.211	5.0
337.1458	29.01	-2.31	116326.160	3.0	145978.400	3.0
337.1488	10.01	-2.75	279324.890	1.5	308976.870	.5
337.1540	73.00	-.77	3871.561	0.0	33531.598	0.0
337.1565	12.03	-2.96	582589.000	1.5	612240.300	1.5
337.1653	28.01	-4.15	107082.210	2.5	136732.740	1.5
337.1671	22.00	-3.28	16106.080	4.0	45756.450	5.0
337.1703	29.01	-2.27	116371.410	4.0	146021.500	3.0
337.1736	27.00	-2.02	25739.930	2.5	55389.730	1.5
337.1737	24.00	-1.79	31028.330	2.0	60678.120	1.0
337.1742	8.01	-.96	231530.260	4.5	261180.000	3.5
337.1778	24.01	-4.05	35607.600	3.5	65257.030	3.5
337.1796	10.01	-.11	251522.120	1.5	281171.380	2.5
337.1799	25.01	-4.67	48435.960	6.0	78085.200	5.0
337.1860	44.00	-.69	8952.985	0.0	38610.207	0.0
337.1888	24.01	-3.81	75716.740	3.5	105365.200	4.5
337.1981	22.01	-.54	32532.380	.5	62180.020	1.5
337.1982	28.00	-1.30	1332.153	3.0	30979.789	4.0
337.2010	92.01	-1.56	241.973	0.0	29897.876	0.0
337.2074	26.00	-2.32	17550.180	3.0	47197.000	2.0
337.2080	76.00	-.31	13308.491	0.0	42963.778	0.0
337.2084	25.00	-.35	34938.700	4.5	64585.440	4.5
337.2090	41.00	-1.17	2742.356	0.0	32397.555	0.0
337.2107	24.01	-1.44	35610.500	4.5	65257.030	3.5
337.2134	21.01	.12	177.630	3.0	29823.920	2.0
337.2195	22.01	-1.02	4897.600	3.5	34543.360	3.5
337.2210	72.00	-1.67	5565.369	0.0	35219.513	0.0
337.2250	45.00	-.65	2581.041	0.0	32234.833	0.0
337.2253	24.00	-4.99	24282.340	4.0	53927.590	4.0
337.2256	9.02	-1.18	360435.080	1.5	390080.300	1.5
337.2342	26.00	-2.24	24118.815	4.0	53763.280	3.0
337.2418	27.02	-3.29	77121.100	4.5	106764.900	4.5
337.2445	27.00	-.22	23152.570	3.5	52796.130	2.5
337.2499	28.01	-3.21	68156.570	1.5	97799.660	1.5
337.2541	9.02	-3.48	360435.080	1.5	390077.800	2.5
337.2559	22.01	-.87	32767.020	3.5	62409.580	3.5
337.2560	41.01	-.25	10808.108	0.0	40459.174	0.0
337.2650	23.01	-2.36	20089.560	1.0	49731.320	2.0
337.2678	20.02	-.22	242547.190	2.0	272188.700	1.0
337.2691	23.03	-1.61	225804.100	2.0	255445.500	3.0
337.2717	26.02	-3.58	160037.900	2.0	189679.070	3.0
337.2760	68.00	.35	0.000	0.0	29649.308	0.0
337.2792	22.01	.34	93.940	2.5	29734.450	3.5
337.2881	18.00	-4.31	95399.870	1.0	125039.600	1.0
337.2952	26.01	-2.14	73969.710	5.5	103608.820	4.5
337.2957	27.00	-3.59	17233.680	3.5	46872.740	3.5
337.2966	24.00	-3.60	24897.550	4.0	54536.530	5.0
337.2979	22.00	-5.51	14105.680	3.0	43744.550	4.0
337.3000	46.00	-.21	7662.464	0.0	37309.662	0.0
337.3050	22.00	-1.51	11531.760	2.0	41170.003	3.0
337.3053	25.01	-4.84	49820.160	2.0	79456.380	2.0
337.3078	9.04	-1.31	844266.000	3.5	873904.000	2.5
337.3087	26.01	-4.90	30764.460	3.5	60402.380	2.5
337.3128	18.01	-4.68	172829.580	1.5	202467.140	1.5
337.3167	22.00	-3.47	16267.510	5.0	45904.730	6.0
337.3212	22.01	-3.51	15265.600	3.5	44902.420	2.5
337.3218	27.00	-.40	18389.570	1.5	48026.340	.5
337.3335	27.00	-4.11	25269.250	3.5	54904.990	2.5
337.3417	28.01	-6.04	29070.930	1.5	58705.950	1.5
337.3420	40.01	-.11	8065.752	0.0	37709.259	0.0
337.3460	58.01	-.59	2500.383	0.0	32143.539	0.0
337.3472	28.01	-2.06	100592.980	3.5	130227.520	2.5
337.3477	18.00	-3.48	93750.639	1.0	123385.130	0.0
337.3483	29.01	-3.60	108014.660	3.0	137649.100	2.0
337.3513	26.02	-3.26	88923.070	6.0	118557.250	5.0
337.3523	28.01	-1.48	104081.040	4.5	133715.130	4.5
337.3559	21.01	-.48	27917.690	1.0	57551.460	1.0
337.3581	22.00	-.41	18695.230	4.0	48328.810	4.0
337.3590	29.01	-.42	116388.000	2.0	146021.500	3.0
337.3648	23.00	-4.56	2153.200	1.5	31786.190	.5
337.3660	28.01	-1.17	100592.980	3.5	130225.870	3.5
337.3686	25.00	-3.56	38120.180	4.5	67752.840	5.5
337.3727	23.03	-1.58	254468.800	2.0	284101.100	3.0
337.3730	58.01	-.35	4436.164	0.0	34076.947	0.0
337.3738	30.02	-1.21	235623.900	3.0	265256.100	3.0
337.3750	74.00	-1.26	3306.958	0.0	32947.566	0.0
337.3801	28.01	-4.67	104298.230	4.5	133929.880	3.5
337.3803	24.00	-4.33	27703.840	4.0	57335.470	4.0
337.3840	64.00	-.74	0.000	0.0	29639.817	0.0
337.3864	26.00	-2.29	21999.132	4.0	51630.230	5.0
337.3923	25.01	-3.84	49882.150	4.0	79512.730	3.0
337.3965	24.00	-.92	25106.340	3.0	54736.550	4.0
337.3967	27.00	-1.69	13795.520	2.5	43425.710	2.5
337.3969	28.01	-2.04	23108.280	2.5	52738.450	2.5
337.3973	28.01	-3.93	99844.130	3.5	129474.270	3.5
337.3976	24.00	-.93	31377.960	4.0	61008.070	5.0
337.3989	10.03	-1.09	642472.000	2.5	672102.000	1.5
337.4030	23.00	-1.53	9636.960	1.5	39266.600	1.5
337.4062	10.01	-.63	249695.530	1.5	279324.890	1.5
337.4072	24.00	-.61	31048.850	1.0	60678.120	1.0
337.4116	24.01	-1.93	39877.280	3.5	69506.160	3.5
337.4160	68.00	-.55	0.000	0.0	29637.006	0.0
337.4193	26.00	-1.25	17927.378	1.0	47955.584	1.0
337.4214	28.00	-2.27	204.786	3.0	29832.810	3.0
337.4250	41.01	-.82	7823.779	0.0	37459.994	0.0
337.4294	27.00	-1.30	25269.250	3.5	54896.570	3.5
337.4302	28.01	-3.84	100609.010	2.5	130236.260	2.5
337.4308	24.00	-4.49	25359.620	4.0	54986.820	3.0
337.4333	22.01	-1.86	9975.920	1.5	39602.900	1.5
337.4412	24.00	-3.08	27176.220	1.0	56802.500	0.0
337.4455	29.01	-2.97	110084.290	1.0	139710.200	2.0
337.4471	8.01	-4.53	248514.230	1.5	278140.000	1.5
337.4487	10.02	-2.30	410134.720	1.0	439760.350	0.0
337.4510	69.01	-.44	8872.327	0.0	38506.259	0.0
337.4595	28.01	-3.72	104298.230	4.5	133922.910	4.5
337.4608	22.00	-.16	18482.860	1.0	48107.420	2.0
337.4631	28.00	.75	27260.891	6.0	56885.249	7.0
337.4640	28.01	-3.70	107142.210	1.5	136766.490	2.5
337.4650	44.00	-.70	7985.094	0.0	37617.797	0.0
337.4690	64.01	-.70	3952.218	0.0	33584.569	0.0
337.4712	24.00	-3.45	24303.940	3.0	53927.590	4.0
337.4730	40.01	.21	7985.094	0.0	37617.094	0.0
337.4735	24.00	-1.29	27597.220	3.0	57220.670	2.0
337.4801	25.01	-4.07	49889.860	3.0	79512.730	3.0
337.4841	28.01	-.28	100592.980	3.5	130215.500	4.5
337.4877	23.00	-4.69	21032.520	3.5	50654.720	2.5
337.4892	24.01	-2.58	20024.180	3.5	49646.250	3.5
337.4916	25.01	-.96	49291.310	3.0	78913.170	2.0
337.4920	41.00	.29	8711.012	0.0	38341.344	0.0
337.4924	24.00	-.85	25177.390	4.0	54799.180	5.0
337.4946	29.01	-.13	118484.000	3.0	148105.600	4.0
337.5015	24.01	-1.99	39877.280	3.5	69498.270	4.5
337.5029	24.00	-1.32	31009.000	3.0	60629.870	2.0
337.5052	25.01	-3.28	52373.180	3.0	81993.850	4.0
337.5219	29.01	-1.59	118484.000	3.0	148103.200	3.0
337.5220	42.00	-.16	18147.942	0.0	47775.640	0.0
337.5227	25.00	-2.70	17282.000	3.5	46901.130	2.5
337.5240	27.00	-2.84	24733.280	2.5	54352.300	3.5
337.5265	28.01	-3.54	106283.160	2.5	135901.960	2.5
337.5375	23.01	-3.82	19112.930	4.0	48730.760	4.0
337.5393	28.01	-1.39	105499.050	3.5	135116.720	2.5
337.5428	28.00	-2.99	29500.690	1.0	59118.060	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
337.5480	70.01	.17	26616.982	0.0	56242.398	0.0
337.5488	25.00	-2.67	38669.600	3.5	68286.440	4.5
337.5514	28.00	-1.88	29013.228	2.0	58629.840	2.0
337.5547	28.00	.15	29013.228	2.0	58629.550	3.0
337.5594	28.01	-.72	100592.980	3.5	130208.890	3.5
337.5630	22.00	-1.39	11639.804	3.0	41255.400	4.0
337.5648	10.00	-4.15	134041.840	2.0	163657.268	1.0
337.5650	42.00	.12	21454.900	0.0	51078.824	0.0
337.5672	29.00	-1.47	41538.623	0.0	71162.354	0.0
337.5694	24.01	-2.37	47372.750	1.5	76987.780	2.5
337.5711	22.00	-.25	18593.990	3.0	48208.870	3.0
337.5711	22.00	-3.36	19421.576	3.0	49036.460	4.0
337.5735	24.00	-1.95	31393.400	5.0	61008.070	5.0
337.5780	58.01	-.22	8872.327	0.0	38495.110	0.0
337.5789	24.02	-3.37	128849.400	4.0	158463.600	3.0
337.5810	8.01	-1.12	231427.990	3.5	261042.000	2.5
337.5821	28.01	-1.02	100592.980	3.5	130206.900	4.5
337.5821	28.01	-1.72	106369.300	1.5	135983.220	1.5
337.5971	17.02	-4.04	216524.600	2.5	246137.200	2.5
337.5979	24.00	-4.63	25206.020	3.0	54818.550	2.0
337.6039	10.03	-2.02	643975.000	2.5	673587.000	2.5
337.6047	23.00	-3.31	9636.960	1.5	39248.900	1.5
337.6050	73.00	-.74	9920.875	0.0	39541.289	0.0
337.6051	27.00	-2.85	23184.230	2.5	52796.130	2.5
337.6063	24.01	-3.61	75810.100	4.5	105421.900	5.5
337.6074	22.01	-3.06	39233.440	1.5	68845.140	2.5
337.6108	28.01	-4.07	70778.120	3.5	100389.520	2.5
337.6203	27.00	-3.86	24326.110	3.5	53936.680	2.5
337.6240	26.01	-3.38	31483.200	3.5	61093.440	2.5
337.6253	25.01	-1.63	52383.720	4.0	81993.850	4.0
337.6267	24.01	-2.56	35607.600	3.5	65217.610	4.5
337.6270	40.01	-.38	7662.464	0.0	37280.948	0.0
337.6318	26.00	.24	28068.091	4.0	57677.649	5.0
337.6330	57.01	-1.21	2581.041	0.0	32198.999	0.0
337.6340	41.00	-.03	12017.970	0.0	41635.840	0.0
337.6385	24.00	-.30	31048.000	7.0	60656.970	7.0
337.6391	8.01	-1.31	231350.080	2.5	260959.000	1.5
337.6424	8.02	-.60	368526.370	1.0	398135.000	0.0
337.6430	25.01	-1.47	55759.270	3.0	85367.850	2.0
337.6434	18.01	.09	170530.310	3.5	200138.850	3.5
337.6479	23.00	-6.40	8715.720	3.5	38323.870	4.5
337.6480	25.01	-2.50	34910.430	4.0	64518.570	5.0
337.6480	62.01	-1.19	3468.273	0.0	33084.915	0.0
337.6500	71.00	-.68	0.000	0.0	29616.467	0.0
337.6515	25.00	-.64	35041.370	3.5	64649.200	3.5
337.6537	24.00	-1.66	31049.330	6.0	60656.970	7.0
337.6597	24.01	-2.17	35610.500	4.5	65217.610	4.5
337.6611	29.01	-1.45	116371.410	4.0	145978.400	3.0
337.6628	24.00	-.18	31009.000	3.0	60615.840	3.0
337.6654	28.01	-2.33	100619.260	4.5	130225.870	3.5
337.6723	24.01	-1.85	38269.670	3.5	67875.680	3.5
337.6724	24.01	-3.58	39742.360	2.5	69348.360	1.5
337.6730	41.00	-.04	11130.738	0.0	40745.187	0.0
337.6740	28.01	-4.10	76402.030	2.5	106007.890	2.5
337.6815	22.00	-2.47	16106.080	4.0	45711.280	4.0
337.6834	8.02	-.25	368526.370	1.0	398131.400	1.0
337.6840	90.01	-.92	10566.135	0.0	40179.620	0.0
337.6913	27.00	-2.45	20500.710	1.5	50105.050	1.5
337.6995	26.00	-3.72	24118.815	4.0	53722.440	5.0
337.7055	27.00	-.90	13795.520	2.5	43398.620	3.5
337.7075	29.01	-2.26	119039.680	2.0	148642.600	2.0
337.7083	22.00	-1.19	19421.576	3.0	49024.430	3.0
337.7111	24.00	.34	36577.730	4.0	66180.340	5.0
337.7130	58.01	.08	4839.451	0.0	34450.393	0.0
337.7140	45.00	-.43	12663.231	0.0	42274.085	0.0
337.7155	10.01	-.63	254292.190	.5	283894.410	.5
337.7218	26.02	-4.58	167299.600	5.0	196901.270	5.0
337.7233	24.00	-.30	31028.330	2.0	60629.870	2.0
337.7249	28.01	-3.36	105499.050	3.5	135100.450	3.5
337.7256	29.01	-3.67	116326.160	3.0	145927.500	2.0
337.7302	8.02	-.36	368526.370	1.0	398127.300	2.0
337.7319	24.01	-2.48	39877.280	3.5	69478.060	2.5
337.7338	24.01	-1.50	50687.630	2.5	80288.250	1.5
337.7392	23.00	-.62	9636.960	1.5	39237.100	.5
337.7460	40.01	-.77	3226.301	0.0	32834.350	0.0
337.7487	22.00	-.88	386.874	4.0	29986.185	3.0
337.7576	28.01	-4.30	100389.520	2.5	129988.050	2.5
337.7577	22.00	-.55	170.132	3.0	29768.655	2.0
337.7580	15.01	.35	102799.200	1.0	132397.700	2.0
337.7593	24.01	-2.66	38269.670	3.5	67868.050	2.5
337.7628	23.00	-.32	9824.580	2.5	39422.660	2.5
337.7641	25.00	-1.40	35114.980	2.5	64712.940	2.5
337.7705	29.01	-.78	116388.000	2.0	145985.400	2.0
337.7710	45.00	-.75	10888.765	0.0	40494.622	0.0
337.7740	75.00	-.22	16212.162	0.0	45817.756	0.0
337.7746	9.00	-4.49	117308.558	1.5	146905.600	2.5
337.7810	62.01	-1.67	1935.780	0.0	31540.761	0.0
337.7836	24.00	-2.75	31364.330	3.0	60960.580	4.0
337.7838	28.01	-.62	100619.260	4.5	130215.500	4.5
337.7863	22.00	-.46	18462.830	0.0	48058.850	1.0
337.7914	28.01	-4.52	68965.650	1.5	98561.220	2.5
337.7944	28.01	-4.70	71770.830	2.5	101366.140	2.5
337.7981	25.01	-2.70	49517.580	5.0	79112.560	5.0
337.8020	44.00	-1.73	0.000	0.0	29603.140	0.0
337.8150	24.02	-4.48	128849.400	4.0	158442.900	4.0
337.8200	42.00	-.71	11050.080	0.0	40651.643	0.0
337.8217	10.01	-.28	224699.270	.5	254292.190	.5
337.8238	21.01	-.33	28021.210	2.0	57613.940	2.0
337.8300	40.01	-.64	7743.122	0.0	37343.809	0.0
337.8308	22.00	-2.01	18593.990	3.0	48186.110	4.0
337.8312	22.00	-1.32	19322.988	2.0	48915.070	2.0
337.8343	24.01	-.98	25033.950	3.5	54625.760	2.5
337.8358	27.00	-3.34	25269.250	3.5	54860.930	4.5
337.8376	29.01	-3.45	119039.680	2.0	148631.200	3.0
337.8387	24.00	-4.20	24833.860	3.0	54425.290	4.0
337.8389	28.01	-1.41	100592.980	3.5	130184.390	2.5
337.8446	18.01	-3.98	172829.580	1.5	202420.490	.5
337.8460	42.00	.64	25407.119	0.0	55006.404	0.0
337.8489	28.01	-4.71	107142.210	1.5	136732.740	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
337.8504	29.01	-1.27	116388.000	2.0	145978.400	3.0
337.8580	90.01	-.49	7904.437	0.0	37502.671	0.0
337.8592	28.01	-1.28	100619.260	4.5	130208.890	3.5
337.8674	26.00	-.70	21715.735	5.0	51304.650	4.0
337.8680	76.00	.30	19761.092	0.0	49358.450	0.0
337.8710	25.01	-2.87	59537.400	4.0	89126.000	3.0
337.8734	26.00	-2.18	18378.187	2.0	47966.571	3.0
337.8736	27.00	-1.73	18389.570	1.5	47977.940	.5
337.8736	27.00	-2.04	23207.760	1.5	52796.130	2.5
337.8758	26.02	-4.70	121949.620	5.0	151537.800	4.0
337.8762	24.00	-2.48	20517.400	2.0	50105.540	1.0
337.8766	23.01	-4.52	34228.790	3.0	63816.900	3.0
337.8799	24.01	-2.44	35569.020	2.5	65156.840	2.5
337.8819	28.01	-1.02	100619.260	4.5	130206.900	4.5
337.8834	24.00	-1.11	31028.330	2.0	60615.840	3.0
337.8930	72.00	-1.37	2339.068	0.0	31934.236	0.0
337.8960	26.02	-3.00	167299.600	5.0	196886.010	6.0
337.8966	28.01	-.08	100619.260	4.5	130205.620	5.5
337.9003	25.00	-3.79	17568.480	1.5	47154.510	1.5
337.9021	26.00	-1.47	17550.180	3.0	47136.058	2.0
337.9060	75.01	.58	14276.381	0.0	43870.410	0.0
337.9162	24.00	-2.21	20517.400	2.0	50102.040	3.0
337.9164	24.00	-3.38	0.000	3.0	29584.620	2.0
337.9170	58.01	-.50	4436.164	0.0	34029.230	0.0
337.9193	21.01	.10	30815.650	1.0	60400.020	1.0
337.9212	22.00	-1.21	386.874	4.0	29971.078	4.0
337.9257	22.00	-3.16	16106.080	4.0	45689.890	3.0
337.9304	25.01	-3.41	34910.430	4.0	64493.630	4.0
337.9320	10.01	-.97	249839.630	.5	279422.890	.5
337.9336	28.01	-4.67	107142.210	1.5	136725.330	.5
337.9344	27.00	-1.51	25937.590	4.5	55520.640	3.5
337.9384	24.00	-4.87	25089.200	2.0	54671.900	1.0
337.9388	24.01	-.94	25043.100	1.5	54625.760	2.5
337.9389	26.02	-4.78	88663.870	4.0	118246.520	3.0
337.9393	24.00	-1.22	31377.960	4.0	60960.580	4.0
337.9424	22.00	-.27	18525.070	2.0	48107.420	2.0
337.9425	21.01	-.06	28161.030	3.0	57743.370	3.0
337.9429	29.01	-2.12	118484.000	3.0	148066.300	2.0
337.9461	18.01	-4.50	157233.930	3.5	186815.960	3.5
337.9520	73.01	-.52	4032.876	0.0	33622.877	0.0
337.9564	24.00	-1.08	20520.920	3.0	50102.040	3.0
337.9576	24.00	-.93	31048.850	1.0	60629.870	2.0
337.9577	18.01	-.91	170400.940	2.5	199981.940	1.5
337.9600	44.00	-.50	10566.135	0.0	40155.436	0.0
337.9684	22.01	-3.04	12628.770	1.5	42208.840	2.5
337.9700	75.00	-.67	11534.025	0.0	41122.450	0.0
337.9760	64.01	.09	10324.163	0.0	39912.063	0.0
337.9817	25.01	-3.36	52653.270	4.0	82232.180	5.0
337.9838	24.01	-.60	25047.040	2.5	54625.760	2.5
337.9878	29.01	-3.03	108335.430	2.0	137913.800	1.0
337.9881	24.00	-.71	20523.690	4.0	50102.040	3.0
337.9883	24.01	-3.52	36101.820	3.5	65680.150	4.5
337.9902	22.01	-2.77	10024.740	2.5	39602.900	1.5
337.9917	25.00	-3.65	30411.740	.5	59989.770	1.5
337.9920	40.00	.66	17422.024	0.0	47006.523	0.0
337.9955	29.01	-.81	118484.000	3.0	148061.700	3.0
337.9970	42.00	.20	11372.710	0.0	40958.771	0.0
337.9977	22.01	-.95	32602.510	1.5	62180.020	1.5
338.0050	41.00	-1.17	2742.356	0.0	32327.717	0.0
338.0052	10.01	-1.71	252798.480	.5	282375.330	1.5
338.0112	26.00	-.63	22249.430	3.0	51825.758	3.0
338.0150	22.00	-.44	18482.860	1.0	48058.850	1.0
338.0180	44.00	-.71	7985.094	0.0	37569.317	0.0
338.0250	63.01	.25	24035.941	0.0	53619.552	0.0
338.0270	28.00	-.91	29013.228	2.0	58588.168	3.0
338.0276	25.00	-2.83	23549.200	2.5	53124.090	3.5
338.0279	22.01	-.44	393.220	4.5	29968.080	4.5
338.0332	24.02	-2.65	128753.900	2.0	158326.300	2.0
338.0333	29.01	-1.74	116371.410	4.0	145945.800	5.0
338.0410	41.00	-.77	1129.205	0.0	30711.415	0.0
338.0443	25.00	-3.18	23296.670	3.5	52870.100	3.5
338.0446	15.01	-4.37	102799.200	1.0	132372.600	1.0
338.0457	22.01	-.85	32697.940	2.5	62271.250	2.5
338.0482	10.02	-2.92	410134.720	1.0	439707.810	1.0
338.0520	64.01	-.03	9356.272	0.0	38937.520	0.0
338.0540	24.00	-.97	27703.840	4.0	57276.420	3.0
338.0566	28.00	-.13	3409.925	2.0	32982.280	1.0
338.0649	23.01	-.34	36425.070	4.0	65996.700	3.0
338.0652	27.02	-3.12	77383.100	3.5	106954.700	2.5
338.0707	38.01	.20	23715.190	0.0	53294.802	0.0
338.0715	29.01	-.29	118532.150	2.0	148103.200	3.0
338.0817	25.00	-2.05	30419.610	2.5	59989.770	1.5
338.0860	41.00	-.57	5242.739	0.0	34821.012	0.0
338.0860	90.00	-.75	2823.013	0.0	32401.286	0.0
338.0870	28.00	-1.41	2216.519	2.0	31786.210	3.0
338.0910	57.01	-.36	2581.041	0.0	32158.877	0.0
338.0946	22.00	-4.59	16961.420	3.0	46530.450	4.0
338.0953	25.00	-2.33	35114.980	2.5	64683.950	1.5
338.0968	26.01	-3.07	31387.980	2.5	60956.820	3.5
338.0992	22.00	-7.63	14105.680	3.0	43674.310	4.0
338.1000	26.01	-1.64	44929.590	2.5	74498.150	1.5
338.1004	25.01	-3.29	49889.860	3.0	79456.380	2.0
338.1048	25.00	-2.72	38008.700	5.5	67576.840	4.5
338.1065	18.01	-4.31	172213.800	1.5	201781.790	2.5
338.1082	28.01	-1.20	104147.290	5.5	133715.130	4.5
338.1098	29.01	-1.63	116388.000	2.0	145955.700	1.0
338.1158	24.00	-2.85	31393.400	5.0	60960.580	4.0
338.1235	12.02	-.50	530420.600	1.0	559987.100	1.0
338.1320	26.00	-3.91	26224.961	3.0	55790.720	3.0
338.1332	24.00	-2.14	28637.000	3.0	58202.650	3.0
338.1332	26.00	-2.38	22946.810	1.0	52512.460	1.0
338.1350	90.01	-.80	9517.587	0.0	39091.574	0.0
338.1361	26.01	-3.35	13673.210	1.5	43236.610	2.5
338.1367	28.01	-1.79	100619.260	4.5	130184.610	5.5
338.1408	22.00	-3.62	16267.510	5.0	45832.500	5.0
338.1421	29.00	-.74	41538.623	0.0	71111.989	0.0
338.1436	22.00	-1.28	11776.806	4.0	41341.553	5.0
338.1459	28.01	-3.32	104503.220	2.5	134067.760	1.5
338.1490	58.01	-.40	6533.259	0.0	36106.021	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
338.1498	27.00	-1.31	16467.900	4.5	46032.100	4.5
338.1501	26.00	-5.39	12968.552	2.0	42532.729	3.0
338.1514	25.00	-2.57	30425.710	1.5	59989.770	1.5
338.1536	24.00	-4.10	27825.450	5.0	57389.320	6.0
338.1670	25.01	-2.56	34910.430	4.0	64473.130	3.0
338.1901	24.01	-4.48	38315.000	2.5	67875.680	3.5
338.1978	25.00	-2.50	23549.200	2.5	53109.210	2.5
338.2047	24.00	-1.87	27163.200	0.0	56722.600	1.0
338.2052	27.00	-1.28	18775.010	.5	48334.370	1.5
338.2075	25.01	-2.43	59537.400	4.0	89096.560	4.0
338.2075	24.00	-1.57	25177.390	4.0	54736.550	4.0
338.2131	28.00	-3.83	29481.020	4.0	59039.693	4.0
338.2141	26.01	-4.35	31483.200	3.5	61041.780	2.5
338.2141	26.02	-3.56	90423.680	2.0	119982.260	1.0
338.2163	26.02	-1.83	114325.350	5.0	143883.740	5.0
338.2280	22.00	.21	8602.340	2.0	38159.710	3.0
338.2290	42.00	-.98	11372.710	0.0	40938.478	0.0
338.2400	62.01	-.52	1451.835	0.0	31016.641	0.0
338.2404	26.00	-2.44	17550.180	3.0	47106.463	4.0
338.2417	26.00	-.99	26351.049	5.0	55907.220	5.0
338.2462	26.00	-3.38	24335.764	2.0	53891.540	3.0
338.2480	42.00	-.32	11050.080	0.0	40614.187	0.0
338.2494	24.01	-2.53	38315.000	2.5	67870.500	1.5
338.2505	26.02	-4.43	93388.750	4.0	122944.150	4.0
338.2526	23.01	-1.51	20343.000	2.0	49898.220	2.0
338.2540	24.01	-4.05	75810.100	4.5	105365.200	4.5
338.2589	22.00	-6.11	14028.470	2.0	43583.140	3.0
338.2606	28.00	-4.01	28212.997	0.0	57767.520	1.0
338.2607	26.00	-3.04	26351.049	5.0	55905.560	4.0
338.2667	25.00	-2.67	23549.200	2.5	53103.190	1.5
338.2668	10.01	-4.34	279422.890	.5	308976.870	.5
338.2669	28.01	-3.58	70778.120	3.5	100332.090	4.5
33d.2671	24.01	-.92	19798.010	2.5	49351.560	2.5
338.2680	92.01	-1.97	887.233	0.0	30449.592	0.0
338.2692	8.02	.07	368583.630	2.0	398137.400	3.0
338.2774	24.01	-1.98	38315.000	2.5	67868.050	2.5
338.2803	30.02	-1.30	235452.500	2.0	265005.300	2.0
338.2806	26.00	-3.03	24338.766	3.0	53891.540	3.0
338.2839	16.01	-1.87	110766.310	4.5	140318.800	3.5
338.2890	47.00	-.64	0.000	0.0	29560.524	0.0
338.2895	12.02	-.26	535179.600	2.0	564731.600	1.0
338.2919	28.00	-2.25	29320.782	3.0	58872.570	4.0
338.2955	27.00	-1.40	16778.160	2.5	46329.630	2.5
338.3143	28.01	-4.58	104503.220	2.5	134053.050	2.5
338.3150	51.00	-.76	16292.819	0.0	45851.071	0.0
338.3158	29.01	-3.75	118484.000	3.0	148033.700	4.0
338.3166	24.00	-4.56	31355.210	2.0	60904.840	3.0
338.3186	27.00	-3.70	24733.280	2.5	54282.730	2.5
338.3210	24.01	-3.21	35607.600	3.5	65156.840	2.5
338.3365	25.00	-2.31	35165.050	1.5	64712.940	2.5
338.3367	26.00	-2.90	21038.987	2.0	50586.857	3.0
338.3379	8.02	-.73	368583.630	2.0	398131.400	1.0
338.3400	24.00	-3.22	24093.160	2.0	53640.740	3.0
338.3538	24.00	-2.27	27176.220	1.0	56722.600	1.0
338.3566	22.01	-1.66	9930.740	1.5	39476.870	2.5
338.3570	24.02	-3.42	128782.200	3.0	158328.300	2.0
338.3633	25.01	-2.35	43850.420	2.0	73395.970	2.0
338.3688	28.00	-4.25	29084.478	4.0	58629.550	3.0
338.3690	58.01	-.39	4194.191	0.0	33747.726	0.0
338.3694	26.00	-2.55	17726.985	2.0	47271.999	1.0
338.3730	25.01	-3.11	43850.420	2.0	73395.120	3.0
338.3768	22.01	.21	0.000	1.5	29544.370	2.5
338.3800	41.00	-.39	8307.725	0.0	37860.299	0.0
338.3802	25.00	-1.61	35041.370	3.5	64585.440	4.5
338.3834	26.02	-3.83	114339.950	4.0	143883.740	5.0
338.3848	8.02	-.14	368583.630	2.0	398127.300	2.0
338.3864	18.01	-1.85	161048.640	1.5	190592.170	1.5
338.3915	27.00	-.85	25739.930	2.5	55283.020	2.5
338.3981	26.00	-.81	17550.180	3.0	47092.693	3.0
338.4000	76.00	-.12	12663.231	0.0	42214.058	0.0
338.4003	26.00	-1.90	24118.815	4.0	53661.130	3.0
338.4048	24.00	.19	36552.130	3.0	66094.060	4.0
338.4085	23.03	-1.03	254824.100	1.0	284365.700	1.0
338.4140	72.01	-.18	14276.381	0.0	43825.986	0.0
338.4181	28.00	-.62	27260.891	6.0	56801.654	5.0
338.4210	24.00	-4.18	31364.330	3.0	60904.840	3.0
338.4245	24.00	-1.22	20517.400	2.0	50057.610	2.0
338.4257	11.02	-2.11	442710.500	1.5	472250.600	.5
338.4326	29.01	-1.60	116388.000	2.0	145927.500	2.0
338.4427	28.01	-4.35	105439.850	1.5	134978.470	2.5
338.4450	75.00	.39	27020.269	0.0	56567.167	0.0
338.4450	92.01	-1.57	241.973	0.0	29788.871	0.0
338.4597	23.00	-1.13	8578.520	2.5	38115.650	3.5
338.4600	76.00	-.48	14276.381	0.0	43821.970	0.0
338.4620	42.00	.55	11775.998	0.0	41321.412	0.0
338.4648	24.00	-.78	20520.920	3.0	50057.610	2.0
338.4660	41.00	.05	11937.313	0.0	41482.378	0.0
338.4660	62.01	-.70	2984.328	0.0	32529.393	0.0
338.4667	22.00	-.06	19422.988	2.0	48859.510	1.0
338.4700	72.01	-1.28	3629.588	0.0	33174.304	0.0
338.4800	26.00	-5.53	7985.783	2.0	37521.144	2.0
338.4800	29.00	-1.47	41538.623	0.0	71082.466	0.0
338.4870	22.00	-1.89	18525.070	2.0	48059.820	3.0
338.4873	25.01	-2.71	43850.420	2.0	73385.150	1.0
338.4931	25.00	-1.70	35114.980	2.5	64649.200	3.5
338.4931	22.01	-3.68	39233.440	1.5	68767.660	1.5
338.4939	29.01	-.87	118532.150	2.0	148066.300	2.0
338.4950	8.02	.35	368684.750	3.0	398218.800	4.0
338.4981	22.00	-1.24	18525.070	2.0	48058.850	1.0
338.5050	73.00	-1.03	3871.561	0.0	33413.222	0.0
338.5080	68.00	-.25	403.288	0.0	29944.687	0.0
338.5110	28.01	-3.84	106369.300	1.5	135901.960	2.5
338.5140	44.00	-.20	12098.628	0.0	41639.504	0.0
338.5159	27.00	-1.50	16470.600	1.5	46002.630	2.5
338.5192	25.02	-4.13	91948.300	3.5	121480.240	3.5
338.5218	27.00	-1.05	4142.660	3.5	33674.380	2.5
338.5313	24.00	-.54	28637.000	3.0	58167.690	4.0
338.5346	23.03	-.72	257690.800	3.0	287221.400	2.0
338.5371	27.00	-3.37	24627.790	4.5	54158.170	4.5
338.5386	21.01	-.83	28021.210	2.0	57551.460	1.0
338.5390	62.01	-1.73	2177.753	0.0	31716.447	0.0
338.5392	22.00	-2.69	11639.804	3.0	41170.003	3.0
338.5411	23.00	-5.35	8715.720	3.5	38245.750	3.5
338.5466	29.01	-2.01	118532.150	2.0	148061.700	3.0
338.5492	26.00	-2.88	26224.961	3.0	55754.290	2.0
338.5500	71.00	-1.26	1935.780	0.0	31473.514	0.0
338.5530	90.01	-1.04	4436.164	0.0	33973.637	0.0
338.5550	27.00	-3.78	25739.930	2.5	55268.750	3.5
338.5662	22.00	-3.33	386.874	4.0	29914.720	3.0
338.5674	24.00	-4.49	24897.550	4.0	54425.290	4.0
338.5736	25.02	-4.45	146391.300	.5	175918.500	.5
338.5760	75.00	-.51	14518.354	0.0	44053.820	0.0
338.5772	24.00	-4.68	31377.960	4.0	60904.840	3.0
338.5780	45.00	-.34	13389.148	0.0	42924.440	0.0
338.5785	23.01	-1.94	25191.080	2.0	54717.850	1.0
338.5822	28.01	-.41	99340.550	3.5	128867.000	3.5
338.5880	42.00	.39	26455.667	0.0	55990.086	0.0
338.5892	24.00	-3.68	28637.000	3.0	58162.640	2.0
338.5928	24.00	-3.06	23512.000	1.0	53037.520	2.0
338.5934	27.00	-4.19	24733.280	2.5	54258.750	2.5
338.5940	76.00	-.32	12663.231	0.0	42197.127	0.0
338.5944	22.00	-.25	386.874	4.0	29912.262	3.0
338.5965	25.01	-2.02	59537.400	4.0	89062.600	5.0
338.6040	23.01	-2.85	25191.080	2.0	54715.630	2.0
338.6057	24.01	-2.08	47354.630	2.5	76879.030	3.5
338.6140	76.00	-.48	14276.381	0.0	43808.533	0.0
338.6203	10.01	-1.51	249695.530	1.5	279216.660	2.5
338.6210	72.00	.38	16696.107	0.0	46227.648	0.0
338.6218	17.02	-.81	188390.100	2.5	217913.100	1.5
338.6240	41.01	0.00	9759.560	0.0	39290.840	0.0
338.6339	28.01	-.33	99340.550	3.5	128862.490	4.5
338.6453	26.01	-3.17	31811.870	2.5	61332.820	1.5
338.6500	90.01	-.48	8952.985	0.0	38481.997	0.0
338.6508	24.00	-.98	28682.180	2.0	58202.650	3.0
338.6577	28.00	-2.14	29668.918	3.0	59188.780	3.0
338.6585	17.02	-.72	179663.000	1.5	209182.800	1.5
338.6634	10.01	-2.55	279218.660	2.5	308738.030	1.5
338.6688	25.00	-3.66	35165.050	1.5	64683.950	1.5
338.6695	26.02	-4.76	159493.000	3.0	189011.640	4.0
338.6723	24.00	-.73	27816.880	5.0	57335.470	4.0
338.6814	27.02	-4.65	143677.100	3.5	173194.900	2.5
338.6814	27.02	-4.65	143677.100	3.5	173194.900	2.5
338.6836	28.00	-4.16	26665.903	3.0	56183.510	4.0
338.6853	26.02	-3.74	84159.550	4.0	113677.010	5.0
338.6864	25.00	-4.62	17637.150	.5	47154.510	1.5
338.6885	23.00	-3.89	9824.580	2.5	39341.760	3.5
338.6892	28.00	-.25	29013.228	2.0	58530.350	3.0
338.6934	22.00	-2.86	19322.988	2.0	48839.740	3.0
338.6983	24.00	-1.23	36577.730	4.0	66094.060	4.0
338.7141	9.00	-4.54	117391.950	.5	146906.900	1.5
338.7203	25.02	-2.89	179228.690	1.5	208743.100	2.5
338.7231	27.00	-.78	26063.110	1.5	55577.280	1.5
338.7286	25.01	-1.09	65567.070	2.0	95080.760	1.0
338.7291	22.00	-1.53	18695.230	4.0	48208.870	3.0
338.7302	26.01	-2.76	31999.120	3.5	61512.670	4.5
338.7315	22.00	-1.22	18593.990	3.0	48107.420	2.0
338.7324	28.01	-1.13	99340.550	3.5	128853.910	4.5
338.7328	28.01	-.97	99340.550	3.5	128853.870	2.5
338.7353	29.01	-3.68	116388.000	2.0	145901.100	1.0
338.7376	12.02	-.29	534776.900	2.0	564289.800	1.0
338.7400	26.00	-1.45	22249.430	3.0	51762.120	2.0
338.7411	28.00	-3.86	15609.861	2.0	45122.460	1.0
338.7446	23.00	-3.21	2424.890	4.5	31937.180	5.5
338.7448	28.00	-1.15	29013.228	2.0	58525.507	1.0
338.7452	28.00	-5.79	879.813	2.0	30392.052	1.0
338.7453	28.01	-4.29	100475.820	3.5	129988.050	2.5
338.7457	28.02	-4.66	103306.100	3.0	132816.300	2.0
338.7460	73.00	-1.12	11130.738	0.0	40651.382	0.0
338.7470	27.00	-3.00	14399.280	.5	43911.360	1.5
338.7530	28.01	-1.31	105588.890	4.5	135100.450	3.5
338.7534	28.01	-1.47	104298.230	4.5	133809.760	3.5
338.7599	18.00	-3.40	93750.639	1.0	123261.593	2.0
338.7617	25.01	-2.86	62572.200	2.0	92063.000	3.0
338.7697	17.02	-.16	174613.900	2.5	204124.000	1.5
338.7709	27.01	-1.52	18338.500	1.0	47848.500	1.0
338.7715	24.01	-3.53	35707.660	5.5	65217.610	4.5
338.7738	25.01	-1.95	48435.960	6.0	77945.710	7.0
338.7750	41.00	-.78	5242.739	0.0	34760.856	0.0
338.7750	42.00	-.81	11372.710	0.0	40890.827	0.0
338.7780	58.01	-.63	5646.026	0.0	35163.681	0.0
338.7806	24.00	-1.06	31009.000	3.0	60518.160	3.0
338.7806	24.00	-1.24	31009.000	3.0	60516.160	3.0
338.7810	23.01	-5.84	17910.980	4.0	47420.100	4.0
338.7821	25.01	-2.25	48333.060	5.0	77842.090	6.0
338.7826	22.01	-.36	225.470	3.5	29734.450	3.5
338.7840	76.00	-.13	10082.190	0.0	39599.523	0.0
338.7870	40.01	.35	7743.122	0.0	37260.193	0.0
338.7946	24.01	-2.25	38362.560	1.5	67870.500	1.5
338.8134	24.00	-1.48	31364.330	3.0	60870.630	4.0
338.8136	26.01	-4.91	31483.200	3.5	60989.480	4.5
338.8165	27.00	-.88	4690.180	2.5	34196.210	1.5
338.8199	22.00	-2.00	12118.394	4.0	41624.130	4.0
338.8214	27.01	-1.42	18031.500	2.0	47537.100	2.0
338.8227	24.01	-3.81	38362.560	1.5	67868.050	2.5
338.8289	24.00	-3.97	24299.890	2.0	53804.840	3.0
338.8300	40.01	-.48	0.000	0.0	29513.325	0.0
338.8358	18.00	-3.10	93750.639	1.0	123254.990	1.0
338.8372	22.01	-2.16	32767.020	3.5	62271.250	2.5
338.8419	10.01	.13	251522.120	1.5	281025.940	2.5
338.8433	29.01	-2.05	118484.000	3.0	147987.700	2.0
338.8434	28.00	-1.89	29084.478	4.0	58586.168	3.0
338.8480	27.00	-2.16	16467.900	4.5	45971.190	3.5
338.8516	27.01	-2.65	22009.230	4.0	51512.200	3.0
338.8529	18.01	-.14	161089.310	.5	190592.170	1.5
338.8558	25.01	-2.90	52383.720	4.0	81886.330	5.0
338.8590	39.00	.34	15163.614	0.0	44674.413	0.0
338.8693	27.00	-2.04	14036.280	1.5	43537.710	1.5
338.8697	24.00	-.85	20517.400	2.0	50016.600	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
338.8710	44.00	-.30	11372.710	0.0	40882.464	0.0
338.8748	22.01	-1.77	9975.920	1.5	39476.870	2.5
338.8754	24.00	-4.97	24303.940	3.0	53804.840	3.0
338.8808	24.00	-1.28	24282.340	4.0	53782.770	4.0
338.8820	73.00	-1.37	9194.957	0.0	38703.754	0.0
338.8830	74.00	.14	21293.585	0.0	50802.294	0.0
338.8870	66.01	-.34	4678.136	0.0	34186.497	0.0
338.8898	24.00	-3.30	23512.000	1.0	53011.650	1.0
338.8909	24.00	-4.20	27223.050	2.0	56722.600	1.0
338.8944	10.01	-.50	276511.820	.5	306011.070	.5
338.8962	26.00	-1.86	24772.019	1.0	54271.110	1.0
338.9162	24.01	-2.71	38362.560	1.5	67859.910	.5
338.9191	28.01	-3.91	100490.950	1.5	129988.050	2.5
338.9294	25.00	-3.05	38008.700	5.5	67504.900	5.5
338.9306	25.01	-2.17	62564.700	1.0	92060.800	1.0
338.9320	62.01	-.64	4355.506	0.0	33859.949	0.0
338.9375	25.01	-1.71	62587.500	3.0	92083.000	3.0
338.9422	24.00	-4.76	24833.860	3.0	54328.950	3.0
338.9430	75.00	-.11	17099.394	0.0	46602.880	0.0
338.9439	24.00	-2.51	31009.000	3.0	60503.940	4.0
338.9460	90.00	-.12	8065.752	0.0	37568.977	0.0
338.9500	44.00	-1.48	2661.698	0.0	32164.575	0.0
338.9523	26.02	-4.60	170310.600	3.0	199804.810	4.0
338.9605	22.00	-.12	19421.576	3.0	48915.070	2.0
338.9649	26.01	-3.91	73091.700	4.5	102584.810	5.5
338.9650	90.01	-1.36	1774.465	0.0	31276.036	0.0
338.9680	23.01	-2.24	20980.920	2.0	50473.760	1.0
338.9700	24.00	-2.28	31377.960	4.0	60870.630	4.0
338.9705	26.00	-1.72	17927.378	1.0	47420.000	2.0
338.9726	25.01	-1.40	39826.570	1.0	69319.010	0.0
338.9740	68.00	-.89	0.000	0.0	29500.788	0.0
338.9750	27.00	-1.62	26063.110	1.5	55555.340	2.5
338.9796	28.00	-2.16	29500.690	1.0	58992.520	2.0
338.9800	42.00	.25	18228.600	0.0	47728.866	0.0
338.9830	72.01	-.75	3629.588	0.0	33129.592	0.0
338.9854	18.00	-4.79	93143.800	2.0	122635.128	2.0
338.9906	22.00	-1.31	18695.230	4.0	48186.110	4.0
338.9944	25.01	-4.99	72010.750	4.0	101501.300	3.0
338.9952	24.00	-3.06	27597.220	3.0	57087.700	2.0
339.0026	24.00	-2.50	31028.330	2.0	60518.160	3.0
339.0026	24.00	-1.62	31028.330	2.0	60518.160	3.0
339.0046	25.01	-2.82	52373.180	3.0	81862.840	4.0
339.0076	25.01	-3.76	35004.430	3.0	64493.830	4.0
339.0090	26.01	-1.69	54870.620	2.5	84359.900	1.5
339.0108	28.01	-2.35	92373.450	2.5	121862.570	3.5
339.0129	22.00	-2.34	16267.510	5.0	45756.450	5.0
339.0168	25.01	-3.05	62572.200	2.0	92060.800	1.0
339.0205	25.01	-3.26	72010.750	4.0	101499.030	4.0
339.0250	75.00	.24	22019.503	0.0	51515.853	0.0
339.0251	26.00	-2.81	19621.004	5.0	49108.876	4.0
339.0352	8.03	-.08	576684.500	2.5	606171.500	2.5
339.0363	23.01	-2.39	23391.090	5.0	52877.990	5.0
339.0386	23.00	-3.56	11100.650	4.5	40587.350	3.5
339.0387	27.00	-1.38	16470.600	1.5	45957.290	.5
339.0398	28.01	-1.77	99340.550	3.5	128827.150	3.5
339.0424	28.01	-4.42	100845.410	.5	130331.780	1.5
339.0444	23.00	-2.91	10892.500	3.5	40378.700	4.5
339.0477	26.02	-4.21	93412.930	2.0	122898.840	2.0
339.0490	22.00	-7.06	13981.750	1.0	43467.550	2.0
339.0520	58.01	-.78	3548.931	0.0	33042.932	0.0
339.0552	10.01	-1.38	249839.630	.5	279324.890	1.5
339.0560	28.01	-2.87	70358.940	4.5	99844.130	3.5
339.0582	12.02	-1.36	535179.600	2.0	564664.600	2.0
339.0630	41.00	-.26	9436.930	0.0	38929.974	0.0
339.0646	25.02	-2.65	84610.530	.5	114094.970	1.5
339.0648	24.00	-4.60	31009.000	3.0	60493.420	3.0
339.0655	22.00	.06	8492.421	1.0	37976.780	2.0
339.0679	29.01	-1.97	118532.150	2.0	148016.300	1.0
339.0759	23.00	-1.29	8476.200	1.5	37959.660	2.5
339.0765	24.00	-1.48	28679.430	1.0	58162.840	2.0
339.0880	64.01	-.42	9356.272	0.0	38847.142	0.0
339.0881	27.02	-4.03	77472.300	2.5	106954.700	2.5
339.0897	25.00	-3.00	37148.660	5.5	66630.920	4.5
339.0913	29.01	-3.12	119039.680	2.0	148521.800	1.0
339.0918	22.01	-2.09	32697.940	2.5	62180.020	1.5
339.0943	27.00	-1.71	16778.160	2.5	46260.020	1.5
339.1000	23.01	-2.89	20242.320	4.0	49723.680	4.0
339.1032	9.01	-2.10	240092.550	2.0	269573.640	1.0
339.1039	28.00	-1.16	0.000	4.0	29481.020	4.0
339.1081	24.00	-2.35	20682.180	2.0	58162.840	2.0
339.1100	70.01	-.29	36860.487	0.0	66349.443	0.0
339.1100	74.00	-.47	15324.929	0.0	44813.885	0.0
339.1110	62.01	-1.44	1451.835	0.0	30940.704	0.0
339.1151	25.02	-2.93	179339.590	2.5	208819.640	3.5
339.1209	24.00	-3.31	31048.000	7.0	60527.550	6.0
339.1224	28.01	-3.39	105499.050	3.5	134978.470	2.5
339.1258	25.01	-2.88	52383.720	4.0	81862.840	4.0
339.1291	24.00	-1.87	24303.940	3.0	53782.770	4.0
339.1316	26.01	-3.04	33466.500	4.5	62945.120	3.5
339.1319	22.00	-2.42	11776.806	4.0	41255.400	4.0
339.1322	25.01	-2.83	72010.750	4.0	101489.310	5.0
339.1330	41.00	-.24	12017.970	0.0	41504.926	0.0
339.1362	24.00	-.24	31049.330	6.0	60527.550	6.0
339.1413	24.01	-1.47	19528.380	.5	49006.150	1.5
339.1449	22.00	-6.27	14105.680	3.0	43583.140	3.0
339.1475	24.00	-3.61	31393.400	5.0	60870.630	4.0
339.1530	74.00	-.52	15002.299	0.0	44487.517	0.0
339.1555	28.01	-4.05	71770.830	2.5	101247.370	2.5
339.1628	23.00	-3.26	9824.580	2.5	39300.480	2.5
339.1641	26.02	-4.17	84159.550	4.0	113635.340	4.0
339.1654	24.00	-2.82	21810.840	1.0	51286.520	2.0
339.1721	25.01	-2.80	62564.700	1.0	92039.800	2.0
339.1776	14.00	-4.66	50189.389	2.0	79664.000	1.0
339.1831	24.01	-3.25	38396.360	.5	67870.500	1.5
339.1833	26.00	-2.48	26523.726	2.0	56097.850	3.0
339.1835	18.02	-2.21	213950.870	2.0	243424.970	3.0
339.1848	27.00	-3.03	15184.040	2.5	44658.030	1.5
339.1866	25.01	-2.73	53597.130	2.0	83070.970	2.0
339.1890	25.00	-2.75	35165.050	1.5	64638.680	.5
339.1890	44.00	-.22	14760.326	0.0	44242.414	0.0
339.1891	26.01	-3.86	31483.200	3.5	60956.820	3.5
339.1902	22.01	-2.25	39476.870	2.5	68950.390	3.5
339.1937	55.00	-7.26	0.000	0.0	29481.680	0.0
339.1973	17.01	-2.53	132162.000	3.0	161634.900	2.0
339.1980	40.01	.55	1290.520	0.0	30771.826	0.0
339.1990	63.01	-.73	10001.532	0.0	39482.751	0.0
339.2008	26.00	-1.13	24335.764	2.0	53808.370	1.0
339.2016	29.00	-1.87	43716.376	0.0	73197.369	0.0
339.2030	90.01	-.79	1451.835	0.0	30932.706	0.0
339.2054	24.00	-1.60	31055.350	5.0	60527.550	6.0
339.2123	23.03	-.84	254468.800	2.0	283940.400	2.0
339.2148	9.01	-.93	240092.550	2.0	269563.930	2.0
339.2170	42.00	.26	21051.613	0.0	50531.268	0.0
339.2194	25.00	-3.40	34938.700	4.5	64409.690	3.5
339.2280	26.00	-3.62	26627.612	4.0	56097.850	3.0
339.2297	18.00	-2.91	93750.639	1.0	123220.730	2.0
339.2306	26.00	-1.16	17726.985	2.0	47197.000	2.0
339.2340	41.00	-.61	1532.493	0.0	31010.670	0.0
339.2457	25.01	-4.09	35004.430	3.0	64473.130	3.0
339.2476	55.00	-7.43	0.000	0.0	29476.996	0.0
339.2530	64.01	-.42	564.603	0.0	30041.129	0.0
339.2532	27.00	-4.09	13795.520	2.5	43263.570	1.5
339.2540	44.00	-1.23	0.000	0.0	29476.439	0.0
339.2584	25.01	-1.94	62572.200	2.0	92039.800	2.0
339.2606	10.01	-.45	251522.120	1.5	280989.530	1.5
339.2649	23.01	-.99	19112.930	4.0	48579.960	3.0
339.2654	26.00	-.61	17550.180	3.0	47017.170	3.0
339.2671	22.00	.00	12118.394	4.0	41585.240	3.0
339.2747	29.01	-3.18	88605.160	1.0	118071.340	1.0
339.2773	18.00	-4.95	93143.800	2.0	122609.760	1.0
339.2788	22.00	-1.65	18593.990	3.0	48059.820	3.0
339.2798	10.01	-.60	224699.270	.5	254165.010	1.5
339.2810	72.00	.36	15566.901	0.0	45040.995	0.0
339.2883	17.02	.14	188448.100	1.5	217913.100	1.5
339.2965	24.00	-2.09	31355.210	2.0	60819.500	3.0
339.2983	28.00	-.28	204.786	3.0	29668.918	3.0
339.2990	92.01	-1.52	4516.821	0.0	33989.351	0.0
339.2991	24.01	-1.12	25035.640	.5	54499.700	1.5
339.3011	25.01	-3.36	52653.270	4.0	82117.160	5.0
339.3050	24.01	-2.66	38396.360	.5	67859.910	.5
339.3057	25.00	-4.65	30354.210	3.5	59817.700	2.5
339.3080	25.00	-4.33	33825.490	2.5	63288.780	3.5
339.3112	27.00	-1.15	24326.110	3.5	53789.120	3.5
339.3120	40.01	-.57	241.973	0.0	29713.374	0.0
339.3150	28.01	-1.97	99340.550	3.5	128803.230	2.5
339.3152	27.00	-3.65	24326.110	3.5	53788.780	4.5
339.3172	22.00	-1.97	19573.968	4.0	49036.460	4.0
339.3183	10.01	-1.63	251011.180	2.5	280473.580	1.5
339.3293	25.00	-4.92	23296.670	3.5	52758.110	4.5
339.3377	26.00	-1.75	23051.744	0.0	52512.460	1.0
339.3448	17.02	.34	188390.100	2.5	217850.200	2.5
339.3586	26.00	-2.16	22249.430	3.0	51708.330	2.0
339.3590	66.01	-.03	806.575	0.0	30273.894	0.0
339.3616	26.00	-2.60	22838.320	2.0	52296.960	2.0
339.3630	64.01	-.06	10566.135	0.0	40033.107	0.0
339.3650	42.00	.50	21212.928	0.0	50679.726	0.0
339.3749	26.01	-2.37	54902.420	1.5	84359.900	1.5
339.3784	25.01	-1.61	75563.490	0.0	105020.670	1.0
339.3825	24.00	-1.67	36552.130	3.0	66008.950	3.0
339.3844	25.00	-4.58	38120.180	4.5	67576.840	4.5
339.3851	24.01	-.96	25043.100	1.5	54499.700	1.5
339.3872	9.01	-.21	240092.550	2.0	269548.970	3.0
339.3920	58.01	-.71	4113.534	0.0	33577.988	0.0
339.3941	26.02	-4.04	117950.320	4.0	147406.140	5.0
339.3972	29.01	-2.36	118532.150	2.0	147987.700	2.0
339.4016	24.00	-2.92	31364.330	3.0	60819.500	3.0
339.4019	22.00	-4.51	17075.310	4.0	46530.450	4.0
339.4020	29.01	-4.03	115359.800	4.0	144814.930	3.0
339.4078	26.00	-3.12	19788.248	4.0	49242.872	3.0
339.4120	75.00	-.18	21616.215	0.0	51078.933	0.0
339.4140	58.01	-.84	4436.164	0.0	33898.708	0.0
339.4176	28.01	-4.98	99844.130	3.5	129297.910	3.5
339.4231	9.01	-.83	257252.840	0.0	286706.140	1.0
339.4272	26.00	-3.48	18378.187	2.0	47831.132	2.0
339.4276	21.01	-.75	28161.030	3.0	57613.940	2.0
339.4305	24.01	-.95	25047.040	2.5	54499.700	1.5
339.4306	8.02	-.24	368684.750	3.0	398137.400	3.0
339.4346	25.01	-3.25	62587.500	3.0	92039.800	2.0
339.4366	22.01	-2.05	10024.740	2.5	39476.870	2.5
339.4381	10.03	-2.82	643975.000	2.5	673427.000	1.5
339.4392	25.01	-2.51	35004.430	3.0	64456.330	2.0
339.4440	70.01	-.36	32182.351	0.0	61642.291	0.0
339.4464	10.02	-3.94	410134.720	1.0	439586.000	2.0
339.4532	22.01	-1.93	12758.150	2.5	42208.840	2.5
339.4558	22.00	.23	19573.968	4.0	49024.430	3.0
339.4562	22.01	-.50	93.940	2.5	29544.370	2.5
339.4565	24.00	.04	36558.550	2.0	66008.950	3.0
339.4568	28.01	-4.62	99844.130	3.5	129294.510	2.5
339.4585	26.00	-.95	17726.985	2.0	47177.210	1.0
339.4590	72.01	-1.13	4839.451	0.0	34298.090	0.0
339.4614	28.01	-4.62	100332.090	4.5	129782.070	3.5
339.4656	25.00	-3.67	17451.520	2.5	46901.130	2.5
339.4710	28.00	-3.96	29668.918	3.0	59118.060	2.0
339.4717	26.00	-4.49	23711.443	4.0	53160.530	3.0
339.4774	24.00	-1.61	31055.350	5.0	60503.940	4.0
339.4780	92.01	-.77	5162.081	0.0	34619.071	0.0
339.4832	24.00	-3.55	24093.160	2.0	53541.250	2.0
339.4837	25.01	-1.84	49465.130	3.0	78913.170	2.0
339.4849	28.01	-1.57	105668.780	2.5	135116.720	2.5
339.4880	24.00	-4.58	27935.260	4.0	57382.930	5.0
339.4908	27.00	-2.20	13795.520	2.5	43242.950	2.5
339.4923	25.03	-4.99	137853.000	4.0	167300.300	3.0
339.4926	23.01	-2.50	19132.690	2.0	48579.960	3.0
339.4980	41.01	-.30	12179.286	0.0	41634.541	0.0
339.4980	72.01	.23	17583.339	0.0	47038.594	0.0
339.5009	25.01	-1.96	52653.270	4.0	82099.620	4.0
339.5070	22.00	-2.20	16458.710	6.0	45904.730	6.0
339.5087	28.00	-1.98	29084.478	4.0	58530.350	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
339.5093	26.02	-4.92	84159.550	4.0	113605.370	3.0
339.5120	64.01	.44	10001.532	0.0	39455.572	0.0
339.5195	29.01	-2.04	117130.360	2.0	146575.300	2.0
339.5203	18.01	-4.83	143371.350	1.5	172816.210	.5
339.5233	23.03	-.29	258288.800	1.0	287733.400	2.0
339.5302	25.01	-4.05	37851.150	3.0	67295.160	4.0
339.5326	26.01	-2.16	33501.320	3.5	62945.120	3.5
339.5330	22.00	-3.13	16267.510	5.0	45711.280	4.0
339.5339	26.00	-4.59	23711.443	4.0	53155.130	4.0
339.5360	42.01	1.06	36134.569	0.0	65586.527	0.0
339.5362	23.01	-3.91	20280.190	5.0	49723.680	4.0
339.5370	90.01	-1.17	6936.547	0.0	36388.418	0.0
339.5371	27.00	-.49	4690.180	2.5	34133.590	3.5
339.5382	28.01	-2.03	70635.460	2.5	100078.780	1.5
339.5470	8.02	-1.08	368684.750	3.0	398127.300	2.0
339.5497	29.01	-1.79	119039.680	2.0	148482.000	3.0
339.5531	23.00	-2.15	9824.580	2.5	39266.600	1.5
339.5576	9.01	-.82	257267.300	1.0	286708.930	0.0
339.5587	24.00	-1.60	31377.960	4.0	60819.500	3.0
339.5621	24.01	-1.12	36101.820	3.5	65543.060	3.5
339.5672	26.02	-4.70	93388.750	4.0	122829.550	3.0
339.5720	76.00	-.33	15082.956	0.0	44531.792	0.0
339.5755	22.01	-3.08	12628.770	1.5	42068.850	1.5
339.5776	19.02	-1.09	212725.400	1.5	242165.300	1.5
339.5797	25.01	-2.92	52373.180	3.0	81812.900	2.0
339.5865	26.00	-3.93	24574.655	4.0	54013.780	5.0
339.5865	26.00	-3.70	24574.655	4.0	54013.780	5.0
339.5871	22.00	-6.80	14028.470	2.0	43467.550	2.0
339.5890	26.00	-4.38	19788.248	4.0	49227.160	3.0
339.5898	9.01	-.94	257267.300	1.0	286706.140	1.0
339.5921	24.00	-3.45	21847.880	2.0	51286.520	2.0
339.5930	41.00	-.94	1532.493	0.0	30979.508	0.0
339.5965	27.00	-3.28	17233.680	3.5	46671.940	2.5
339.6099	26.02	-3.95	93392.450	3.0	122829.550	3.0
339.6110	10.03	-1.17	643239.000	.5	672676.000	.5
339.6126	24.01	-3.69	36272.660	4.5	65709.530	5.5
339.6139	28.01	-4.13	104298.230	4.5	133734.980	3.5
339.6170	66.01	-.58	0.000	0.0	29444.934	0.0
339.6175	28.00	-.00	29084.478	4.0	58520.923	5.0
339.6182	24.00	-2.01	27597.220	3.0	57033.600	4.0
339.6190	62.01	-.75	3468.273	0.0	32913.033	0.0
339.6222	24.00	-2.73	21810.840	1.0	51246.870	1.0
339.6324	29.00	-1.88	41538.623	0.0	70982.221	0.0
339.6330	40.01	-.21	7662.464	0.0	37106.010	0.0
339.6369	25.00	-.98	37420.240	5.5	66855.000	4.5
339.6379	26.00	-3.78	7728.058	3.0	37162.729	3.0
339.6447	27.00	-4.10	16470.600	1.5	45904.680	1.5
339.6459	9.01	-.74	257267.300	1.0	286701.280	2.0
339.6499	28.00	-1.35	29084.478	4.0	58518.110	4.0
339.6512	25.01	-4.37	52379.380	2.0	81812.900	2.0
339.6541	23.00	-3.69	10892.500	3.5	40325.770	2.5
339.6580	63.01	1.00	26697.639	0.0	56139.018	0.0
339.6586	28.00	-3.80	13521.352	2.0	42954.234	2.0
339.6660	40.01	-.15	13308.491	0.0	42749.177	0.0
339.6694	26.02	-2.08	88923.070	6.0	118355.010	6.0
339.6720	58.01	-1.17	3710.246	0.0	33150.412	0.0
339.6726	28.01	-3.73	105668.780	2.5	135100.450	3.5
339.6730	90.00	-.45	3790.903	0.0	33230.982	0.0
339.6759	25.01	-3.91	71263.920	1.0	100695.300	1.0
339.6778	24.00	-3.62	36577.730	4.0	66008.950	3.0
339.6840	68.00	-.47	5081.424	0.0	34520.550	0.0
339.6850	45.00	-.28	0.000	0.0	29439.039	0.0
339.6899	26.00	-3.21	24574.655	4.0	54004.820	3.0
339.6907	26.02	-4.53	93412.930	2.0	122843.030	1.0
339.6907	25.00	-2.01	30354.210	3.5	59784.310	3.5
339.6918	28.01	-1.38	106620.530	3.5	136050.530	2.5
339.6967	24.00	-2.59	21856.940	3.0	51286.520	2.0
339.6977	26.00	-2.57	7728.058	3.0	37157.546	2.0
339.7040	39.00	.19	16131.504	0.0	45568.897	0.0
339.7053	24.00	-4.78	31352.420	1.0	60781.250	2.0
339.7070	71.01	-.22	11695.340	0.0	41132.473	0.0
339.7071	25.01	-4.02	71263.920	1.0	100692.600	2.0
339.7197	28.01	-4.91	99844.130	3.5	129271.720	3.5
339.7205	26.00	-3.43	24335.764	2.0	53763.280	3.0
339.7210	83.00	-.18	15324.929	0.0	44760.848	0.0
339.7210	75.00	.06	26213.694	0.0	55649.613	0.0
339.7220	64.00	-.20	1693.808	0.0	31129.641	0.0
339.7260	72.00	-1.00	4516.821	0.0	33952.307	0.0
339.7261	28.01	-.43	99442.860	4.5	128869.890	5.5
339.7277	28.01	-2.59	92373.450	2.5	121800.340	1.5
339.7288	17.02	-2.74	216710.400	3.5	246137.200	2.5
339.7304	28.01	-4.16	104503.220	2.5	133929.880	3.5
339.7352	29.01	-1.82	117130.360	2.0	146556.600	3.0
339.7376	24.00	-4.40	31355.210	2.0	60781.250	2.0
339.7399	22.00	-3.59	18037.225	4.0	47463.060	4.0
339.7415	27.00	-4.01	25739.930	2.5	55165.630	2.5
339.7498	10.01	-2.99	251522.120	1.5	280947.100	1.5
339.7500	69.01	-1.01	0.000	0.0	29433.407	0.0
339.7503	25.00	-3.62	37148.660	5.5	66573.600	5.5
339.7552	26.00	-1.89	24338.766	3.0	53763.280	3.0
339.7574	23.00	-.33	9824.580	2.5	39248.900	1.5
339.7595	28.01	-1.28	99442.860	4.5	128867.000	3.5
339.7600	72.00	-.46	8872.327	0.0	38304.868	0.0
339.7610	18.01	-4.72	172829.580	1.5	202253.590	1.5
339.7640	26.00	-3.19	7985.783	2.0	37409.530	1.0
339.7690	42.00	-.63	11050.080	0.0	40481.841	0.0
339.7783	25.00	-3.73	37586.030	1.5	67008.540	2.5
339.7804	23.00	-3.36	10892.500	3.5	40314.830	3.5
339.7810	28.01	-3.30	29070.930	1.5	58493.210	2.5
339.7837	23.00	-1.13	8412.940	.5	37834.980	1.5
339.7866	10.01	-.68	252953.540	1.5	282375.330	1.5
339.7898	18.01	-1.27	158167.710	1.5	187589.230	2.5
339.7906	18.00	-3.69	93750.639	1.0	123172.090	1.0
339.7920	40.00	.55	18147.942	0.0	47577.711	0.0
339.7946	55.00	-2.68	0.000	0.0	29429.544	0.0
339.7966	9.01	-.95	240152.710	1.0	269573.640	1.0
339.8100	74.00	-.04	19115.832	0.0	48544.042	0.0
339.8111	26.00	-2.20	26105.908	6.0	55525.580	5.0
339.8116	28.01	-.46	99442.860	4.5	128862.490	4.5
339.8218	26.00	-2.29	22249.430	3.0	51668.175	4.0
339.8244	24.00	-2.23	31049.330	6.0	60467.850	5.0
339.8280	68.00	-1.21	403.288	0.0	29829.939	0.0
339.8285	22.00	-1.47	19421.576	3.0	48639.740	3.0
339.8330	73.00	-1.48	1935.780	0.0	31361.998	0.0
339.8354	26.01	-2.36	32875.630	6.5	62293.200	6.5
339.8429	24.00	-4.66	31364.330	3.0	60781.250	2.0
339.8431	28.01	-1.78	104298.230	4.5	133715.130	4.5
339.8574	28.01	-4.93	109148.050	4.5	138563.710	3.5
339.8574	24.00	-2.68	27176.220	1.0	56591.880	2.0
339.8604	22.00	-.29	8436.618	0.0	37852.021	1.0
339.8616	9.01	-.72	257290.840	2.0	286706.140	1.0
339.8805	27.00	-.89	25269.250	3.5	54682.910	4.5
339.8866	10.01	-2.23	279324.890	1.5	308738.030	1.5
339.8897	28.01	-3.35	68709.760	.5	98122.630	.5
339.8940	24.00	-.95	31055.350	5.0	60467.850	5.0
339.9087	9.01	-.49	240152.710	1.0	269563.930	2.0
339.9107	28.01	-2.51	99442.860	4.5	128853.910	4.5
339.9124	28.01	-4.64	106620.530	3.5	136031.430	2.5
339.9177	9.01	-.24	257290.840	2.0	286701.280	2.0
339.9182	12.02	-.82	532725.700	2.0	562136.100	2.0
339.9187	23.00	-3.76	2311.370	3.5	31721.730	4.5
339.9223	26.00	-4.54	21999.132	4.0	51409.180	4.0
339.9300	75.00	.43	11695.340	0.0	41113.161	0.0
339.9304	25.00	-2.76	37164.250	6.5	66573.600	5.5
339.9336	26.00	-.32	17726.985	2.0	47136.058	2.0
339.9350	40.01	-.48	2500.383	0.0	31917.772	0.0
339.9385	26.00	-3.12	24574.655	4.0	53983.300	5.0
339.9400	41.00	-.94	2742.356	0.0	32159.312	0.0
339.9410	64.01	-.86	3064.986	0.0	32481.655	0.0
339.9431	27.00	-2.84	16778.160	2.5	46186.410	1.5
339.9455	23.00	-6.25	8715.720	3.5	38123.760	4.5
339.9483	25.02	-3.38	179683.610	4.5	209091.410	5.5
339.9519	24.01	-1.20	36272.660	4.5	65680.150	4.5
339.9615	28.00	-4.29	27414.893	2.0	56821.553	3.0
339.9630	28.01	-3.33	104646.520	3.5	134053.050	2.5
339.9676	25.01	-3.75	48435.960	6.0	77842.090	6.0
339.9700	45.00	-.80	2581.041	0.0	31995.401	0.0
339.9710	41.01	.29	14599.011	0.0	44013.285	0.0
339.9800	72.01	-.74	0.000	0.0	29413.495	0.0
339.9870	27.00	-2.10	25041.160	1.5	54445.610	2.5
339.9884	25.00	-2.10	37164.250	6.5	66568.580	6.5
339.9907	27.00	-1.89	13795.520	2.5	43199.650	2.5
339.9950	69.01	-.52	8872.327	0.0	38284.524	0.0
339.9959	55.00	-3.68	0.000	0.0	29412.119	0.0
339.9963	25.00	-2.67	38934.940	2.5	68338.590	3.5
339.9979	25.02	-3.71	179339.590	2.5	208743.100	2.5
339.9990	64.01	-.45	2823.013	0.0	32234.864	0.0
340.0062	18.03	-2.28	257348.890	1.5	286751.680	2.5
340.0099	11.01	-3.76	268766.670	1.0	298169.140	1.0
340.0113	25.01	-1.15	39813.380	2.0	69215.730	1.0
340.0114	24.01	-2.36	34659.480	.5	64061.820	1.5
340.0142	17.02	-.81	188448.100	1.5	217850.200	2.5
340.0172	22.00	-.93	19322.988	2.0	48724.830	1.0
340.0210	72.00	-1.70	0.000	0.0	29409.948	0.0
340.0228	22.00	-1.40	19322.988	2.0	48724.340	2.0
340.0232	25.01	-3.96	52379.380	2.0	81780.700	3.0
340.0250	58.01	-.66	7420.492	0.0	36830.094	0.0
340.0393	23.00	-.31	8715.720	3.5	38115.650	3.5
340.0466	27.00	-2.20	14036.280	1.5	43435.580	.5
340.0490	27.00	-1.83	24326.110	3.5	53725.200	4.5
340.0502	24.00	-3.86	21847.880	2.0	51246.870	1.0
340.0515	28.00	-2.43	28569.210	2.0	57968.080	3.0
340.0606	25.00	-2.16	30419.610	2.5	59817.700	2.5
340.0734	25.01	-3.72	52383.720	4.0	81780.700	3.0
340.0955	28.01	-3.24	100592.980	3.5	129988.050	2.5
340.1020	70.01	-.41	30085.255	0.0	59486.199	0.0
340.1030	9.01	-.84	240179.220	0.0	269573.640	1.0
340.1050	28.01	-.36	99442.860	4.5	128837.110	5.5
340.1070	64.01	-1.42	564.603	0.0	29967.115	0.0
340.1117	28.01	-3.26	67880.160	2.5	97273.830	2.5
340.1146	24.00	-.86	31048.000	7.0	60441.420	6.0
340.1159	28.01	-1.70	101740.270	3.5	131133.580	2.5
340.1160	28.00	-1.18	27580.411	5.0	56973.707	5.0
340.1170	76.00	.54	23148.708	0.0	52550.355	0.0
340.1172	22.00	-4.12	11776.806	4.0	41170.003	3.0
340.1300	24.00	-2.82	31049.330	6.0	60441.420	6.0
340.1311	25.00	-2.65	30425.710	1.5	59817.700	2.5
340.1362	28.00	-1.64	29481.020	4.0	58872.570	4.0
340.1401	26.02	-4.48	170310.600	3.0	199701.820	3.0
340.1520	26.00	-2.26	7376.762	4.0	36766.950	3.0
340.1538	28.00	-.34	28578.046	3.0	57968.080	3.0
340.1578	25.00	-2.84	23719.520	1.5	53109.210	2.5
340.1608	27.00	-1.72	14036.280	1.5	43425.710	2.5
340.1617	9.02	-1.13	360348.280	.5	389737.630	.5
340.1639	25.01	-1.62	39826.570	1.0	69215.730	1.0
340.1680	90.01	-.93	6936.547	0.0	36333.786	0.0
340.1721	24.00	-1.19	27597.220	3.0	56985.670	3.0
340.1722	28.00	-2.38	15734.018	1.0	45122.460	1.0
340.1734	24.00	-4.67	24940.610	2.0	54328.950	3.0
340.1736	23.01	-2.36	20343.000	2.0	49731.320	2.0
340.1740	44.00	-.14	9517.587	0.0	38914.308	0.0
340.1766	28.01	-2.78	24788.200	1.5	54176.260	.5
340.1860	76.00	-.32	8630.355	0.0	38026.039	0.0
340.1905	27.00	-1.90	26063.110	1.5	55449.970	2.5
340.1986	26.01	-3.79	49101.090	.5	78487.250	1.5
340.1993	23.01	-2.33	17910.980	4.0	47297.080	5.0
340.1997	24.00	-4.65	31055.350	5.0	60441.420	6.0
340.2012	22.01	-3.44	37430.550	.5	66816.490	1.5
340.2020	90.00	.11	8388.382	0.0	37782.683	0.0
340.2065	27.00	-4.37	25041.160	1.5	54426.640	1.5
340.2070	64.01	.47	10324.163	0.0	39718.032	0.0
340.2072	26.01	-4.10	37227.320	.5	66612.740	1.5
340.2153	25.00	-2.18	38120.180	4.5	67504.900	5.5
340.2156	28.01	-.96	101740.270	3.5	131124.960	3.5
340.2187	27.00	-2.58	15184.040	2.5	44568.470	2.5
340.2189	24.00	-1.99	27703.840	4.0	57088.250	5.0
340.2203	28.01	-1.93	99442.860	4.5	128827.150	3.5
340.2248	26.00	-.74	26105.908	6.0	55489.810	6.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
340.2272	26.02	-3.53	105895.350	1.0	135279.040	2.0
340.2275	25.00	-3.00	23719.520	1.5	53103.190	1.5
340.2314	26.01	-3.16	32909.870	5.5	62293.200	6.5
340.2405	22.01	-1.13	9850.900	.5	39233.440	1.5
340.2417	24.01	-1.15	25035.640	.5	54418.080	.5
340.2460	62.01	-.64	2984.328	0.0	32374.828	0.0
340.2474	25.00	-2.10	34463.370	1.5	63845.320	1.5
340.2491	25.00	-2.90	23719.520	1.5	53101.320	.5
340.2510	72.00	-1.12	4516.821	0.0	33906.889	0.0
340.2510	76.00	-1.79	0.000	0.0	29390.068	0.0
340.2537	30.02	-2.01	235623.900	3.0	265005.300	2.0
340.2568	23.00	-.88	8578.520	2.5	37959.660	2.5
340.2609	25.02	-3.48	84610.530	.5	113991.310	.5
340.2680	28.01	-2.79	74283.330	.5	103663.500	1.5
340.2784	22.00	-3.19	16106.080	4.0	45485.350	5.0
340.2804	17.02	-1.34	179663.000	1.5	209042.100	.5
340.2810	42.00	.73	27584.872	0.0	56972.349	0.0
340.2815	27.00	-.23	25568.680	5.5	54947.680	5.5
340.2828	29.01	-1.20	116576.810	0.0	145955.700	1.0
340.2870	40.01	.32	12259.943	0.0	41646.902	0.0
340.2896	24.00	-2.48	31049.330	6.0	60427.630	5.0
340.2947	9.01	-3.71	236960.830	1.0	266338.700	0.0
340.2962	25.00	-2.63	30354.210	3.5	59731.940	4.5
340.3080	64.01	-.35	9356.272	0.0	38741.417	0.0
340.3119	26.01	-4.28	74606.970	2.5	103983.350	3.5
340.3154	23.01	-1.66	20522.140	1.0	49898.220	2.0
340.3161	27.00	-4.42	24326.110	3.5	53702.130	3.5
340.3236	27.00	-.19	25937.590	4.5	55312.960	4.5
340.3265	29.01	-3.11	110365.980	2.0	139741.100	3.0
340.3278	28.01	-.18	101740.270	3.5	131115.280	4.5
340.3280	90.01	-.68	8952.985	0.0	38336.403	0.0
340.3281	24.01	-1.12	25043.100	1.5	54418.080	.5
340.3292	26.00	-2.79	22838.320	2.0	52213.207	3.0
340.3294	24.01	-.64	19631.280	1.5	49006.150	1.5
340.3306	26.00	-4.05	21999.132	4.0	51373.894	5.0
340.3320	28.01	-2.02	106007.890	2.5	135382.530	1.5
340.3344	22.00	-.59	8602.340	2.0	37976.780	2.0
340.3350	42.00	-.99	11372.710	0.0	40755.524	0.0
340.3399	25.00	-4.25	37148.660	5.5	66522.620	4.5
340.3418	30.02	-1.92	235452.500	2.0	264826.300	1.0
340.3418	28.01	-4.86	71770.830	2.5	101144.630	3.5
340.3419	22.00	-4.88	16458.710	6.0	45832.500	5.0
340.3423	28.00	-.36	27580.411	5.0	56954.167	6.0
340.3532	26.02	-2.69	105906.230	2.0	135279.040	2.0
340.3545	8.03	-.17	390161.200	.5	419533.900	1.5
340.3594	24.00	-.17	31055.350	5.0	60427.630	5.0
340.3595	25.01	-4.15	53698.700	2.0	83070.970	2.0
340.3600	58.01	-.82	4113.534	0.0	33494.190	0.0
340.3609	25.01	-4.75	71323.150	2.0	100695.300	1.0
340.3625	28.01	-3.45	70706.770	1.5	100078.780	1.5
340.3650	48.00	.35	29923.940	0.0	59304.164	0.0
340.3680	40.01	-.11	7985.094	0.0	37365.059	0.0
340.3768	28.00	-1.29	29668.918	3.0	59039.693	4.0
340.3800	30.02	-.85	234866.900	1.0	264237.400	1.0
340.3922	25.01	-4.16	71323.150	2.0	100692.600	2.0
340.3994	24.00	-2.83	27223.050	2.0	56591.880	2.0
340.4037	27.00	-3.80	24326.110	3.5	53694.570	3.5
340.4053	25.00	-1.86	35041.370	3.5	64409.690	3.5
340.4059	22.01	-2.91	39476.870	2.5	68845.140	2.5
340.4078	27.02	-2.94	77121.100	4.5	106489.200	3.5
340.4093	22.01	-4.98	12628.770	1.5	41996.740	.5
340.4110	70.01	-.45	35650.624	0.0	65026.878	0.0
340.4194	19.01	-.40	183208.400	1.0	212575.500	2.0
340.4251	24.01	-3.32	38509.070	3.5	67875.680	3.5
340.4272	25.00	-2.44	8154.713	1.0	37521.144	2.0
340.4302	26.00	-.82	21999.132	4.0	51365.300	3.0
340.4317	24.00	-3.04	21810.840	1.0	51176.680	0.0
340.4322	27.01	-6.90	19189.900	4.0	48555.900	5.0
340.4340	29.01	-3.39	117130.360	2.0	146496.200	3.0
340.4340	42.00	.06	11775.998	0.0	41150.267	0.0
340.4356	26.00	-.35	17726.985	2.0	47092.693	3.0
340.4381	25.01	-4.37	69044.610	2.0	98410.100	2.0
340.4413	23.01	-.26	36425.070	4.0	65790.280	4.0
340.4426	15.01	.46	102799.200	1.0	132164.300	2.0
340.4444	25.01	-3.95	71323.150	2.0	100688.100	3.0
340.4473	25.00	-2.84	30419.610	2.5	59784.310	3.5
340.4485	22.00	-2.01	18695.230	4.0	48059.820	3.0
340.4580	28.00	-.56	27260.891	6.0	56624.668	6.0
340.4580	46.00	.30	6533.259	0.0	35905.458	0.0
340.4602	23.02	-4.02	56160.420	2.5	85524.000	2.5
340.4630	90.01	-.61	10082.190	0.0	39453.957	0.0
340.4680	28.01	-1.99	101740.270	3.5	131103.180	2.5
340.4719	28.01	-4.26	74300.930	1.5	103663.500	1.5
340.4720	75.00	-.38	11534.025	0.0	40905.016	0.0
340.4801	22.00	-7.56	14105.680	3.0	43467.550	2.0
340.4822	10.01	.30	277325.600	1.5	306687.290	2.5
340.4830	40.01	-.27	2823.013	0.0	32193.055	0.0
340.4876	25.02	-4.83	91906.100	2.5	121267.320	2.5
340.4910	58.01	-.70	1855.123	0.0	31224.475	0.0
340.4951	22.01	-2.01	9872.870	.5	39233.440	1.5
340.5040	64.01	-.27	10727.450	0.0	40095.681	0.0
340.5064	22.00	-.48	8492.421	1.0	37852.021	1.0
340.5114	27.00	.24	3482.820	4.5	32841.990	4.5
340.5117	24.00	-3.33	25177.390	4.0	54536.530	5.0
340.5135	28.01	-3.69	104503.220	2.5	133862.210	1.5
340.5136	24.01	-1.91	38509.070	3.5	67868.050	2.5
340.5159	23.00	-.90	8476.200	1.5	37834.980	1.5
340.5200	42.00	-.17	18147.942	0.0	47514.793	0.0
340.5203	24.00	-1.91	24282.340	4.0	53640.740	3.0
340.5238	30.02	-3.10	234384.000	3.0	263742.100	2.0
340.5238	30.02	-4.26	234384.000	3.0	263742.100	2.0
340.5391	28.01	-3.07	106620.530	3.5	135977.310	4.5
340.5410	41.00	.17	9436.930	0.0	38801.970	0.0
340.5485	28.00	-1.20	29832.810	3.0	59188.780	3.0
340.5560	90.00	-.48	3629.588	0.0	32993.334	0.0
340.5565	24.01	-3.39	35569.020	2.5	64924.300	3.5
340.5740	8.02	-.97	300228.210	0.0	329581.980	1.0
340.5795	27.02	-2.83	77411.600	5.5	106764.900	4.5
340.5826	28.01	-1.23	101740.270	3.5	131093.300	4.5
340.5826	26.00	-1.81	21715.735	5.0	51068.770	5.0
340.5874	25.01	-2.99	52379.380	2.0	81732.000	1.0
340.5890	75.00	-.06	14115.066	0.0	43475.967	0.0
340.5934	17.01	-2.73	145468.500	1.0	174820.600	2.0
340.5966	28.01	-2.73	100845.410	.5	130197.230	1.5
340.5977	23.00	-2.65	11100.650	4.5	40452.380	5.5
340.5980	58.01	-.29	4436.164	0.0	33796.289	0.0
340.6051	23.01	-1.52	20242.320	4.0	49593.410	5.0
340.6099	25.00	-3.87	37630.620	4.5	66981.300	3.5
340.6130	41.00	-.13	8952.985	0.0	38311.817	0.0
340.6176	18.00	-3.45	95399.870	1.0	124749.890	0.0
340.6192	26.02	-2.67	105929.160	3.0	135279.040	2.0
340.6197	26.00	-4.82	23711.443	4.0	53061.280	5.0
340.6230	90.01	-1.17	6613.917	0.0	35971.888	0.0
340.6280	92.01	-1.50	887.233	0.0	30244.773	0.0
340.6293	18.01	-4.47	170530.310	3.5	199879.320	3.5
340.6433	26.00	-.69	26406.490	1.0	55754.290	2.0
340.6550	45.00	-.06	14276.381	0.0	43631.594	0.0
340.6554	26.00	-2.10	19788.248	4.0	49135.003	3.0
340.6571	24.00	-4.63	31028.330	2.0	60374.940	2.0
340.6599	27.00	-1.92	20500.710	1.5	49847.080	2.5
340.6633	24.01	-3.17	39824.520	4.5	69170.600	5.5
340.6660	73.01	-.11	6775.232	0.0	36129.497	0.0
340.6670	76.00	-.48	13953.751	0.0	43307.930	0.0
340.6755	26.01	-2.82	31811.870	2.5	61156.900	3.5
340.6802	26.00	-1.51	17927.378	1.0	47271.999	1.0
340.6839	23.00	-1.10	8412.940	.5	37757.240	.5
340.6849	29.01	-4.20	110365.980	2.0	139710.200	2.0
340.6875	27.00	-1.52	26063.110	1.5	55407.100	1.5
340.6920	64.00	-.40	483.945	0.0	29835.970	0.0
340.6940	73.00	-1.43	0.000	0.0	29351.852	0.0
340.6946	10.01	.48	277344.290	2.5	306687.670	3.5
340.6946	9.02	-3.92	414894.890	4.5	444238.270	4.5
340.6990	10.01	-.71	277344.290	2.5	306687.290	2.5
340.7025	23.03	-1.45	225804.100	2.0	255146.800	2.0
340.7048	26.00	-2.92	22838.320	2.0	52180.820	1.0
340.7122	25.01	-3.94	53597.130	2.0	82939.000	1.0
340.7140	72.00	-.88	8872.327	0.0	38222.456	0.0
340.7149	25.00	-3.25	34423.270	3.5	63764.900	2.5
340.7196	22.01	-1.94	393.220	4.5	29734.450	3.5
340.7240	24.00	-1.81	24299.890	2.0	53640.740	3.0
340.7240	58.01	-.14	11614.683	0.0	40963.951	0.0
340.7271	25.01	-1.82	52653.270	4.0	81993.850	4.0
340.7274	9.02	-2.64	414897.720	3.5	444238.270	4.5
340.7292	8.01	-1.35	229946.600	2.5	259287.000	1.5
340.7300	28.01	-1.91	24835.930	.5	54176.260	.5
340.7317	26.00	-2.53	24772.019	1.0	54112.203	2.0
340.7385	8.01	-.13	229946.600	2.5	259286.200	2.5
340.7391	28.01	-3.05	106620.530	3.5	135960.080	4.5
340.7429	22.00	-2.56	12118.394	4.0	41457.620	3.0
340.7438	22.00	-5.18	6661.003	3.0	36000.144	4.0
340.7461	26.00	.15	17550.180	3.0	46889.126	4.0
340.7469	25.01	-3.23	53597.130	2.0	82936.010	3.0
340.7478	23.00	-4.67	16361.450	1.5	45700.250	2.5
340.7534	26.00	-2.92	17550.180	3.0	46888.494	2.0
340.7560	64.01	.80	10566.135	0.0	39912.647	0.0
340.7574	28.01	-2.36	103663.500	1.5	133001.470	.5
340.7626	28.00	-2.55	29888.505	2.0	59226.030	1.0
340.7701	22.01	-3.46	37430.550	.5	66767.430	.5
340.7705	25.01	-3.81	41190.470	6.0	70527.320	5.0
340.7710	24.00	-1.68	24303.940	3.0	53640.740	3.0
340.7760	72.01	-.48	12017.970	0.0	41362.760	0.0
340.7790	66.01	.01	0.000	0.0	29344.531	0.0
340.7822	25.01	-1.83	75719.590	1.0	105055.430	2.0
340.7922	26.01	-4.26	49506.990	1.5	78841.970	.5
340.7958	25.00	-3.95	23549.200	2.5	52883.870	1.5
340.7958	25.00	-3.48	23549.200	2.5	52883.870	2.5
340.8080	40.01	-.14	7743.122	0.0	37085.156	0.0
340.8112	8.01	-4.60	232536.060	1.5	261869.400	2.5
340.8127	7.01	-1.41	148940.170	1.0	178273.380	0.0
340.8130	78.00	-1.57	806.575	0.0	30148.179	0.0
340.8138	8.02	-1.00	300310.310	1.0	329643.430	0.0
340.8352	18.01	-1.51	179592.130	2.5	208923.410	2.5
340.8366	27.00	-4.30	25937.590	4.5	55268.750	3.5
340.8371	24.00	-4.47	31352.420	1.0	60683.530	1.0
340.8376	20.01	-4.73	52166.930	.5	81498.000	.5
340.8380	41.00	-.67	2097.096	0.0	31436.548	0.0
340.8491	28.01	-3.37	70748.700	.5	100078.780	1.5
340.8528	24.00	-1.04	27703.840	4.0	57033.600	4.0
340.8608	18.01	-2.60	179592.130	2.5	208921.200	1.5
340.8661	28.01	-4.43	100845.410	.5	130174.030	1.5
340.8670	75.00	-.45	14518.354	0.0	43855.309	0.0
340.8680	41.01	-.31	6129.972	0.0	35466.841	0.0
340.8696	24.00	-4.80	31355.210	2.0	60683.530	1.0
340.8758	24.01	-.38	20024.180	3.5	49351.960	2.5
340.8760	76.00	-.85	10082.190	0.0	39418.371	0.0
340.8874	27.00	-.80	26250.490	.5	55577.280	1.5
340.8893	27.00	-1.57	26063.110	1.5	55389.730	1.5
340.8950	23.01	-1.44	20242.320	4.0	49568.450	3.0
340.9000	24.00	-2.84	31352.420	1.0	60678.120	1.0
340.9003	24.01	-2.10	20512.750	5.5	49838.430	4.5
340.9028	26.02	-2.95	189679.070	3.0	219004.530	4.0
340.9039	26.00	-1.83	24335.764	2.0	53661.130	3.0
340.9079	25.01	-4.64	56883.380	1.0	86208.400	1.0
340.9164	29.01	-1.84	116576.810	0.0	145901.100	1.0
340.9173	27.00	-.36	4142.660	3.5	33466.870	3.5
340.9189	26.01	-2.95	31483.200	3.5	60807.280	4.5
340.9190	41.01	-.49	5484.711	0.0	34817.192	0.0
340.9200	26.00	-2.08	26105.908	6.0	55429.890	5.0
340.9213	28.01	-3.19	106620.530	3.5	135944.400	3.5
340.9244	28.00	-4.46	29668.918	3.0	58992.520	2.0
340.9260	90.01	-.50	10485.478	0.0	39817.356	0.0
340.9280	27.00	-1.66	26232.050	3.5	55555.340	2.5
340.9280	44.00	-.34	7985.094	0.0	37316.800	0.0
340.9300	64.01	-.71	3387.616	0.0	32719.150	0.0
340.9325	24.00	-1.67	31355.210	2.0	60678.120	1.0
340.9388	26.00	-2.81	24338.766	3.0	53661.130	3.0
340.9428	29.01	-3.52	119039.680	2.0	148361.700	1.0
340.9450	22.00	-2.17	18141.229	5.0	47463.060	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
340.9451	26.02	-3.17	105895.350	1.0	135217.170	1.0
340.9541	23.00	-4.44	2220.130	2.5	31541.180	3.5
340.9543	18.01	-3.49	174409.830	1.5	203730.860	1.5
340.9558	25.00	-3.86	23549.200	2.5	52870.100	3.5
340.9572	28.00	-2.34	0.000	4.0	29320.782	3.0
340.9587	25.01	-4.55	53597.130	2.0	82917.780	2.0
340.9590	26.00	-3.06	19788.248	4.0	49108.876	4.0
340.9643	27.00	-3.18	4142.660	3.5	33462.830	2.5
340.9651	24.01	-5.94	20518.330	3.5	49838.430	4.5
340.9778	28.01	-3.50	103663.500	1.5	132982.510	1.5
340.9783	25.00	-1.70	34138.880	6.5	63457.850	5.5
340.9785	24.00	-3.99	25106.340	3.0	54425.290	4.0
340.9791	22.01	-1.87	225.470	3.5	29544.370	2.5
340.9803	8.01	-.33	229968.200	1.5	259287.000	1.5
340.9828	24.01	-3.28	20519.850	4.5	49838.430	4.5
340.9830	75.00	.02	17180.052	0.0	46507.027	0.0
340.9896	8.01	-1.23	229968.200	1.5	259286.200	2.5
340.9910	41.00	-.13	10969.423	0.0	40295.710	0.0
340.9989	17.01	-1.68	145468.500	1.0	174785.700	1.0
341.0022	26.02	-4.40	93512.640	4.0	122829.550	3.0
341.0025	26.00	-3.27	24574.655	4.0	53891.540	3.0
341.0038	18.01	-1.16	179931.770	1.5	209248.550	2.5
341.0047	24.01	-2.73	35607.600	3.5	64924.300	3.5
341.0050	69.00	-.49	0.000	0.0	29325.083	0.0
341.0169	26.00	-.48	27543.000	1.0	56858.650	2.0
341.0170	72.01	.10	15002.299	0.0	44326.350	0.0
341.0199	24.01	-4.49	45669.540	1.5	74984.930	1.5
341.0229	10.01	-2.77	279422.890	.5	308738.030	1.5
341.0233	26.00	-4.65	18378.187	2.0	47693.289	3.0
341.0243	22.00	-4.47	17215.440	5.0	46530.450	4.0
341.0250	40.01	-.09	3226.301	0.0	32549.664	0.0
341.0336	25.00	-3.78	33825.490	2.5	63139.700	2.5
341.0399	29.01	-3.57	108335.430	2.0	137649.100	2.0
341.0419	27.00	-.40	25138.880	6.5	54452.380	6.5
341.0452	23.01	-3.49	20280.190	5.0	49593.410	5.0
341.0501	24.02	-2.84	128753.900	2.0	158066.700	3.0
341.0532	24.01	-1.62	38563.150	4.5	67875.680	3.5
341.0544	22.00	-4.46	11531.760	2.0	40844.190	1.0
341.0544	22.00	-3.39	11531.760	2.0	40844.190	3.0
341.0546	28.01	-3.20	101258.010	1.5	130570.420	.5
341.0555	26.00	-3.34	20874.482	3.0	50186.814	2.0
341.0716	25.02	-4.11	179339.590	2.5	208650.540	3.5
341.0717	26.02	-2.63	105906.230	2.0	135217.170	1.0
341.0745	22.01	-3.30	12758.150	2.5	42068.650	1.5
341.0797	25.00	-1.80	34138.880	6.5	63449.130	5.5
341.0797	25.01	-4.66	73395.120	3.0	102705.370	3.0
341.0838	26.00	-3.98	23783.617	5.0	53093.517	6.0
341.0862	28.01	-3.24	105668.780	2.5	134978.470	2.5
341.0896	25.01	-3.33	73395.970	2.0	102705.370	3.0
341.0897	26.00	-3.08	7376.762	4.0	36686.159	4.0
341.0936	28.00	-3.17	29320.782	3.0	58629.840	2.0
341.0970	28.00	-4.92	29320.782	3.0	58629.550	3.0
341.0995	24.01	-3.57	39684.000	3.5	68992.550	4.5
341.1020	64.00	-.30	967.890	0.0	30284.634	0.0
341.1033	25.01	-3.48	73395.120	3.0	102703.340	4.0
341.1081	9.02	-3.31	414894.890	4.5	444202.700	5.5
341.1098	28.01	-.84	99559.330	2.5	128867.000	3.5
341.1123	26.00	-1.74	21715.735	5.0	51023.190	6.0
341.1199	25.01	-4.45	56883.380	1.0	86190.180	2.0
341.1229	28.01	-1.68	104503.220	2.5	133809.760	3.5
341.1263	28.01	-4.50	100475.820	3.5	129782.070	3.5
341.1348	26.00	-1.31	21999.132	4.0	51304.650	4.0
341.1359	10.01	-.51	276276.850	1.5	305582.270	.5
341.1386	24.00	-4.48	20517.400	2.0	49822.590	2.0
341.1595	28.01	-2.12	70706.770	1.5	100010.170	.5
341.1640	44.00	-.56	7985.094	0.0	37296.510	0.0
341.1669	22.00	-.40	19421.576	3.0	48724.340	2.0
341.1676	22.01	-1.74	9930.740	1.5	39233.440	1.5
341.1687	8.03	.08	390248.000	1.5	419550.600	2.5
341.1693	9.02	-1.45	360435.080	1.5	389737.630	.5
341.1770	90.01	-.91	7743.122	0.0	37053.421	0.0
341.1790	40.00	.50	17744.654	0.0	47054.782	0.0
341.1812	25.00	-1.58	34463.370	1.5	63764.900	2.5
341.1865	25.01	-1.60	75719.590	1.0	105020.670	1.0
341.1958	28.00	-.95	29888.505	2.0	59188.780	3.0
341.2020	64.01	-.37	9275.615	0.0	38583.767	0.0
341.2105	24.00	-4.88	24833.860	3.0	54132.880	3.0
341.2227	25.00	-2.40	34250.520	5.5	63548.490	4.5
341.2228	25.01	-4.23	71390.140	3.0	100688.100	3.0
341.2254	22.00	-3.28	16458.710	6.0	45756.450	5.0
341.2270	45.00	.84	15889.531	0.0	45195.536	0.0
341.2312	29.01	-2.35	117130.360	2.0	146427.600	1.0
341.2333	27.00	.12	4142.660	3.5	33439.720	4.5
341.2340	72.00	-.36	14437.696	0.0	43743.099	0.0
341.2359	23.00	-4.46	2424.890	4.5	31721.730	4.5
341.2406	23.00	-5.29	0.000	1.5	29296.430	2.5
341.2445	27.00	-1.63	15184.040	2.5	44480.140	2.5
341.2457	28.00	-2.25	27414.893	2.0	56710.889	2.0
341.2470	39.00	.38	15566.901	0.0	44871.188	0.0
341.2541	25.00	-2.58	38669.600	3.5	67964.870	2.5
341.2566	24.00	-4.66	20517.400	2.0	49812.460	3.0
341.2590	69.00	-.89	0.000	0.0	29303.256	0.0
341.2607	25.00	-2.69	35114.980	2.5	64409.690	3.5
341.2626	28.01	-.77	99559.330	2.5	128853.870	2.5
341.2629	27.00	-.78	0.000	4.5	29294.520	3.5
341.2716	23.00	-4.56	16449.850	2.5	45743.620	3.5
341.2740	76.00	-.46	13308.491	0.0	42610.460	0.0
341.2794	25.01	-2.96	41204.340	5.0	70497.440	4.0
341.2832	18.01	-2.91	174820.930	.5	204113.710	1.5
341.2890	73.00	-1.00	9194.957	0.0	38495.638	0.0
341.2893	27.00	-4.41	25568.680	5.5	54860.930	4.5
341.2904	25.01	-3.64	71390.140	3.0	100682.300	4.0
341.2940	41.01	-.18	7178.519	0.0	36478.770	0.0
341.2960	74.00	-1.51	4758.794	0.0	34058.874	0.0
341.2976	24.00	-3.20	20520.920	3.0	49812.460	3.0
341.3063	22.01	-3.88	39476.870	2.5	68767.660	1.5
341.3134	26.00	-.12	17726.985	2.0	47017.170	3.0
341.3145	10.01	.05	276276.850	1.5	305566.940	1.5
341.3240	25.01	-4.25	53781.700	3.0	83070.970	2.0
341.3270	64.01	.11	10727.450	0.0	40024.869	0.0
341.3299	24.00	-2.33	20523.690	4.0	49812.460	3.0
341.3316	25.00	-4.17	33825.490	2.5	63114.110	1.5
341.3320	27.00	-.25	26232.050	3.5	55520.640	3.5
341.3343	29.00	-.92	45813.471	0.0	75110.263	0.0
341.3382	28.01	-3.99	77332.470	2.5	106620.530	3.5
341.3471	28.00	-.48	28542.113	5.0	57829.405	5.0
341.3472	28.00	-1.55	1332.153	3.0	30619.440	2.0
341.3510	27.00	-3.70	816.000	3.5	30102.960	2.5
341.3527	18.02	-.91	211004.850	2.0	240291.660	2.0
341.3540	74.00	-1.74	2903.671	0.0	32198.772	0.0
341.3584	25.01	-3.71	52373.180	3.0	81659.500	3.0
341.3633	8.03	-.87	390248.000	1.5	419533.900	1.5
341.3699	29.01	-2.43	117130.360	2.0	146415.700	2.0
341.3709	28.00	-2.33	29832.810	3.0	59118.060	2.0
341.3740	72.01	-.51	13389.148	0.0	42682.533	0.0
341.3740	75.00	-.68	16534.792	0.0	45828.177	0.0
341.3780	66.01	-.50	806.575	0.0	30099.617	0.0
341.3817	25.00	-3.10	23818.870	.5	53103.190	1.5
341.3858	9.00	-4.20	117622.923	2.5	146906.900	1.5
341.3900	62.01	-1.60	2177.753	0.0	31469.765	0.0
341.3929	28.01	-3.75	104646.520	3.5	133929.880	3.5
341.3933	28.00	-.78	879.813	2.0	30163.140	2.0
341.4009	9.00	-3.40	117622.923	2.5	146905.600	2.5
341.4035	25.00	-3.24	23818.870	.5	53101.320	.5
341.4062	24.01	-3.13	36101.820	3.5	65384.040	4.5
341.4070	41.00	-1.06	2742.356	0.0	32032.910	0.0
341.4108	24.00	-2.80	27703.840	4.0	56985.670	3.0
341.4138	26.01	-3.36	31811.870	2.5	61093.440	2.5
341.4140	73.01	-.21	6775.232	0.0	36065.185	0.0
341.4185	23.01	-.64	20617.050	2.0	49896.220	2.0
341.4200	23.00	-1.09	8476.200	1.5	37757.240	.5
341.4229	23.00	-4.92	137.380	2.5	29418.170	3.5
341.4367	26.00	-4.11	26627.612	4.0	55907.220	5.0
341.4477	28.01	-3.18	105838.060	3.5	135116.720	2.5
341.4510	90.01	-.82	9517.587	0.0	38804.366	0.0
341.4529	24.00	-3.55	25038.610	5.0	54316.830	6.0
341.4549	23.00	-3.19	11100.650	4.5	40378.700	4.5
341.4560	26.00	-2.44	26627.612	4.0	55905.560	4.0
341.4610	28.00	-2.77	27580.411	5.0	56857.933	4.0
341.4619	24.00	-2.98	31352.420	1.0	60629.870	2.0
341.4647	28.01	-3.59	101754.800	2.5	131032.010	2.5
341.4660	40.00	-.62	564.603	0.0	29850.096	0.0
341.4661	23.00	-3.72	16361.450	1.5	45638.540	1.5
341.4719	27.00	-1.29	5075.830	1.5	34352.420	1.5
341.4742	28.01	-4.73	104646.520	3.5	133922.910	4.5
341.4748	23.00	-4.03	8476.200	1.5	37752.540	2.5
341.4760	28.00	.24	204.786	3.0	29481.020	4.0
341.4813	25.01	-2.66	52383.720	4.0	81659.500	3.0
341.4830	66.01	-.46	4274.849	0.0	33558.884	0.0
341.4877	23.01	-2.34	20622.990	3.0	49898.220	2.0
341.4888	10.01	-.38	251522.120	1.5	280797.260	2.5
341.4944	24.00	-2.15	31355.210	2.0	60629.870	2.0
341.5292	8.02	-1.14	300310.310	1.0	329561.980	1.0
341.5328	24.00	-.87	27816.880	5.0	57088.250	5.0
341.5334	25.00	-3.60	37737.220	3.5	67008.540	2.5
341.5441	24.01	-2.26	36272.660	4.5	65543.060	3.5
341.5466	23.01	-8.51	17910.980	4.0	47181.170	3.0
341.5501	25.00	-2.79	37148.660	5.5	66418.550	5.5
341.5508	24.01	-2.47	40228.440	5.5	69498.270	4.5
341.5519	27.00	-2.67	0.000	4.5	29269.730	4.5
341.5532	26.00	-1.22	17927.378	1.0	47197.000	2.0
341.5677	28.00	-1.59	28542.113	5.0	57810.494	4.0
341.5742	28.01	-2.87	99559.330	2.5	128827.150	3.5
341.5779	27.01	-1.56	17771.500	3.0	47039.000	3.0
341.5793	28.00	-3.57	29320.782	3.0	58588.168	3.0
341.5809	23.02	-2.88	56256.750	1.5	85524.000	2.5
341.5905	23.01	-2.07	23391.090	5.0	52657.510	4.0
341.5970	41.00	.06	9436.930	0.0	38711.192	0.0
341.5981	22.00	-.47	19573.968	4.0	48839.740	3.0
341.6008	24.00	-2.69	31364.330	3.0	60629.870	2.0
341.6014	26.01	-2.96	18360.650	1.5	47626.140	.5
341.6037	22.00	-4.56	19322.988	2.0	48588.280	3.0
341.6125	27.00	-4.62	21920.090	4.5	51184.630	3.5
341.6133	28.01	-1.50	103663.500	1.5	132927.970	1.5
341.6164	18.02	-2.29	242923.960	1.0	272188.160	2.0
341.6231	24.00	-3.94	31364.330	3.0	60627.960	4.0
341.6297	22.00	-2.36	11776.806	4.0	41039.674	5.0
341.6316	28.01	-1.14	99559.330	2.5	128822.230	1.5
341.6376	28.01	-1.45	105838.060	3.5	135100.450	3.5
341.6449	9.01	-.36	207699.070	1.0	236960.830	1.0
341.6537	23.00	-2.71	10892.500	3.5	40153.510	2.5
341.6560	58.01	-.56	5887.999	0.0	35157.205	0.0
341.6581	24.00	-1.78	31355.210	2.0	60615.840	3.0
341.6590	69.00	-.89	0.000	0.0	29268.949	0.0
341.6671	21.00	-.27	15756.510	2.5	45016.370	3.5
341.6673	26.00	-2.99	20037.815	0.0	49297.660	1.0
341.6729	25.01	-3.17	78913.170	2.0	108172.540	1.0
341.6738	25.01	-2.74	44521.520	4.0	73780.810	3.0
341.6796	9.01	-.84	207702.040	0.0	236960.830	1.0
341.6813	18.00	-2.78	95399.870	1.0	124658.520	2.0
341.6845	26.01	-2.22	70314.740	4.5	99573.110	4.5
341.6860	58.01	-.96	967.890	0.0	30234.527	0.0
341.6897	29.01	-1.96	121524.670	3.0	150782.600	2.0
341.6914	10.01	-.39	251011.180	2.5	280268.960	2.5
341.6945	22.01	-1.15	9975.920	1.5	39233.440	1.5
341.6950	64.01	.01	3387.616	0.0	32653.482	0.0
341.6960	22.00	-4.07	6742.757	4.0	36000.144	4.0
341.6973	25.01	-3.34	78913.170	2.0	108170.450	2.0
341.7001	9.01	-.14	207703.790	2.0	236960.830	1.0
341.7004	25.01	-2.79	44138.960	1.0	73395.970	2.0
341.7030	73.01	-1.52	0.000	0.0	29265.181	0.0
341.7068	23.00	-.94	8578.520	2.5	37834.980	1.5
341.7155	27.00	-.42	4690.180	2.5	33945.900	2.5
341.7177	28.01	-3.85	105861.190	2.5	135116.720	2.5
341.7260	26.00	-3.42	8154.713	1.0	37409.530	1.0
341.7273	24.00	-1.89	24286.540	1.0	53541.250	2.0
341.7321	25.00	-2.94	37164.250	6.5	66418.550	5.5
341.7330	64.01	-.10	10808.108	0.0	40070.719	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
341.7334	24.01	-2.33	45730.740	2.5	74984.930	1.5
341.7339	28.01	-3.64	76727.360	5.5	105981.500	4.5
341.7340	72.00	-1.29	2339.068	0.0	31601.594	0.0
341.7350	44.00	-.07	2016.438	0.0	31278.878	0.0
341.7365	25.01	-4.20	72247.380	3.0	101501.300	3.0
341.7368	23.03	-.52	254468.800	2.0	283722.700	1.0
341.7450	58.01	-.08	5646.026	0.0	34907.610	0.0
341.7503	18.02	-.82	211004.850	2.0	240257.590	1.0
341.7516	27.00	-3.87	23611.780	5.5	52864.410	4.5
341.7558	25.02	-4.13	179683.610	4.5	208935.880	4.5
341.7630	25.01	-3.88	72247.380	3.0	101499.030	4.0
341.7635	25.00	-3.70	37586.030	1.5	66837.640	2.5
341.7647	24.00	-3.49	31364.330	3.0	60615.840	3.0
341.7668	27.00	-.68	18775.010	.5	48026.340	.5
341.7676	24.01	-3.49	45669.540	1.5	74920.800	.5
341.7686	18.00	-3.47	95399.870	1.0	124651.050	1.0
341.7689	10.01	.31	251011.180	2.5	280262.330	3.5
341.7696	22.00	-3.90	19421.576	3.0	48672.660	4.0
341.7770	75.00	-.28	14921.641	0.0	44180.485	0.0
341.7776	23.00	-3.53	16449.850	2.5	45700.250	2.5
341.7794	27.00	-1.67	3482.820	4.5	32733.070	3.5
341.7823	24.00	-2.92	31377.960	4.0	60627.960	4.0
341.7843	26.00	-.32	17927.378	1.0	47177.210	1.0
341.7859	27.00	-1.38	25739.930	2.5	54989.620	3.5
341.7860	22.00	-1.83	8602.340	2.0	37852.021	1.0
341.7860	41.00	-.34	8630.355	0.0	37888.429	0.0
341.7894	28.01	-2.04	106133.140	1.5	135382.530	1.5
341.7900	58.01	-.32	8307.725	0.0	37565.456	0.0
341.7904	10.00	-2.15	134459.287	1.0	163708.599	2.0
341.8006	10.00	-2.68	134459.287	1.0	163707.721	1.0
341.8040	25.02	-2.85	115711.600	4.5	144959.740	4.5
341.8069	24.00	-4.17	25177.390	4.0	54425.290	4.0
341.8116	28.00	-1.42	28542.113	5.0	57789.611	4.0
341.8153	26.00	-4.77	26479.366	1.0	55726.540	0.0
341.8227	28.00	-3.89	13521.352	2.0	42767.900	3.0
341.8244	10.01	-3.23	251522.120	1.5	280768.520	.5
341.8268	25.01	-2.22	44138.960	1.0	73385.150	1.0
341.8274	25.00	-2.83	30354.210	3.5	59600.350	2.5
341.8358	27.00	-3.51	25269.250	3.5	54514.670	3.5
341.8368	28.01	-3.44	107082.210	2.5	136327.550	1.5
341.8390	92.00	-1.14	564.603	0.0	29818.140	0.0
341.8420	23.00	-5.35	2153.200	1.5	31398.090	2.5
341.8445	22.00	-2.30	18037.225	4.0	47281.900	3.0
341.8508	26.00	-.63	17927.378	1.0	47171.520	0.0
341.8510	62.01	-.69	3871.561	0.0	33124.072	0.0
341.8520	42.00	-.43	11372.710	0.0	40625.135	0.0
341.8531	23.00	-1.32	8715.720	3.5	37959.660	2.5
341.8536	28.01	-2.58	99559.330	2.5	128803.230	2.5
341.8547	21.00	-.36	15881.760	3.5	45125.570	4.5
341.8563	18.00	-3.16	95399.870	1.0	124643.540	1.0
341.8730	22.01	-2.83	39602.900	1.5	68845.140	2.5
341.8730	64.01	-.41	0.000	0.0	29250.628	0.0
341.8736	24.00	-4.82	31048.850	1.0	60291.040	1.0
341.8770	90.01	-1.30	4032.876	0.0	33283.162	0.0
341.8808	27.00	-4.60	25041.160	1.5	54282.730	2.5
341.8833	24.00	-2.19	24299.890	2.0	53541.250	2.0
341.8909	23.00	-4.68	16572.540	3.5	45813.250	4.5
341.8940	90.01	-1.25	4436.164	0.0	33684.996	0.0
341.8943	14.02	-2.32	225526.330	3.0	254766.750	2.0
341.8957	25.01	-4.10	53698.700	2.0	82939.000	1.0
341.8960	42.00	-.11	20245.038	0.0	49493.698	0.0
341.9079	28.01	-1.68	105861.190	2.5	135100.450	3.5
341.9110	40.01	-1.34	1290.520	0.0	30537.897	0.0
341.9180	72.00	-.64	5565.369	0.0	34812.147	0.0
341.9240	24.00	-.83	31377.960	4.0	60615.840	3.0
341.9307	24.00	-1.84	24303.940	3.0	53541.250	2.0
341.9307	25.01	-4.12	53698.700	2.0	82936.010	3.0
341.9339	15.01	-.54	76764.960	2.0	106001.990	1.0
341.9349	21.00	-.43	15672.550	1.5	44909.500	2.5
341.9405	25.01	-1.06	39808.140	3.0	69044.610	2.0
341.9410	75.00	.02	14115.066	0.0	43359.877	0.0
341.9420	77.00	-.69	13873.093	0.0	43117.819	0.0
341.9473	26.02	-4.97	93392.450	3.0	122628.340	2.0
341.9524	26.02	-3.11	84369.920	2.0	113605.370	3.0
341.9538	24.00	-3.87	24897.550	4.0	54132.880	3.0
341.9589	25.01	-2.62	59537.400	4.0	88772.300	5.0
341.9615	8.01	-2.92	232462.830	2.5	261697.500	1.5
341.9628	24.00	-2.03	31393.400	5.0	60627.960	4.0
341.9660	40.00	-.71	4113.534	0.0	33356.207	0.0
341.9693	26.00	-1.55	22946.810	1.0	52180.820	1.0
341.9750	73.00	-1.74	3871.561	0.0	33113.465	0.0
341.9777	23.00	-4.13	10892.500	3.5	40125.790	3.5
341.9804	25.01	-4.41	52653.270	4.0	81886.330	5.0
341.9875	28.00	-.66	28578.046	3.0	57810.494	4.0
341.9923	28.01	-3.45	104503.220	2.5	133735.260	2.5
341.9956	28.01	-2.64	104503.220	2.5	133734.980	3.5
342.0018	25.01	-1.79	39813.380	2.0	69044.610	2.0
342.0040	42.00	.44	18228.600	0.0	47468.024	0.0
342.0080	44.00	-.54	11695.340	0.0	40934.422	0.0
342.0114	25.01	-2.07	49882.150	4.0	79112.560	5.0
342.0136	28.01	-4.56	105439.850	1.5	134670.070	1.5
342.0140	23.01	-2.62	20363.220	6.0	49593.410	5.0
342.0160	45.00	-.72	12663.231	0.0	41901.629	0.0
342.0166	29.00	-1.48	45894.129	0.0	75132.476	0.0
342.0172	26.01	-3.60	31811.870	2.5	61041.780	2.5
342.0180	58.01	-.55	4274.849	0.0	33513.076	0.0
342.0184	23.00	-4.79	2311.370	3.5	31541.180	3.5
342.0214	28.00	-2.81	29888.505	2.0	59118.060	2.0
342.0331	27.00	-.83	25138.880	6.5	54367.430	5.5
342.0479	27.00	-1.57	14036.280	1.5	43263.570	1.5
342.0541	23.00	-2.92	10892.500	3.5	40119.260	2.5
342.0601	28.01	-4.11	25036.380	2.5	54262.630	3.5
342.0630	41.01	-.56	7420.492	0.0	36654.873	0.0
342.0694	23.01	-5.97	20343.000	2.0	49568.450	3.0
342.0726	28.00	-4.01	33590.159	4.0	62815.340	5.0
342.0730	28.00	-2.96	2216.519	2.0	31441.665	2.0
342.0750	75.00	-1.00	11534.025	0.0	40767.380	0.0
342.0786	27.00	-1.46	16778.160	2.5	46002.830	2.5
342.0787	25.00	-.55	34138.880	6.5	63363.540	6.5
342.0817	19.02	-.78	208687.800	1.5	237912.200	1.5
342.0820	25.00	-.95	37630.620	4.5	66855.000	4.5
342.0962	22.00	-3.61	12118.394	4.0	41341.553	5.0
342.0988	28.01	-4.74	107737.810	1.5	136960.750	2.5
342.1027	24.00	-4.51	25106.340	3.0	54326.950	3.0
342.1027	27.00	-2.46	18389.570	1.5	47612.180	1.5
342.1126	25.00	-1.63	38669.600	3.5	67891.360	3.5
342.1187	28.00	.07	27580.411	5.0	56801.654	5.0
342.1193	24.01	-.69	19528.380	.5	48749.570	.5
342.1204	26.00	-3.59	26224.961	3.0	55446.060	4.0
342.1210	90.00	-.29	2823.013	0.0	32052.438	0.0
342.1240	46.00	.17	7662.464	0.0	36891.632	0.0
342.1250	42.00	-.61	10646.793	0.0	39875.876	0.0
342.1333	28.00	.15	28542.113	5.0	57762.106	6.0
342.1343	27.00	-.41	26063.110	1.5	55283.020	2.5
342.1420	72.01	-1.87	4839.451	0.0	34067.082	0.0
342.1440	25.01	-2.63	53698.700	2.0	82917.780	2.0
342.1461	23.03	-1.05	255146.800	2.0	284365.700	1.0
342.1475	22.00	-3.26	15156.787	4.0	44375.570	5.0
342.1495	25.00	-4.66	37789.930	2.5	67008.540	2.5
342.1540	29.01	-1.51	121524.670	3.0	150742.900	3.0
342.1562	25.01	-3.00	39826.570	1.0	69044.610	2.0
342.1567	10.03	-4.07	642184.000	1.5	671402.000	2.5
342.1570	24.01	-1.94	34631.140	4.5	63849.110	5.5
342.1576	27.00	-.77	26232.050	3.5	55449.970	2.5
342.1591	24.01	-1.39	34813.060	5.5	64030.850	6.5
342.1610	18.01	-1.18	157673.320	2.5	186890.950	2.5
342.1615	27.00	-4.89	25041.160	1.5	54256.750	2.5
342.1619	27.00	-1.43	16470.600	1.5	45688.150	2.5
342.1648	24.02	-5.00	128849.400	4.0	156066.700	3.0
342.1690	76.00	-.85	10082.190	0.0	39307.514	0.0
342.1716	24.00	-2.71	27816.880	5.0	57033.600	4.0
342.1813	19.02	.03	214232.300	.5	243446.200	1.5
342.1870	26.02	-4.07	93412.930	2.0	122628.340	2.0
342.2002	26.02	-3.25	84369.920	2.0	113584.200	2.0
342.2014	23.00	-4.38	11100.650	4.5	40314.830	3.5
342.2029	26.02	-3.12	90483.590	3.0	119697.640	2.0
342.2310	42.00	.60	20003.065	0.0	49223.095	0.0
342.2320	28.00	-.39	28578.046	3.0	57789.611	4.0
342.2382	26.02	-3.89	117950.320	4.0	147161.360	4.0
342.2424	25.00	-1.73	37420.240	5.5	66630.920	4.5
342.2453	27.00	-2.70	15184.040	2.5	44394.470	3.5
342.2470	64.01	.52	1855.123	0.0	31073.787	0.0
342.2499	27.00	-.44	25739.930	2.5	54949.970	1.5
342.2510	58.01	-.26	8872.327	0.0	38090.649	0.0
342.2554	28.00	-1.16	29320.782	3.0	58530.350	3.0
342.2554	25.01	-2.44	52653.270	4.0	81862.840	4.0
342.2562	26.00	-3.58	20641.110	4.0	49850.610	3.0
342.2600	23.01	-4.01	20522.140	1.0	49731.320	2.0
342.2650	90.01	-1.30	4113.534	0.0	33330.661	0.0
342.2656	22.01	-2.77	10024.740	2.5	39233.440	1.5
342.2658	26.00	-.39	17927.378	1.0	47136.058	2.0
342.2710	58.01	-.01	3548.931	0.0	32765.546	0.0
342.2722	24.01	-.39	19798.010	2.5	49006.150	1.5
342.2750	64.01	-.81	1129.205	0.0	30345.478	0.0
342.2768	25.00	-4.93	37148.660	5.5	66356.400	4.5
342.2816	25.00	-.87	34250.520	5.5	63457.850	5.5
342.2859	27.00	-.46	25739.930	2.5	54946.900	2.5
342.2869	28.00	-.23	29832.810	3.0	59039.693	4.0
342.2894	27.00	-1.65	14036.280	1.5	43242.950	2.5
342.3110	90.01	-.47	12340.601	0.0	41553.802	0.0
342.3138	25.00	-1.52	34343.900	4.5	63548.490	4.5
342.3162	22.00	-1.62	11639.804	3.0	40844.190	3.0
342.3223	18.02	-2.57	242923.960	1.0	272127.820	1.0
342.3248	28.00	-.99	29668.918	3.0	58872.570	4.0
342.3332	27.00	-4.37	18775.010	.5	47977.940	.5
342.3342	24.00	-1.97	21856.940	3.0	51059.790	4.0
342.3347	23.00	-4.96	0.000	1.5	29202.800	1.5
342.3704	28.00	-.52	1713.080	1.0	30912.838	1.0
342.3760	41.00	-.76	2742.356	0.0	31950.011	0.0
342.3820	24.00	-4.59	24833.860	3.0	54032.630	2.0
342.3831	26.02	-4.98	157684.300	2.0	186882.980	3.0
342.3839	25.00	-.94	34250.520	5.5	63449.130	5.5
342.3840	27.01	-1.68	18338.500	1.0	47537.100	2.0
342.3850	58.01	-.01	9517.587	0.0	38724.474	0.0
342.3874	28.00	-2.02	28569.210	2.0	57767.520	1.0
342.3900	64.00	.39	967.890	0.0	30174.350	0.0
342.3912	10.00	-3.06	134459.287	1.0	163657.268	1.0
342.3938	22.00	-3.59	19573.968	4.0	48771.730	5.0
342.3989	28.00	-.71	29320.782	3.0	58518.110	4.0
342.3990	90.00	-.81	0.000	0.0	29205.693	0.0
342.4168	26.01	-3.11	33466.500	4.5	62662.300	5.5
342.4275	18.02	-2.06	213950.870	2.0	243145.760	2.0
342.4286	26.00	-2.64	17550.180	3.0	46744.975	3.0
342.4310	25.01	-1.54	75719.590	1.0	104914.180	0.0
342.4322	25.01	-4.39	72306.810	2.0	101501.300	3.0
342.4336	25.01	-4.77	69215.730	1.0	98410.100	2.0
342.4369	25.00	-1.39	34250.520	5.5	63444.610	4.5
342.4380	45.00	-1.02	7743.122	0.0	36945.489	0.0
342.4397	27.00	-4.51	25232.790	.5	54426.640	1.5
342.4397	24.01	-4.92	20512.620	2.5	49706.470	2.5
342.4450	73.00	-1.20	5968.656	0.0	35170.426	0.0
342.4467	26.02	-3.05	105895.350	1.0	135088.600	0.0
342.4493	27.00	-.67	16778.160	2.5	45971.190	3.5
342.4493	25.01	-4.72	72306.810	2.0	101499.840	2.0
342.4544	27.00	-5.78	13795.520	2.5	42988.120	3.5
342.4560	92.01	-.99	1693.808	0.0	30894.640	0.0
342.4590	64.01	-.28	2823.013	0.0	32023.589	0.0
342.4600	42.00	-.61	10646.793	0.0	39847.284	0.0
342.4620	75.00	.71	11695.340	0.0	40895.660	0.0
342.4649	17.01	-2.14	153257.000	2.0	182448.700	2.0
342.4688	25.00	-4.86	37789.930	2.5	66981.300	3.5
342.4760	42.00	-.18	16615.449	0.0	45814.575	0.0
342.4777	26.02	-4.12	105906.230	2.0	135096.840	3.0
342.4820	40.01	-1.15	241.973	0.0	29440.588	0.0
342.4940	25.01	-3.63	43131.400	2.0	72320.620	1.0
342.4957	25.01	-3.06	78913.170	2.0	108102.250	3.0
342.4993	15.01	-.84	76813.220	1.0	106001.990	1.0
342.5002	23.00	-3.24	16449.850	2.5	45638.540	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
342.5008	26.01	-4.29	33501.320	3.5	62689.960	2.5
342.5010	26.00	-1.33	24574.655	4.0	53763.280	3.0
342.5020	63.01	-.72	11050.080	0.0	40246.990	0.0
342.5067	24.01	-4.70	20518.330	3.5	49706.470	2.5
342.5080	69.01	-.43	161.315	0.0	29357.713	0.0
342.5080	68.00	-1.09	403.288	0.0	29599.686	0.0
342.5140	26.02	-4.83	122346.610	3.0	151534.130	3.0
342.5142	28.01	-3.98	101754.800	2.5	130942.300	1.5
342.5150	90.01	-.87	9114.300	0.0	38310.102	0.0
342.5190	42.00	.19	20164.380	0.0	49359.841	0.0
342.5288	24.01	-2.75	40202.140	6.5	69388.400	6.5
342.5305	28.00	-.30	27580.411	5.0	56766.523	4.0
342.5340	58.01	-1.06	2339.068	0.0	31533.250	0.0
342.5349	25.02	-4.10	115774.000	3.5	144959.740	4.5
342.5420	41.01	.26	10808.108	0.0	40001.608	0.0
342.5480	42.00	-.05	16696.107	0.0	45889.096	0.0
342.5554	26.01	-3.44	49506.990	1.5	78690.980	2.5
342.5576	26.01	-2.84	13474.430	2.5	42658.230	3.5
342.5595	24.00	-2.76	23933.900	4.0	53117.540	4.0
342.5630	69.01	-1.28	0.000	0.0	29191.711	0.0
342.5850	41.00	.35	12905.203	0.0	42095.039	0.0
342.5863	26.02	-4.67	189679.070	3.0	218860.430	2.0
342.5930	64.01	-.58	3064.986	0.0	32254.140	0.0
342.5936	25.00	-1.56	30419.610	2.5	59600.350	2.5
342.5940	58.01	-.47	7662.464	0.0	36851.533	0.0
342.5940	90.01	-.85	9356.272	0.0	38545.341	0.0
342.5954	24.00	-.62	24897.550	4.0	54078.130	5.0
342.6000	42.00	.12	18147.942	0.0	47336.500	0.0
342.6034	30.02	-1.37	235452.500	2.0	264632.400	3.0
342.6082	26.00	-3.18	25091.620	0.0	54271.110	1.0
342.6114	25.01	-4.68	72320.620	1.0	101499.840	2.0
342.6122	24.01	-2.16	38269.670	3.5	67448.820	4.5
342.6190	75.00	.10	17180.052	0.0	46366.991	0.0
342.6210	58.01	-.52	967.890	0.0	30154.659	0.0
342.6259	15.01	-1.35	76824.000	0.0	106001.990	1.0
342.6262	23.00	-5.48	2220.130	2.5	31398.090	2.5
342.6304	25.01	-4.07	53597.130	2.0	82774.730	1.0
342.6328	26.00	-2.11	18378.187	2.0	47555.584	1.0
342.6340	64.01	-.44	9033.642	0.0	38219.304	0.0
342.6343	9.02	-1.05	360348.280	.5	389525.550	1.5
342.6381	26.00	-2.00	7985.783	2.0	37162.729	3.0
342.6389	26.00	-2.69	17550.180	3.0	46727.055	2.0
342.6440	63.01	-1.37	9840.217	0.0	39025.027	0.0
342.6450	27.00	-.03	25269.250	3.5	54445.610	2.5
342.6506	25.01	-4.01	53017.160	1.0	82193.040	2.0
342.6561	25.01	-3.41	43131.400	2.0	72306.810	2.0
342.6570	41.01	.22	10485.478	0.0	39669.181	0.0
342.6580	58.01	-1.04	2500.383	0.0	31684.000	0.0
342.6630	26.00	-1.77	17726.985	2.0	46901.808	1.0
342.6652	25.00	-1.86	30425.710	1.5	59600.350	2.5
342.6665	26.00	-1.81	26351.049	5.0	55525.580	5.0
342.6682	28.00	-3.04	28569.210	2.0	57743.596	3.0
342.6693	24.00	-3.10	31987.060	4.0	61161.350	5.0
342.6725	23.00	-3.25	8578.520	2.5	37752.540	2.5
342.6730	73.00	-1.40	5968.656	0.0	35150.996	0.0
342.6790	42.00	-.56	11775.998	0.0	40957.827	0.0
342.6809	26.01	-4.09	32909.870	5.5	62083.170	4.5
342.6880	28.01	-2.83	99559.330	2.5	128732.030	1.5
342.6930	40.00	-.89	7985.094	0.0	37165.731	0.0
342.6990	26.00	-2.84	7985.783	2.0	37157.546	2.0
342.7070	23.00	-3.48	16572.540	3.5	45743.620	3.5
342.7121	26.00	-.09	17550.180	3.0	46720.824	4.0
342.7428	24.01	-4.94	39824.520	4.5	68992.550	4.5
342.7437	23.00	-2.19	13801.530	1.5	42969.490	1.5
342.7440	72.00	-.69	8872.327	0.0	38048.622	0.0
342.7440	76.00	.26	23148.708	0.0	52325.003	0.0
342.7450	41.00	-.66	2742.356	0.0	31918.566	0.0
342.7470	26.02	-2.70	105929.160	3.0	135096.840	3.0
342.7550	26.00	-2.72	26623.726	2.0	55790.720	3.0
342.7610	75.00	-.31	14921.641	0.0	44096.489	0.0
342.7670	76.00	-.94	8630.355	0.0	37804.692	0.0
342.7720	28.00	-4.39	28578.046	3.0	57743.596	3.0
342.7720	74.00	-.47	13227.833	0.0	42401.745	0.0
342.7777	27.00	-4.20	25739.930	2.5	54904.990	2.5
342.7796	12.02	-2.74	532971.200	3.0	562136.100	2.0
342.7813	22.01	-3.39	39602.900	1.5	68767.660	1.5
342.7861	25.00	-3.39	23719.520	1.5	52883.870	1.5
342.7861	25.00	-3.86	23719.520	1.5	52883.870	2.5
342.7900	42.00	.53	27584.872	0.0	56757.252	0.0
342.7930	78.00	-1.01	13389.148	0.0	42561.272	0.0
342.7951	25.00	-3.69	23719.520	1.5	52883.100	.5
342.7976	27.00	-1.79	14036.280	1.5	43199.650	2.5
342.7991	28.01	-1.45	104646.520	3.5	133809.760	3.5
342.8007	26.00	-1.35	26627.612	4.0	55790.720	3.0
342.8025	24.00	-1.80	31355.210	2.0	60518.160	3.0
342.8025	24.00	-2.10	31355.210	2.0	60518.160	3.0
342.8042	28.01	-3.72	100619.260	4.5	129782.070	3.5
342.8096	22.00	-2.80	8492.421	1.0	37654.770	2.0
342.8185	25.01	-1.63	44521.520	4.0	73683.110	4.0
342.8194	28.01	-4.99	107737.810	1.5	136899.330	1.5
342.8195	26.00	-1.59	17726.985	2.0	46888.494	2.0
342.8216	27.00	.24	24627.790	4.5	53789.120	3.5
342.8251	25.01	-3.22	37847.900	2.0	67008.930	3.0
342.8256	27.00	-3.22	24627.790	4.5	53788.760	4.5
342.8310	44.00	-.14	0.000	0.0	29168.891	0.0
342.8370	72.01	-1.83	0.000	0.0	29168.380	0.0
342.8372	30.02	-1.55	235623.900	3.0	264783.900	4.0
342.8377	24.01	-4.43	40228.440	5.5	69388.400	6.5
342.8402	26.00	-1.86	22249.430	3.0	51409.180	4.0
342.8406	28.00	-2.29	29832.810	3.0	58992.520	2.0
342.8425	28.01	-2.64	105499.050	3.5	134658.600	4.5
342.8430	24.01	-1.80	39684.000	3.5	68843.510	3.5
342.8470	64.01	.02	10001.532	0.0	39169.062	0.0
342.8470	70.01	-.11	34602.076	0.0	63769.606	0.0
342.8478	22.00	-3.94	7255.369	2.0	36414.470	3.0
342.8484	23.00	-4.04	137.380	2.5	29296.430	2.5
342.8538	23.00	-2.88	13810.900	.5	42969.490	1.5
342.8630	44.00	-1.58	1129.205	0.0	30295.373	0.0
342.8633	25.01	-4.18	37851.150	3.0	67008.930	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
342.8633	26.01	-3.18	31999.120	3.5	61156.900	3.5
342.8646	8.02	-.71	300310.310	1.0	329467.980	2.0
342.8685	10.01	-.38	254165.010	1.5	283322.350	1.5
342.8689	29.01	-3.03	110084.290	1.0	139241.600	1.0
342.8704	22.00	-3.21	6842.964	5.0	36000.144	4.0
342.8767	27.00	-.15	25739.930	2.5	54896.570	3.5
342.8771	27.00	-.42	26250.490	.5	55407.100	1.5
342.8778	25.00	-2.28	30411.740	.5	59568.290	.5
342.8790	41.00	-.42	10808.108	0.0	39972.915	0.0
342.8936	24.01	-1.99	36101.820	3.5	65257.030	3.5
342.8939	22.00	-1.91	15220.390	5.0	44375.570	5.0
342.9000	90.00	-.63	2500.383	0.0	31663.404	0.0
342.9040	41.00	-.52	5887.999	0.0	35050.680	0.0
342.9041	25.01	-2.76	53781.700	3.0	82936.010	3.0
342.9098	24.00	-3.23	31364.330	3.0	60518.160	3.0
342.9098	24.00	-3.03	31364.330	3.0	60518.160	3.0
342.9153	25.00	-.64	37420.240	5.5	66573.600	5.5
342.9197	21.00	.21	15756.510	2.5	44909.500	2.5
342.9263	25.00	-1.20	37630.620	4.5	66783.050	3.5
342.9330	69.00	-.90	0.000	0.0	29160.215	0.0
342.9390	90.01	-.92	9194.957	0.0	38354.662	0.0
342.9399	28.01	-2.26	71457.740	3.5	100609.010	2.5
342.9488	21.00	.10	15672.550	1.5	44823.060	1.5
342.9540	44.00	-.26	10566.135	0.0	39724.564	0.0
342.9560	25.00	-2.82	34138.880	6.5	63288.780	5.5
342.9599	25.00	-3.04	38669.600	3.5	67819.170	4.5
342.9600	74.00	.42	19438.462	0.0	48596.381	0.0
342.9613	18.01	-.71	170530.310	3.5	199679.760	2.5
342.9711	28.01	-3.77	107142.210	1.5	136290.830	.5
342.9721	28.00	-4.26	29481.020	4.0	58629.550	3.0
342.9744	25.00	-3.68	37420.240	5.5	66568.580	6.5
342.9750	62.01	-1.73	806.575	0.0	29963.219	0.0
342.9804	26.00	-3.44	21038.987	2.0	50186.814	2.0
342.9809	26.00	-1.17	24574.655	4.0	53722.440	5.0
342.9859	27.00	-4.89	23207.760	1.5	52355.120	.5
342.9880	90.01	-1.45	4436.164	0.0	33591.703	0.0
342.9966	23.00	-2.86	10892.500	3.5	40038.950	4.5
342.9973	28.01	-3.75	107142.210	1.5	136286.600	2.5
343.0037	28.01	-4.84	101754.800	2.5	130900.650	2.5
343.0097	23.01	-4.94	17910.980	4.0	47056.320	4.0
343.0107	29.01	-3.04	88926.090	0.0	118071.340	1.0
343.0143	26.01	-3.79	31811.870	2.5	60956.820	3.5
343.0197	18.02	-2.46	242923.960	1.0	272068.450	1.0
343.0240	64.01	-.22	10566.135	0.0	39718.614	0.0
343.0290	40.00	-1.33	1209.863	0.0	30361.917	0.0
343.0320	58.01	-.26	7017.204	0.0	36169.003	0.0
343.0368	28.01	-2.63	105499.050	3.5	134642.090	3.5
343.0380	24.01	-2.28	34659.480	.5	63802.410	.5
343.0414	18.01	-.57	157673.320	2.5	186815.960	3.5
343.0422	25.00	-1.85	30425.710	1.5	59568.290	.5
343.0490	27.02	-4.51	77622.900	4.5	106764.900	4.5
343.0530	40.01	.07	3710.246	0.0	32860.261	0.0
343.0538	22.00	-.62	8602.340	2.0	37743.933	3.0
343.0592	8.02	-.73	300440.850	2.0	329581.980	1.0
343.0618	23.01	-7.78	17910.980	4.0	47051.890	3.0
343.0677	28.01	-2.54	105838.060	3.5	134978.470	2.5
343.0691	24.00	-1.81	33762.740	6.0	62903.030	6.0
343.0702	24.00	-2.02	31377.960	4.0	60518.160	3.0
343.0702	24.00	-2.18	31377.960	4.0	60518.160	3.0
343.0725	24.00	-3.61	23933.900	4.0	53073.900	3.0
343.0760	12.02	-.91	559987.100	1.0	589126.800	1.0
343.0770	44.00	-.81	2661.698	0.0	31809.674	0.0
343.0771	24.00	-1.64	31364.330	3.0	60503.940	4.0
343.0815	27.00	-2.33	26250.490	.5	55389.730	1.5
343.0862	22.00	-1.65	11531.760	2.0	40670.600	2.0
343.0871	26.00	-2.49	26351.049	5.0	55489.810	6.0
343.0895	26.02	-3.93	189784.520	2.0	218923.080	3.0
343.0910	27.00	-2.63	14399.280	.5	43537.710	1.5
343.0936	24.00	-3.72	31355.210	2.0	60493.420	3.0
343.0942	25.01	-3.61	53597.130	2.0	82735.290	2.0
343.1078	22.00	-2.05	12118.394	4.0	41255.400	4.0
343.1114	25.01	-1.15	75918.730	2.0	105055.430	2.0
343.1138	22.00	-3.56	18145.400	2.0	47281.900	3.0
343.1140	92.00	-.40	4194.191	0.0	33339.023	0.0
343.1180	24.00	-2.30	31987.060	4.0	61123.200	4.0
343.1187	25.01	-3.06	53781.700	3.0	82917.760	2.0
343.1200	69.01	-.54	8872.327	0.0	38016.650	0.0
343.1251	28.00	-1.17	28542.113	5.0	57677.649	5.0
343.1272	24.00	-2.54	20517.400	2.0	49652.760	2.0
343.1318	28.00	-5.72	13521.352	2.0	42656.317	1.0
343.1360	21.00	.38	15881.760	3.5	45016.370	3.5
343.1404	24.01	-4.38	52298.120	3.5	81432.360	3.5
343.1414	24.00	-1.74	31393.400	5.0	60527.550	6.0
343.1476	24.01	-5.31	20512.620	2.5	49646.250	3.5
343.1500	58.01	-.82	4839.451	0.0	33981.226	0.0
343.1540	92.01	-1.10	5726.684	0.0	34868.119	0.0
343.1549	29.01	-2.62	110084.290	1.0	139217.300	2.0
343.1570	40.01	-.39	7662.464	0.0	36803.644	0.0
343.1571	24.00	-3.72	20517.400	2.0	49650.220	3.0
343.1578	27.00	-.98	816.000	3.5	29948.760	2.5
343.1624	28.00	-3.23	13521.352	2.0	42653.723	2.0
343.1686	24.00	-1.79	20520.920	3.0	49652.760	2.0
343.1736	18.01	-4.10	172213.800	1.5	201345.220	1.5
343.1807	26.00	-1.13	22838.320	2.0	51969.140	3.0
343.1837	26.00	-1.73	26623.726	2.0	55754.290	2.0
343.1878	25.01	-2.74	53805.800	4.0	82936.010	3.0
343.1982	26.02	-4.32	122628.340	2.0	151757.670	2.0
343.1986	24.00	-4.45	20520.920	3.0	49650.220	3.0
343.2003	28.00	-2.59	29500.690	1.0	58629.840	2.0
343.2010	24.00	-2.71	31364.330	3.0	60493.420	3.0
343.2012	26.00	-2.70	23051.744	0.0	52180.820	1.0
343.2148	24.01	-3.56	20518.330	3.5	49646.250	3.5
343.2173	23.00	-3.08	16572.540	3.5	45700.250	2.5
343.2206	25.01	-3.42	52653.270	4.0	81780.700	3.0
343.2210	44.00	-.73	9033.642	0.0	38169.388	0.0
343.2226	27.00	-1.32	26450.020	2.5	55577.280	1.5
343.2257	10.03	-4.85	612781.000	1.5	641908.000	.5
343.2305	25.00	-2.63	30354.210	3.5	59460.800	2.5
343.2312	24.00	-1.71	20523.690	4.0	49650.220	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
343.2313	27.00	-1.47	16778.160	2.5	45904.680	1.5
343.2327	24.01	-2.65	20519.850	4.5	49646.250	3.5
343.2374	22.00	-3.90	18061.540	1.0	47187.540	2.0
343.2377	24.00	-2.05	31377.960	4.0	60503.940	4.0
343.2406	25.01	-4.80	38720.200	6.0	67845.930	5.0
343.2410	40.01	-.33	7420.492	0.0	36554.541	0.0
343.2420	41.00	-.73	8307.725	0.0	37441.689	0.0
343.2430	22.00	-4.53	15108.121	3.0	44233.650	3.0
343.2466	25.00	-3.61	34423.270	3.5	63548.490	4.5
343.2481	27.02	-4.08	78927.800	3.5	108052.900	2.5
343.2586	18.01	-4.57	170400.940	2.5	199525.150	1.5
343.2700	41.01	.80	16131.504	0.0	45263.091	0.0
343.2740	44.00	-.22	9033.642	0.0	38164.890	0.0
343.2829	27.00	-1.89	21780.470	5.5	50902.610	4.5
343.2859	8.01	-4.25	232747.510	2.5	261869.400	2.5
343.2870	42.00	-.19	16615.449	0.0	45745.594	0.0
343.2967	26.02	-2.36	109570.840	2.0	138691.810	1.0
343.2990	64.01	-.37	2823.013	0.0	31952.140	0.0
343.3026	25.00	-1.81	34463.370	1.5	63583.840	1.5
343.3037	27.00	-.12	5075.830	1.5	34196.210	1.5
343.3090	41.00	-.36	9275.615	0.0	38403.893	0.0
343.3090	58.01	.26	10162.848	0.0	39291.126	0.0
343.3120	68.00	-1.15	0.000	0.0	29128.023	0.0
343.3170	28.01	-3.90	107082.210	2.5	136201.460	3.5
343.3206	28.01	-2.45	105981.500	4.5	135100.450	3.5
343.3260	44.00	-.26	10566.135	0.0	39692.971	0.0
343.3283	24.01	-.71	19631.280	1.5	48749.570	.5
343.3343	25.00	-2.93	37737.220	3.5	66855.000	4.5
343.3359	25.01	-4.42	37811.570	1.0	66929.220	2.0
343.3361	24.01	-3.25	38769.670	3.5	67387.300	2.5
343.3385	23.00	-3.69	16917.150	5.5	46034.580	5.5
343.3402	28.01	-1.63	105861.190	2.5	134978.470	2.5
343.3405	28.01	-3.03	68156.570	1.5	97273.830	2.5
343.3430	8.00	-3.96	76794.990	1.0	105912.043	1.0
343.3430	8.00	-3.74	76794.990	1.0	105912.043	2.0
343.3430	8.00	-4.44	76794.990	1.0	105912.043	0.0
343.3458	46.00	.24	11614.683	0.0	40739.907	0.0
343.3518	23.03	-.30	254824.100	1.0	283940.400	2.0
343.3519	23.00	-6.27	2424.890	4.5	31541.180	3.5
343.3527	24.00	-4.62	24056.110	5.0	53172.330	5.0
343.3536	25.00	-1.96	30411.740	.5	59527.890	1.5
343.3554	28.00	-.46	204.786	3.0	29320.782	3.0
343.3556	25.01	-3.79	43131.400	2.0	72247.380	3.0
343.3562	25.00	-1.14	30354.210	3.5	59470.140	3.5
343.3569	26.00	-1.66	22249.430	3.0	51365.300	3.0
343.3578	24.01	-3.93	36101.820	3.5	65217.610	4.5
343.3598	25.00	-1.79	30411.740	.5	59527.360	.5
343.3605	24.00	.25	20519.600	6.0	49635.160	6.0
343.3608	8.01	-1.46	232753.860	3.5	261869.400	2.5
343.3617	24.00	-2.29	31377.960	4.0	60493.420	3.0
343.3622	25.01	-4.17	53597.130	2.0	82712.550	3.0
343.3629	26.00	-4.61	23783.617	5.0	52898.980	5.0
343.3636	17.01	-4.01	153257.000	2.0	182372.300	1.0
343.3639	24.01	-2.41	39877.280	3.5	68992.550	4.5
343.3710	92.01	-2.08	241.973	0.0	29364.992	0.0
343.3757	23.01	-2.76	20617.050	2.0	49731.320	2.0
343.3762	27.00	-.70	25568.680	5.5	54682.910	4.5
343.3786	25.02	-2.39	85173.880	1.5	114287.910	2.5
343.3795	25.00	-1.83	34343.900	4.5	63457.850	5.5
343.3845	21.01	-2.14	30815.650	1.0	59929.180	2.0
343.3900	92.01	-1.78	241.973	0.0	29363.380	0.0
343.3905	25.00	-1.73	34250.520	5.5	63363.540	6.5
343.3910	40.01	-.35	7985.094	0.0	37106.416	0.0
343.3967	28.01	-3.10	29593.460	.5	58705.950	1.5
343.3972	29.00	-3.30	30569.200	0.0	59689.997	0.0
343.4000	90.01	-.89	1774.465	0.0	30895.024	0.0
343.4013	23.01	-2.47	20089.560	1.0	49201.660	2.0
343.4040	42.00	-.84	11372.710	0.0	40492.930	0.0
343.4061	17.01	-3.37	129065.400	2.0	158177.100	1.0
343.4098	24.01	-1.55	36272.660	4.5	65384.040	4.5
343.4117	24.00	-.78	20523.940	5.0	49635.160	6.0
343.4136	24.01	-3.45	52321.300	4.5	81432.360	3.5
343.4150	92.01	-1.33	1693.808	0.0	30813.095	0.0
343.4170	28.01	-2.58	104503.220	2.5	133613.990	1.5
343.4197	24.00	-4.21	31393.400	5.0	60503.940	4.0
343.4238	12.02	-2.89	535179.600	2.0	564289.800	1.0
343.4306	26.01	-3.33	38164.240	2.5	67273.860	1.5
343.4370	66.01	-.46	0.000	0.0	29117.422	0.0
343.4417	23.00	-3.33	10892.500	3.5	40001.180	3.5
343.4458	23.01	-2.95	20622.990	3.0	49731.320	2.0
343.4459	28.01	-4.36	105499.050	3.5	134607.370	4.5
343.4464	25.00	-4.64	30419.610	2.5	59527.890	1.5
343.4500	73.00	-1.04	9598.245	0.0	38714.565	0.0
343.4569	23.00	-3.83	10892.500	3.5	39999.890	2.5
343.4591	25.00	-2.04	37630.620	4.5	66737.820	3.5
343.4598	28.00	-2.45	29481.020	4.0	58588.168	3.0
343.4709	18.01	-4.46	143107.600	2.5	172213.800	1.5
343.4721	27.02	-3.85	77383.100	3.5	106489.200	3.5
343.4724	25.02	-3.26	115711.600	4.5	144817.680	3.5
343.4790	42.00	-.19	11775.998	0.0	40889.859	0.0
343.4813	27.00	-.44	26450.020	2.5	55555.340	2.5
343.4824	25.00	-2.14	34343.900	4.5	63449.130	5.5
343.4834	28.00	-2.29	16017.317	0.0	45122.460	1.0
343.4834	18.02	-2.97	243145.760	2.0	272250.900	3.0
343.4890	45.00	-.14	0.000	0.0	29113.014	0.0
343.4910	24.01	-4.37	44307.440	.5	73411.940	1.5
343.4951	26.00	-2.29	28604.610	2.0	57708.760	2.0
343.4967	28.00	-1.27	29888.505	2.0	58992.520	2.0
343.5003	8.01	-4.86	245816.290	1.5	274920.000	1.5
343.5069	28.01	-1.62	91800.050	4.5	120903.200	3.5
343.5141	24.00	-2.68	21847.880	2.0	50950.420	3.0
343.5160	25.00	-.89	37420.240	5.5	66522.620	4.5
343.5184	25.00	-1.56	30425.710	1.5	59527.890	1.5
343.5190	44.00	-1.26	3064.986	0.0	32175.457	0.0
343.5212	25.01	-1.56	75918.730	2.0	105020.670	1.0
343.5247	25.00	-2.80	30425.710	1.5	59527.360	.5
343.5260	76.00	-.81	12663.231	0.0	41773.109	0.0
343.5270	62.01	-1.38	5242.739	0.0	34352.532	0.0
343.5306	24.01	-2.33	39742.360	2.5	68843.510	3.5
343.5347	26.01	-4.92	50142.930	2.5	79243.730	1.5
343.5357	25.00	-.72	34343.900	4.5	63444.610	4.5
343.5360	23.01	-2.01	20622.990	3.0	49723.680	4.0
343.5392	25.00	-1.16	37737.220	3.5	66837.640	2.5
343.5450	42.00	1.04	25487.776	0.0	54596.044	0.0
343.5468	24.00	-4.89	20520.920	3.0	49620.690	4.0
343.5477	28.00	-2.13	13521.352	2.0	42621.048	3.0
343.5490	92.00	-.24	564.603	0.0	29672.532	0.0
343.5531	24.01	-4.03	44307.440	.5	73406.680	.5
343.5553	21.00	.58	16026.520	4.5	45125.570	4.5
343.5676	24.00	-1.06	20519.600	6.0	49617.610	5.0
343.5713	27.01	-3.73	22414.500	3.0	51512.200	3.0
343.5747	27.00	.30	24627.790	4.5	53725.200	4.5
343.5749	25.00	-2.74	34250.520	5.5	63347.910	4.5
343.5796	24.00	-3.10	20523.690	4.0	49620.690	4.0
343.5825	24.00	-1.84	20523.940	5.0	49620.690	4.0
343.5854	22.00	-4.38	6661.003	3.0	35757.510	4.0
343.5920	27.00	-3.90	17233.680	3.5	46329.630	2.5
343.5980	90.01	-1.22	0.000	0.0	29103.778	0.0
343.6000	73.00	-.58	11130.738	0.0	40234.347	0.0
343.6030	26.00	-2.35	26351.049	5.0	55446.060	4.0
343.6040	8.01	-4.88	232602.570	.5	261697.500	1.5
343.6061	23.00	-3.62	323.420	3.5	29418.170	3.5
343.6112	26.01	-2.12	31999.120	3.5	61093.440	2.5
343.6117	24.00	-1.04	32097.360	6.0	61191.640	6.0
343.6155	27.00	-4.08	14036.280	1.5	43130.240	.5
343.6159	24.00	-.63	20523.690	4.0	49617.610	5.0
343.6182	24.00	-.83	24833.860	3.0	53927.590	4.0
343.6189	24.00	.13	20523.940	5.0	49617.610	5.0
343.6211	24.00	-2.42	21856.940	3.0	50950.420	3.0
343.6266	22.01	-3.53	39674.640	.5	68767.660	1.5
343.6267	25.01	-2.75	49820.160	2.0	78913.170	2.0
343.6275	26.02	-2.98	201164.210	2.0	230257.150	2.0
343.6294	24.01	-2.54	35356.060	1.5	64448.640	2.5
343.6375	23.01	-2.69	19166.190	1.0	48258.280	0.0
343.6390	18.01	-4.64	174409.830	1.5	203501.800	2.5
343.6478	24.00	-3.39	31987.060	4.0	61078.280	3.0
343.6528	26.02	-4.83	201166.350	3.0	230257.150	2.0
343.6543	29.00	-1.41	46136.101	0.0	75235.111	0.0
343.6567	9.02	-.48	360435.080	1.5	389525.550	1.5
343.6634	28.01	-3.44	68709.760	.5	97799.660	1.5
343.6635	24.00	-1.30	31377.960	4.0	60467.850	5.0
343.6710	90.01	-.56	9114.300	0.0	38211.896	0.0
343.6740	44.00	.11	1129.205	0.0	30226.547	0.0
343.6771	28.01	-3.58	104646.520	3.5	133735.260	2.5
343.6882	23.00	-6.41	2112.320	.5	31200.120	1.5
343.6953	27.00	.04	25269.250	3.5	54356.450	4.5
343.6960	41.01	.41	15405.586	0.0	44501.066	0.0
343.7010	23.00	-6.76	2311.370	3.5	31398.090	2.5
343.7020	90.01	-.98	8307.725	0.0	37402.697	0.0
343.7020	77.00	-.60	6291.287	0.0	35386.259	0.0
343.7039	26.00	-.18	24574.655	4.0	53661.130	3.0
343.7100	62.01	-1.33	2661.698	0.0	31755.993	0.0
343.7112	26.00	-3.00	20641.110	4.0	49726.964	4.0
343.7140	28.01	-4.29	101246.160	.5	130331.780	1.5
343.7140	40.01	-.12	5646.026	0.0	34739.982	0.0
343.7145	7.01	-.42	149187.800	1.0	178273.380	0.0
343.7173	29.01	-3.00	117130.360	2.0	146215.700	1.0
343.7178	22.00	-4.95	7255.369	2.0	36340.670	2.0
343.7220	42.00	.64	16696.107	0.0	45789.386	0.0
343.7261	12.02	-1.36	562136.100	2.0	591220.700	1.0
343.7272	23.00	-3.51	16728.750	4.5	45813.250	4.5
343.7275	28.00	-2.05	0.000	4.0	29084.478	4.0
343.7283	28.01	-3.75	101247.370	2.5	130331.780	1.5
343.7310	90.00	-.36	2823.013	0.0	31915.530	0.0
343.7325	26.02	-3.79	201164.210	2.0	230248.260	1.0
343.7340	24.01	-1.99	38269.670	3.5	67353.600	4.5
343.7387	27.00	-3.48	15774.040	1.5	44857.570	.5
343.7444	27.00	.01	25269.250	3.5	54352.300	3.5
343.7463	28.01	-2.58	101144.630	3.5	130227.520	2.5
343.7465	28.01	-3.34	92373.450	2.5	121456.320	1.5
343.7500	77.00	-.22	15970.189	0.0	45061.098	0.0
343.7515	22.00	-1.86	17075.310	4.0	46167.760	5.0
343.7557	22.00	-2.83	18695.230	4.0	47777.320	5.0
343.7625	26.00	-3.83	19621.004	5.0	48702.518	4.0
343.7648	25.01	-4.24	37847.900	2.0	66929.220	2.0
343.7658	28.01	-1.73	101144.630	3.5	130225.870	3.5
343.7671	28.01	-4.65	110021.920	4.5	139103.050	5.5
343.7697	27.00	.45	26232.050	3.5	55312.960	4.5
343.7710	75.00	-.34	14518.354	0.0	43607.486	0.0
343.7724	24.00	-3.90	20517.400	2.0	49598.080	2.0
343.7816	23.03	-.68	255146.800	2.0	284226.700	3.0
343.7886	24.00	-3.74	21810.840	1.0	50890.150	2.0
343.7906	26.02	-2.82	201178.010	1.0	230257.150	2.0
343.7941	26.00	-1.49	26351.049	5.0	55429.890	5.0
343.7946	24.01	-3.37	38315.000	2.5	67393.800	3.5
343.8022	26.02	-3.33	201170.100	0.0	230248.260	1.0
343.8032	25.01	-2.94	37851.150	3.0	66929.220	2.0
343.8060	62.01	-1.22	2984.328	0.0	32070.499	0.0
343.8140	24.00	-2.85	20520.920	3.0	49596.080	2.0
343.8175	22.00	-3.75	15156.787	4.0	44233.650	3.0
343.8230	40.01	.37	725.918	0.0	29810.651	0.0
343.8240	72.01	.57	18793.202	0.0	47877.850	0.0
343.8274	25.01	-4.73	53698.700	2.0	82774.730	1.0
343.8303	23.00	-6.13	2153.200	1.5	31228.980	2.5
343.8339	24.01	-3.25	34631.140	4.5	63706.620	4.5
343.8370	44.00	-.44	7985.094	0.0	37068.642	0.0
343.8430	72.00	-1.12	5484.711	0.0	34567.752	0.0
343.8460	24.00	-2.76	31393.400	5.0	60467.850	5.0
343.8473	27.00	-3.55	24627.790	4.5	53702.130	3.5
343.8596	27.02	-4.63	78434.300	.5	107507.600	.5
343.8616	8.01	-2.45	232796.270	2.5	261869.400	2.5
343.8632	12.02	-2.15	532725.700	2.0	561798.700	3.0
343.8705	27.00	-1.21	16467.900	4.5	45540.260	5.5
343.8710	70.01	-.31	34360.104	0.0	63440.777	0.0
343.8715	24.01	-3.17	38315.000	2.5	67387.300	2.5
343.8801	24.00	-4.99	20517.400	2.0	49588.970	1.0
343.8810	69.01	-1.05	8711.012	0.0	37790.839	0.0
343.8850	70.01	-.06	31779.063	0.0	60856.552	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
343.8870	42.00	-.47	10888.765	0.0	39968.085	0.0
343.8884	28.01	-1.72	101144.630	3.5	130215.500	4.5
343.8913	27.00	.34	26450.020	2.5	55520.640	3.5
343.8929	28.01	-3.90	92792.080	3.5	121862.570	3.5
343.8933	10.01	-.30	276511.820	.5	305582.270	.5
343.8950	90.01	.04	13147.176	0.0	42225.819	0.0
343.8957	26.02	-3.04	201178.010	1.0	230248.260	1.0
343.8988	25.01	-2.19	9472.970	2.0	38542.960	3.0
343.8988	26.02	-4.30	105906.230	2.0	134976.220	3.0
343.9021	28.01	-4.24	105588.890	4.5	134658.600	4.5
343.9026	23.00	-2.97	10892.500	3.5	39962.170	2.5
343.9030	26.00	-1.66	21999.132	4.0	51068.770	5.0
343.9210	64.01	.04	3064.986	0.0	32141.431	0.0
343.9225	25.02	-4.18	179683.610	4.5	208751.600	4.5
343.9260	14.02	-2.19	175263.100	1.0	204330.790	2.0
343.9280	24.00	-3.86	33762.740	6.0	62830.260	5.0
343.9296	22.00	-.34	11776.806	4.0	40844.190	3.0
343.9312	18.01	-2.92	189934.550	.5	219001.800	1.5
343.9368	27.00	-4.59	24627.790	4.5	53694.570	3.5
343.9395	21.00	-.50	15756.510	2.5	44823.060	1.5
343.9435	23.01	-4.50	18353.890	3.0	47420.100	4.0
343.9462	28.01	-1.17	103663.500	1.5	132729.480	2.5
343.9490	76.00	-1.15	8630.355	0.0	37704.433	0.0
343.9529	23.00	-4.36	137.380	2.5	29202.800	1.5
343.9578	25.00	-3.87	23818.870	.5	52883.870	1.5
343.9588	24.01	-4.68	38315.000	2.5	67379.920	1.5
343.9634	24.01	-2.94	38269.670	3.5	67334.200	3.5
343.9649	26.02	-3.85	189796.030	1.0	218860.430	2.0
343.9666	28.01	-2.76	101144.630	3.5	130208.890	3.5
343.9670	25.00	-3.31	23818.870	.5	52883.100	.5
343.9698	24.00	-3.87	32097.360	6.0	61161.350	5.0
343.9780	64.01	-.22	3387.616	0.0	32459.243	0.0
343.9822	29.01	-3.86	108014.660	3.0	137077.600	3.0
343.9828	28.00	-2.04	30163.140	2.0	59226.030	1.0
343.9830	58.01	-.54	4436.164	0.0	33507.368	0.0
343.9901	28.01	-1.48	101144.630	3.5	130206.900	4.5
343.9920	41.01	-.53	7823.779	0.0	36894.222	0.0
343.9990	64.01	.12	1855.123	0.0	30924.975	0.0
344.0001	24.00	-2.88	24056.110	5.0	53117.540	4.0
344.0029	25.00	-1.96	30419.610	2.5	59480.800	2.5
344.0039	28.01	-3.76	101754.800	2.5	130815.910	3.5
344.0113	10.01	-4.17	318183.690	4.5	347244.170	4.5
344.0117	25.00	-2.67	34463.370	1.5	63523.820	2.5
344.0118	10.01	-3.11	318183.730	5.5	347244.170	4.5
344.0118	10.01	-2.78	318183.690	4.5	347244.130	5.5
344.0123	10.01	-1.16	318183.730	5.5	347244.130	5.5
344.0181	10.01	-2.91	318184.260	3.5	347244.170	4.5
344.0182	10.01	-1.24	318184.270	4.5	347244.170	4.5
344.0187	10.01	-2.98	318184.270	4.5	347244.130	5.5
344.0200	44.00	-.59	7420.492	0.0	36488.569	0.0
344.0209	28.01	-2.16	70358.940	4.5	99418.610	3.5
344.0240	73.01	.54	14357.039	0.0	43424.778	0.0
344.0246	26.01	-3.15	38214.500	1.5	67273.860	1.5
344.0272	21.01	-3.43	30815.650	1.0	59874.790	1.0
344.0336	24.02	-4.87	128849.400	4.0	157908.000	4.0
344.0351	14.02	-2.63	225526.330	3.0	254584.800	3.0
344.0351	14.02	-.34	225526.330	3.0	254584.800	4.0
344.0375	14.02	-.91	225526.330	3.0	254584.600	4.0
344.0450	40.00	-1.04	0.000	0.0	29065.965	0.0
344.0500	62.01	-.79	5242.739	0.0	34308.282	0.0
344.0507	29.00	-3.60	13227.833	0.0	42293.317	0.0
344.0530	45.00	1.07	16050.847	0.0	45116.136	0.0
344.0590	41.01	-.17	8227.067	0.0	37291.849	0.0
344.0600	76.00	-.46	10969.423	0.0	40034.121	0.0
344.0607	26.00	-.93	0.000	4.0	29056.312	3.0
344.0663	27.00	-2.17	24733.280	2.5	53789.120	3.5
344.0672	24.00	-1.12	31028.330	2.0	60084.090	1.0
344.0736	26.00	-2.57	22249.430	3.0	51304.650	4.0
344.0748	10.01	-.60	276511.820	.5	305566.940	1.5
344.0752	25.00	-2.85	30425.710	1.5	59480.800	2.5
344.0760	24.01	-3.24	36101.820	3.5	65156.840	2.5
344.0820	63.01	.24	27100.927	0.0	56163.767	0.0
344.0843	22.00	-3.26	15108.121	3.0	44162.440	4.0
344.0857	22.00	-4.02	6598.749	2.0	35652.950	3.0
344.0897	25.00	-.90	37789.930	2.5	66843.790	1.5
344.0938	28.01	-3.60	102742.740	1.5	131796.260	2.5
344.0971	25.01	-4.17	37847.900	2.0	66901.140	2.0
344.0975	28.01	-4.75	105588.890	4.5	134642.090	3.5
344.0990	26.00	-1.22	415.932	3.0	29469.010	2.0
344.1000	63.01	-.85	10001.532	0.0	39062.851	0.0
344.1067	22.00	-2.88	8602.340	2.0	37654.770	2.0
344.1096	24.01	-4.55	20512.620	2.5	49564.800	1.5
344.1105	24.00	-.67	20520.920	3.0	49573.030	4.0
344.1114	27.00	-.70	25937.590	4.5	54989.620	3.5
344.1150	68.00	-.64	403.288	0.0	29463.341	0.0
344.1164	22.00	-2.28	12118.394	4.0	41170.003	3.0
344.1171	25.00	-1.45	34343.900	4.5	63395.450	3.5
344.1210	58.01	-.44	2823.013	0.0	31882.559	0.0
344.1240	27.00	-1.22	26232.050	3.5	55283.020	2.5
344.1354	9.02	-4.85	440069.510	1.5	469119.520	2.5
344.1360	90.01	-1.19	6613.917	0.0	35672.196	0.0
344.1394	24.00	-2.80	31377.960	4.0	60427.630	5.0
344.1400	46.00	.34	11614.683	0.0	40672.625	0.0
344.1428	26.01	-1.48	70523.730	3.5	99573.110	4.5
344.1433	24.00	-.02	20523.690	4.0	49573.030	4.0
344.1434	28.00	-2.38	29481.020	4.0	58530.350	3.0
344.1440	42.00	-.31	12259.943	0.0	41317.547	0.0
344.1450	66.01	-.53	806.575	0.0	29864.094	0.0
344.1462	24.00	-.90	20523.940	5.0	49573.030	4.0
344.1467	25.01	-3.73	53781.700	3.0	82830.750	4.0
344.1500	69.01	-.55	161.315	0.0	29218.412	0.0
344.1531	24.01	-4.96	45669.540	1.5	74718.050	1.5
344.1589	24.00	-.58	31393.400	5.0	60441.420	6.0
344.1589	23.00	-5.97	2220.130	2.5	31268.150	3.5
344.1626	25.00	-1.09	37789.930	2.5	66837.640	2.5
344.1661	10.01	-.09	318196.750	5.5	347244.170	4.5
344.1665	10.01	-1.92	318196.750	5.5	347244.130	5.5
344.1668	10.01	-.02	318196.770	6.5	347244.130	5.5
344.1703	26.02	-2.78	105929.160	3.0	134976.220	3.0
344.1719	23.00	-7.03	2153.200	1.5	31200.120	1.5
344.1790	64.01	-1.11	3387.616	0.0	32442.265	0.0
344.1805	22.00	-1.71	16961.420	3.0	46007.620	4.0
344.1840	72.00	-.16	14599.011	0.0	43653.238	0.0
344.1841	25.01	-4.96	37847.900	2.0	66893.790	1.0
344.1849	25.00	-.95	37737.220	3.5	66783.050	3.5
344.1978	10.01	-.49	252953.540	1.5	281998.280	2.5
344.1999	23.00	-4.30	8412.940	.5	37457.500	1.5
344.2005	25.01	-.47	14325.860	4.0	43370.370	3.0
344.2035	28.00	.20	27580.411	5.0	56624.668	6.0
344.2103	25.02	-3.22	115774.000	3.5	144817.680	3.5
344.2177	22.00	-3.85	7255.369	2.0	36298.430	1.0
344.2224	26.01	-3.54	31999.120	3.5	61041.780	2.5
344.2244	26.02	-4.45	105895.350	1.0	134937.840	2.0
344.2255	18.02	-2.46	243145.760	2.0	272188.160	2.0
344.2270	24.00	-3.08	21847.880	2.0	50890.150	2.0
344.2286	22.00	-4.57	18145.400	2.0	47187.540	2.0
344.2325	26.00	-1.86	18378.187	2.0	47420.000	2.0
344.2380	58.01	-.54	4436.164	0.0	33485.833	0.0
344.2542	18.00	-3.96	93750.639	1.0	122790.612	0.0
344.2551	28.00	-.87	29481.020	4.0	58520.923	5.0
344.2564	25.01	-1.92	44745.460	2.0	73785.450	2.0
344.2568	28.00	-.02	29832.810	3.0	58872.570	4.0
344.2568	28.01	-4.22	101144.630	3.5	130184.390	2.5
344.2580	90.00	-.59	4920.109	0.0	33968.090	0.0
344.2594	18.00	-4.37	95399.870	1.0	124439.410	0.0
344.2596	24.00	-1.37	25038.610	5.0	54078.130	5.0
344.2630	45.00	-.75	14276.381	0.0	43323.941	0.0
344.2639	26.00	-4.99	26339.682	2.0	55378.842	2.0
344.2650	41.00	-.48	8711.012	0.0	37758.403	0.0
344.2660	42.00	-.01	20003.065	0.0	49050.371	0.0
344.2671	26.00	-2.66	7728.058	3.0	36766.950	3.0
344.2746	25.00	-1.36	34250.520	5.5	63288.780	5.5
344.2787	26.01	-4.92	31364.470	1.5	60402.380	2.5
344.2790	41.00	-.38	12017.970	0.0	41064.180	0.0
344.2842	25.02	-4.13	115780.230	2.5	144817.680	3.5
344.2885	28.00	-2.10	29481.020	4.0	58518.110	4.0
344.2917	23.00	-3.59	8715.720	3.5	37752.540	2.5
344.2920	27.00	-1.14	1406.840	2.5	30443.630	1.5
344.2931	27.00	-2.83	26232.050	3.5	55268.750	3.5
344.2944	25.01	-3.86	53698.700	2.0	82735.290	2.0
344.2960	26.00	-3.31	28604.610	2.0	57641.060	3.0
344.2960	58.01	-.80	5081.424	0.0	34126.199	0.0
344.2962	26.00	-3.84	26339.682	2.0	55376.117	1.0
344.2970	75.00	-.87	16212.162	0.0	45256.853	0.0
344.2972	26.00	-1.57	24772.019	1.0	53808.370	1.0
344.2978	27.00	-1.72	14399.280	.5	43435.580	.5
344.3000	7.03	-.55	465463.000	0.0	494507.438	0.0
344.3008	24.01	-3.02	34813.060	5.5	63849.110	5.5
344.3010	74.00	-.43	12098.628	0.0	41142.982	0.0
344.3031	28.00	-.67	28068.091	4.0	57103.946	3.0
344.3091	25.01	-2.95	44745.460	2.0	73780.810	3.0
344.3104	24.00	-1.01	31048.850	1.0	60084.090	1.0
344.3110	90.01	-1.12	9356.272	0.0	38399.782	0.0
344.3224	24.00	-3.58	31393.400	5.0	60427.630	5.0
344.3253	9.00	-3.40	117872.916	1.5	146906.900	1.5
344.3260	42.00	-.42	11372.710	0.0	40414.955	0.0
344.3279	28.00	-4.04	30192.268	0.0	59226.030	1.0
344.3345	24.00	-3.81	21856.940	3.0	50890.150	2.0
344.3357	22.01	-1.29	16515.790	.5	45548.900	1.5
344.3407	9.00	-3.82	117872.916	1.5	146905.600	2.5
344.3419	27.00	.17	24627.790	4.5	53660.370	5.5
344.3534	26.02	-3.60	105906.230	2.0	134937.840	2.0
344.3570	40.01	-.36	7743.122	0.0	36782.752	0.0
344.3631	26.01	-4.80	50212.930	2.5	79243.730	1.5
344.3631	22.00	-.48	11639.804	3.0	40670.600	2.0
344.3642	27.00	-.05	4142.660	3.5	33173.360	3.5
344.3651	25.00	-4.99	34343.900	4.5	63374.530	4.5
344.3706	10.01	-1.48	254292.190	.5	283322.350	1.5
344.3721	24.00	-3.36	24897.550	4.0	53927.590	4.0
344.3734	25.00	-1.46	38934.940	2.5	67964.870	2.5
344.3762	9.02	-4.48	414897.720	3.5	443927.410	3.5
344.3780	24.00	-.76	23933.900	4.0	52963.440	4.0
344.3824	26.01	-3.41	18360.650	1.5	47389.820	1.5
344.3846	6.00	-4.61	60352.630	1.0	89381.610	0.0
344.3878	26.00	-1.64	704.003	2.0	29732.721	1.0
344.3886	26.02	-2.52	201164.210	2.0	230192.860	3.0
344.3940	28.01	-3.76	105499.050	3.5	134527.240	3.5
344.3994	21.00	-.37	15881.760	3.5	44909.500	2.5
344.4000	90.01	-.96	10566.135	0.0	39602.140	0.0
344.4066	8.02	-.20	300440.850	2.0	329467.980	2.0
344.4110	29.01	-2.80	118071.340	1.0	147098.100	0.0
344.4136	24.00	-4.70	25106.340	3.0	54132.880	3.0
344.4140	26.02	-4.47	201166.350	3.0	230192.860	3.0
344.4166	23.01	-2.83	20242.320	4.0	49268.610	4.0
344.4202	25.00	-3.60	33825.490	2.5	62851.470	3.5
344.4240	28.01	-3.23	105588.890	4.5	134614.550	5.5
344.4243	28.00	-.12	30163.140	2.0	59188.780	3.0
344.4302	23.00	-2.64	11100.650	4.5	40165.790	3.5
344.4307	22.01	-.86	1215.580	4.5	30240.680	5.5
344.4325	25.01	-2.56	53805.800	4.0	82830.750	4.0
344.4340	28.00	-2.44	29500.690	1.0	58525.507	1.0
344.4350	24.01	-2.93	38362.560	1.5	67367.300	2.5
344.4401	22.00	-.69	11531.760	2.0	40556.070	1.0
344.4414	12.02	-.94	530962.900	0.0	559987.100	1.0
344.4452	25.01	-3.89	38720.200	6.0	67744.080	6.0
344.4460	76.00	-.30	14760.326	0.0	43792.453	0.0
344.4490	22.01	-3.29	39926.830	2.5	68950.390	3.5
344.4519	25.01	-3.45	49889.860	3.0	78913.170	2.0
344.4571	21.00	-2.59	0.000	1.5	29022.670	2.5
344.4608	23.00	-6.04	8476.200	1.5	37498.760	2.5
344.4613	24.00	-3.75	31352.420	1.0	60374.940	2.0
344.4621	28.00	-2.23	22102.349	4.0	51124.800	3.0
344.4693	26.00	-4.36	23192.486	2.0	52214.330	1.0
344.4714	6.00	-.94	68856.330	1.0	97878.000	2.0
344.4752	26.01	-2.36	37227.320	.5	66248.670	.5
344.4753	25.00	-1.78	34423.270	3.5	63444.610	4.5
344.4792	24.00	-2.41	31987.060	4.0	61008.070	5.0
344.4875	22.00	-4.02	6556.828	1.0	35577.140	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
344.4884	22.00	-.95	8602.340	2.0	37622.573	3.0
344.4885	25.01	-3.72	73683.110	4.0	102703.340	4.0
344.4912	23.03	-4.10	225804.100	2.0	254824.100	1.0
344.4944	24.00	-2.78	31355.210	2.0	60374.940	2.0
344.5000	7.03	-.64	465301.000	0.0	494328.576	0.0
344.5007	24.01	-1.99	38315.000	2.5	67334.200	3.5
344.5032	24.01	-.76	39824.520	4.5	68843.510	3.5
344.5040	42.00	.19	20245.038	0.0	49272.277	0.0
344.5093	28.01	-3.78	105588.890	4.5	134607.370	4.5
344.5095	24.00	-1.84	20519.600	6.0	49538.060	5.0
344.5098	9.02	-4.38	414894.890	4.5	443913.330	4.5
344.5102	22.00	-1.13	20006.032	2.0	49024.430	3.0
344.5141	22.00	-1.73	16875.190	2.0	45893.260	3.0
344.5150	73.00	-1.24	9920.875	0.0	38947.187	0.0
344.5151	26.00	-1.32	17726.985	2.0	46744.975	3.0
344.5164	27.00	-2.43	15184.040	2.5	44201.920	2.5
344.5180	63.01	-1.36	10001.532	0.0	39027.592	0.0
344.5192	24.01	-4.03	39742.360	2.5	68760.000	3.5
344.5210	28.00	-3.38	28569.210	2.0	57586.700	2.0
344.5226	24.01	-3.58	38362.560	1.5	67379.920	1.5
344.5243	26.01	-2.08	70314.740	4.5	99331.950	4.5
344.5251	8.01	-4.66	245902.850	2.5	274920.000	2.5
344.5257	23.03	-2.14	256781.800	1.0	285798.900	2.0
344.5260	42.00	.10	16615.449	0.0	45640.835	0.0
344.5380	90.01	-.74	12340.601	0.0	41364.976	0.0
344.5397	27.00	-7.31	13795.520	2.5	42811.440	3.5
344.5434	9.02	-4.68	414897.720	3.5	443913.330	4.5
344.5521	23.00	-2.94	16728.750	4.5	45743.620	3.5
344.5535	22.00	-3.19	6742.757	4.0	35757.510	4.0
344.5550	76.00	-.18	14760.326	0.0	43783.269	0.0
344.5577	26.01	-3.60	31387.980	2.5	60402.380	2.5
344.5580	66.01	-.17	0.000	0.0	29022.690	0.0
344.5581	24.00	-2.10	20523.690	4.0	49538.060	5.0
344.5610	24.00	-1.40	20523.940	5.0	49538.060	5.0
344.5680	41.00	.09	12259.943	0.0	41281.791	0.0
344.5686	27.00	-4.13	25269.250	3.5	54282.730	2.5
344.5720	25.01	-3.10	52718.800	0.0	81732.000	1.0
344.5730	90.01	-.01	14679.669	0.0	43701.096	0.0
344.5802	26.00	-4.65	23244.826	1.0	52257.330	0.0
344.5821	28.01	-3.21	92373.450	2.5	121385.800	1.5
344.5973	25.01	-2.49	43311.000	1.0	72322.070	0.0
344.6027	24.00	-2.43	31364.330	3.0	60374.940	2.0
344.6045	28.01	-4.44	101754.800	2.5	130765.260	3.5
344.6080	42.01	.70	23713.311	0.0	52731.790	0.0
344.6089	27.00	.55	25937.590	4.5	54947.680	5.5
344.6145	25.01	-2.55	43311.000	1.0	72320.620	1.0
344.6236	23.00	-5.74	2220.130	2.5	31228.980	2.5
344.6243	27.00	-3.58	23855.620	4.5	52864.410	4.5
344.6255	28.00	-.31	879.813	2.0	29888.505	2.0
344.6256	26.02	-3.89	105929.160	3.0	134937.840	2.0
344.6260	28.00	-1.25	28578.046	3.0	57586.700	2.0
344.6273	28.01	-3.81	105588.890	4.5	134597.430	5.5
344.6278	30.02	-2.75	235623.900	3.0	266632.400	3.0
344.6283	25.01	-3.96	38901.800	4.0	67910.260	4.0
344.6365	28.00	-4.26	25753.678	4.0	54761.346	4.0
344.6371	19.00	-2.42	0.000	.5	29007.710	1.5
344.6397	27.01	-1.29	18031.500	2.0	47039.000	3.0
344.6499	22.01	-1.88	40074.710	3.5	69081.350	4.5
344.6521	22.00	-2.88	15156.787	4.0	44163.240	5.0
344.6559	23.00	-5.92	2311.370	3.5	31317.500	4.5
344.6610	40.00	-.50	4113.534	0.0	33127.551	0.0
344.6616	22.00	-2.00	15156.787	4.0	44162.440	4.0
344.6720	58.01	-.99	2500.383	0.0	31513.474	0.0
344.6745	26.02	-4.75	200504.990	3.0	229509.560	3.0
344.6747	8.02	-.07	365550.600	1.0	394555.150	2.0
344.6752	26.02	-2.84	118350.240	4.0	147354.750	5.0
344.6764	25.00	-2.48	30411.740	.5	59416.150	1.5
344.6770	27.00	-1.89	18389.570	1.5	47393.930	2.5
344.6781	26.00	-2.39	21038.987	2.0	50043.250	1.0
344.6811	25.00	-1.38	34343.900	4.5	63347.910	4.5
344.6812	10.03	-.27	643672.000	1.5	672676.000	.5
344.6890	70.01	-.49	32182.351	0.0	61194.011	0.0
344.6910	73.01	.24	12582.573	0.0	41594.064	0.0
344.6951	26.00	-3.77	8154.713	1.0	37157.546	2.0
344.7012	24.00	-1.09	20517.400	2.0	49519.720	3.0
344.7042	27.01	-4.26	40694.900	4.0	69696.970	3.0
344.7120	42.00	.79	12259.943	0.0	41269.667	0.0
344.7151	27.00	-4.65	13795.520	2.5	42796.670	1.5
344.7206	8.02	-.37	365515.760	0.0	394516.450	1.0
344.7252	25.00	-3.71	37630.620	4.5	66630.920	4.5
344.7260	69.01	-.95	8872.327	0.0	37880.873	0.0
344.7280	26.00	-2.15	17726.985	2.0	46727.055	2.0
344.7281	25.00	-2.97	34845.260	.5	63845.320	1.5
344.7290	73.00	-1.03	9194.957	0.0	38203.250	0.0
344.7294	27.00	-.51	26450.020	2.5	55449.970	2.5
344.7329	18.01	-2.49	179592.130	2.5	208591.780	1.5
344.7360	40.00	-.51	0.000	0.0	29007.704	0.0
344.7375	19.00	-2.76	0.000	.5	28999.270	.5
344.7378	28.01	-2.11	92325.850	3.5	121325.090	2.5
344.7431	24.00	-.36	20520.920	3.0	49519.720	3.0
344.7489	25.00	-2.64	37420.240	5.5	66418.550	5.5
344.7522	26.01	-2.85	54870.620	2.5	83868.650	2.5
344.7590	2.00	-1.89	166278.000	0.0	195283.769	0.0
344.7647	25.01	-2.08	73683.110	4.0	102680.090	5.0
344.7699	25.00	-3.32	30419.610	2.5	59416.150	1.5
344.7703	10.00	-1.85	134041.840	2.0	163038.351	2.0
344.7740	45.00	-1.04	7743.122	0.0	36747.629	0.0
344.7760	24.00	-1.16	20523.690	4.0	49519.720	3.0
344.7785	22.00	-1.90	16817.190	1.0	45813.010	2.0
344.7786	25.01	-3.15	43311.000	1.0	72306.810	2.0
344.7823	26.02	-4.50	114325.350	5.0	143320.850	6.0
344.7871	26.02	-4.84	200514.460	4.0	229509.560	3.0
344.7923	24.00	-3.21	27597.220	3.0	56591.880	2.0
344.7961	22.00	-3.59	18287.560	4.0	47281.900	3.0
344.7966	8.01	-1.11	211521.980	1.5	240516.280	1.5
344.8025	19.02	-1.05	209461.300	.5	238455.100	.5
344.8043	21.00	.11	16022.720	2.5	45016.370	3.5
344.8051	8.02	.16	365619.120	2.0	394612.700	3.0
344.8070	68.00	-.71	5323.396	0.0	34325.127	0.0
344.8106	25.00	-2.70	37789.930	2.5	66783.050	3.5
344.8189	26.00	-4.36	19390.165	6.0	48384.585	5.0
344.8246	22.00	-3.00	6661.003	3.0	35652.950	3.0
344.8282	18.01	-2.35	179931.770	1.5	208923.410	2.5
344.8406	23.03	.58	254468.800	2.0	283459.400	3.0
344.8425	25.00	-2.49	30425.710	1.5	59416.150	1.5
344.8434	26.01	-4.38	31999.120	3.5	60989.480	4.5
344.8495	21.00	-.47	16026.520	4.5	45016.370	3.5
344.8537	27.00	-4.90	25269.250	3.5	54258.750	2.5
344.8545	18.01	-1.67	179931.770	1.5	208921.200	1.5
344.8580	45.00	-.48	14679.669	0.0	43677.111	0.0
344.8596	11.02	-1.79	443261.600	.5	472250.600	.5
344.8628	26.02	-3.64	89697.520	3.0	118686.250	4.0
344.8659	27.00	-2.80	16778.160	2.5	45766.630	3.5
344.8665	23.01	-2.98	20280.190	5.0	49268.610	4.0
344.8782	26.00	-2.48	22838.320	2.0	51825.758	3.0
344.8797	24.01	-3.66	45730.740	2.5	74718.050	1.5
344.8820	39.01	-1.36	3226.301	0.0	32221.726	0.0
344.8830	74.00	-.51	15324.929	0.0	44320.269	0.0
344.8863	24.00	-3.66	27223.050	2.0	56209.810	3.0
344.8864	26.00	-3.72	20641.110	4.0	49627.861	4.0
344.8950	44.00	-.25	11372.710	0.0	40367.042	0.0
344.8970	77.00	-1.10	4032.876	0.0	33027.039	0.0
344.9004	26.02	-2.70	201207.290	4.0	230192.860	3.0
344.9032	25.00	-1.57	30354.210	3.5	59339.550	3.5
344.9053	26.00	-3.60	23783.617	5.0	52768.780	4.0
344.9070	42.00	.03	11775.998	0.0	40769.321	0.0
344.9095	26.00	-4.29	26140.164	3.0	55124.974	3.0
344.9147	24.01	-3.75	36272.660	4.5	65257.030	3.5
344.9167	27.00	-.04	4690.180	2.5	33674.380	2.5
344.9200	76.00	-.33	11292.053	0.0	40284.283	0.0
344.9243	24.01	-2.85	38396.360	.5	67379.920	1.5
344.9367	27.00	-1.92	21920.090	4.5	50902.610	4.5
344.9370	75.00	-.19	15082.956	0.0	44073.757	0.0
344.9422	18.02	-3.36	243145.760	2.0	272127.820	1.0
344.9440	27.00	-.16	3482.820	4.5	32464.730	4.5
344.9446	24.01	-4.69	38362.560	1.5	67344.420	2.5
344.9486	25.01	-2.57	43339.100	2.0	72320.620	1.0
344.9512	23.00	-3.44	8476.200	1.5	37457.500	1.5
344.9515	26.01	-3.45	73603.530	5.5	102584.810	5.5
344.9532	18.00	-4.16	95399.870	1.0	124381.010	2.0
344.9560	62.01	-1.64	2661.698	0.0	31650.902	0.0
344.9579	24.00	-2.50	24093.160	2.0	53073.900	3.0
344.9620	64.01	-.94	241.973	0.0	29230.673	0.0
344.9636	26.01	-4.99	49506.990	1.5	78487.250	1.5
344.9649	28.01	-1.77	101247.370	2.5	130227.520	2.5
344.9650	90.01	-.60	10485.478	0.0	39473.926	0.0
344.9668	23.00	-6.06	2220.130	2.5	31200.120	1.5
344.9710	27.00	-1.44	26597.640	1.5	55577.280	1.5
344.9798	24.00	-3.68	27176.220	1.0	56155.120	2.0
344.9846	28.01	-1.58	101247.370	2.5	130225.870	3.5
344.9850	42.00	.18	20164.380	0.0	49151.148	0.0
344.9859	22.00	-3.02	6598.749	2.0	35577.140	2.0
344.9893	27.02	-4.11	79425.300	2.5	108403.400	1.5
344.9967	23.00	-4.52	8578.520	2.5	37556.000	3.5
344.9999	22.00	-1.62	19937.859	1.0	48915.070	2.0
345.0071	26.02	-3.36	118350.240	4.0	147326.850	4.0
345.0082	18.00	-3.94	95399.870	1.0	124376.380	1.0
345.0128	26.00	-4.67	20874.482	3.0	49850.610	3.0
345.0176	28.01	-3.59	101754.800	2.5	130730.530	2.5
345.0290	45.00	-.34	13389.148	0.0	42372.219	0.0
345.0330	26.00	-1.94	17927.378	1.0	46901.808	1.0
345.0380	64.01	.06	3952.218	0.0	32934.533	0.0
345.0439	24.00	-1.63	31987.060	4.0	60960.580	4.0
345.0464	28.01	-4.74	105668.780	2.5	134642.090	3.5
345.0490	18.02	-.97	213950.870	2.0	242923.960	1.0
345.0499	23.00	-3.38	323.420	3.5	29296.430	2.5
345.0535	25.00	-3.89	30411.740	.5	59384.450	1.5
345.0585	28.01	-3.18	107082.210	2.5	136054.500	1.5
345.0598	25.00	-.65	34423.270	3.5	63395.450	3.5
345.0608	24.00	-2.80	24200.230	6.0	53172.330	5.0
345.0653	22.00	-3.91	15108.121	3.0	44079.840	2.0
345.0741	24.00	-2.91	24833.860	3.0	53804.840	3.0
345.0747	22.00	-3.17	6556.828	1.0	35527.760	1.0
345.0756	27.00	-4.41	24733.280	2.5	53704.140	2.5
345.0765	10.00	-2.59	134041.840	2.0	163012.621	1.0
345.0851	24.01	-2.06	34631.140	4.5	63601.200	3.5
345.0916	28.01	-1.60	101258.010	1.5	130227.520	2.5
345.0940	90.01	-.44	1314.176	0.0	42124.788	0.0
345.0944	8.02	.36	365719.160	3.0	394688.440	4.0
345.0950	39.00	.33	16131.504	0.0	45109.032	0.0
345.1001	16.01	-2.85	129858.070	1.5	158826.870	2.5
345.1041	23.01	-1.49	20242.320	4.0	49210.780	3.0
345.1041	24.01	-2.99	40202.140	6.5	69170.600	5.5
345.1058	28.01	-1.58	107082.210	2.5	136050.530	2.5
345.1131	25.01	-2.45	43339.100	2.0	72306.810	2.0
345.1150	45.00	-1.89	3226.301	0.0	32202.150	0.0
345.1210	92.01	-1.61	1693.808	0.0	30669.153	0.0
345.1224	25.02	-4.83	179683.610	4.5	208650.540	3.5
345.1230	64.01	-.16	3064.986	0.0	32040.163	0.0
345.1238	26.01	-1.69	54904.500	3.5	83871.310	4.5
345.1277	7.01	-2.77	168892.210	1.0	197858.690	1.0
345.1307	26.01	-1.55	54902.420	1.5	83868.650	2.5
345.1307	24.01	-2.72	39877.280	3.5	68843.510	3.5
345.1352	8.02	-.38	365550.600	1.0	394516.450	1.0
345.1377	28.01	-3.42	101366.140	2.5	130331.780	1.5
345.1410	5.01	.29	73397.000	0.0	102370.666	0.0
345.1416	29.01	-3.25	110365.980	2.0	139331.300	3.0
345.1473	25.00	-1.63	30419.610	2.5	59384.450	1.5
345.1537	17.01	-4.97	158177.100	1.0	187141.400	2.0
345.1555	26.01	-1.50	54904.500	3.5	83868.650	2.5
345.1560	58.01	-.64	5887.999	0.0	34860.406	0.0
345.1593	25.01	-3.44	38901.800	4.0	67865.630	4.0
345.1611	26.00	-2.15	19552.474	1.0	48516.150	1.0
345.1636	26.02	-3.42	84671.870	3.0	113635.340	4.0
345.1644	26.02	-3.14	201293.750	2.0	230257.150	2.0
345.1657	26.00	-1.45	20641.110	4.0	49604.402	5.0
345.1677	23.00	-2.14	11100.650	4.5	40063.780	5.5
345.1700	90.01	-.89	9114.300	0.0	38085.532	0.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
345.1795	25.00	-3.23	33825.490	2.5	62787.630	1.5
345.1798	26.01	-3.52	69606.640	3.5	98568.750	3.5
345.1868	28.01	-1.20	101247.370	2.5	130208.890	3.5
345.1880	75.00	-.44	0.000	0.0	28969.721	0.0
345.1917	26.00	-1.50	17927.378	1.0	46888.494	2.0
345.1940	28.00	-2.08	29668.918	3.0	58629.840	2.0
345.1954	27.01	-8.31	19189.900	4.0	48150.700	3.0
345.1967	23.00	-3.55	20828.480	2.5	49789.170	3.5
345.1974	28.00	-2.56	29668.918	3.0	58629.550	3.0
345.2093	24.00	-4.40	20517.400	2.0	49477.040	1.0
345.2093	24.00	-3.24	20517.400	2.0	49477.040	2.0
345.2171	27.00	-1.02	25937.590	4.5	54896.570	3.5
345.2180	57.01	-1.60	1371.178	0.0	30338.381	0.0
345.2200	25.00	-2.45	30425.710	1.5	59384.450	1.5
345.2221	10.01	-2.54	279218.660	2.5	308177.220	1.5
345.2276	26.00	-1.68	7728.058	3.0	36686.159	4.0
345.2305	26.02	-4.90	93388.750	4.0	122346.610	3.0
345.2310	72.00	-1.28	5565.369	0.0	34531.482	0.0
345.2324	27.00	.24	26597.640	1.5	55555.340	2.5
345.2324	26.01	-4.53	31999.120	3.5	60956.820	3.5
345.2350	41.01	.29	14599.011	0.0	43564.788	0.0
345.2395	22.01	-.48	16515.790	.5	45472.890	.5
345.2398	27.00	-4.35	26450.020	2.5	55407.100	1.5
345.2412	6.00	-3.53	60393.140	2.0	89350.100	2.0
345.2420	28.01	-3.17	106007.890	2.5	134964.780	1.5
345.2424	18.00	-3.81	95399.870	1.0	124356.730	2.0
345.2433	23.00	-4.99	2311.370	3.5	31268.150	3.5
345.2464	26.00	-4.41	23110.925	3.0	52067.450	2.0
345.2476	25.00	-2.68	38934.940	2.5	67891.360	3.5
345.2494	24.00	-2.32	31049.330	6.0	60005.600	5.0
345.2512	24.00	-3.73	20520.920	3.0	49477.040	2.0
345.2559	26.02	-4.07	118350.240	4.0	147305.970	3.0
345.2587	24.00	-3.64	25177.390	4.0	54132.880	3.0
345.2600	42.00	.41	18147.942	0.0	47111.622	0.0
345.2617	28.00	-3.32	15609.861	2.0	44565.100	3.0
345.2620	7.00	-4.58	83364.590	2.5	112319.805	1.5
345.2655	28.00	-.71	30163.140	2.0	59118.060	2.0
345.2657	20.01	-1.53	60533.020	.5	89487.930	1.5
345.2663	28.00	-1.66	29013.228	2.0	57968.080	3.0
345.2680	90.01	-.93	6210.629	0.0	35173.637	0.0
345.2704	26.02	-4.47	201293.750	2.0	230248.260	1.0
345.2729	23.03	.04	255146.800	2.0	284101.100	3.0
345.2746	26.02	-3.73	93392.450	3.0	122346.610	3.0
345.2780	62.01	-1.53	2984.328	0.0	31946.498	0.0
345.2814	25.01	-3.89	53781.700	3.0	82735.290	2.0
345.2856	23.02	-4.12	56922.500	2.5	85875.740	3.5
345.2885	28.00	-.86	879.813	2.0	29832.810	3.0
345.2900	44.00	-1.60	2016.438	0.0	30977.601	0.0
345.2922	22.00	-4.01	8602.340	2.0	37555.021	3.0
345.3015	26.00	-1.20	22249.430	3.0	51201.330	2.0
345.3046	28.01	-3.91	92373.450	2.5	121325.090	2.5
345.3064	24.00	-4.20	23933.900	4.0	52885.390	5.0
345.3068	10.01	-.95	251522.120	1.5	280473.580	1.5
345.3075	23.01	-.60	20617.050	2.0	49568.450	3.0
345.3087	23.03	-2.37	226796.300	2.0	255747.600	3.0
345.3114	28.01	-2.15	101246.160	.5	130197.230	1.5
345.3160	28.01	-4.68	77332.470	2.5	106283.160	2.5
345.3170	57.01	-1.25	3226.301	0.0	32185.200	0.0
345.3199	24.00	-1.17	28637.000	3.0	57587.360	4.0
345.3212	24.00	-1.18	31055.350	5.0	60005.600	5.0
345.3244	8.01	-2.90	232747.510	2.5	261697.500	1.5
345.3259	28.01	-2.78	101247.370	2.5	130197.230	1.5
345.3280	75.00	-.81	15647.559	0.0	44605.535	0.0
345.3317	24.00	-.16	20517.400	2.0	49466.770	2.0
345.3335	28.01	-3.03	107082.210	2.5	136031.430	2.5
345.3372	24.00	-4.51	24833.860	3.0	53782.770	4.0
345.3469	28.00	-2.34	29500.690	1.0	58448.790	0.0
345.3494	25.00	-1.68	37789.930	2.5	66737.820	3.5
345.3500	75.00	-.48	14518.354	0.0	43474.485	0.0
345.3508	27.00	.51	3482.820	4.5	32430.590	5.5
345.3538	22.00	-1.60	16817.190	1.0	45764.710	1.0
345.3619	24.00	-.37	37233.500	5.0	66180.340	5.0
345.3651	22.00	-3.17	6556.828	1.0	35503.400	0.0
345.3670	69.01	-.56	161.315	0.0	29116.021	0.0
345.3737	24.00	-1.00	20520.920	3.0	49466.770	2.0
345.3784	23.01	-2.68	20622.990	3.0	49568.450	3.0
345.3845	24.01	-2.70	36272.660	4.5	65217.610	4.5
345.3853	25.00	-2.66	34343.900	4.5	63288.780	3.5
345.3853	25.00	-2.38	34343.900	4.5	63288.780	5.5
345.3915	24.00	-2.84	24093.160	2.0	53037.520	2.0
345.3942	25.01	-4.79	38901.800	4.0	67845.930	5.0
345.3969	29.01	-3.89	110084.290	1.0	139028.200	2.0
345.4000	7.03	-.77	465301.000	0.0	494252.940	0.0
345.4055	24.01	-3.51	38563.150	4.5	67506.340	5.5
345.4070	70.01	.49	26616.982	0.0	55568.335	0.0
345.4080	25.00	-2.70	37630.620	4.5	66573.600	5.5
345.4083	25.01	-2.69	52379.380	2.0	81322.330	1.0
345.4092	18.01	-.66	155043.070	2.5	183985.940	1.5
345.4095	22.00	-4.09	15220.390	5.0	44163.240	5.0
345.4140	64.01	-.70	1129.205	0.0	30079.971	0.0
345.4158	22.00	-.91	17215.440	5.0	46157.760	5.0
345.4164	28.01	-2.15	23796.180	1.5	52738.450	2.5
345.4178	24.01	-3.54	40228.440	5.5	69170.600	5.5
345.4191	22.00	-3.68	15220.390	5.0	44162.440	4.0
345.4195	10.00	-2.36	134459.287	1.0	163401.301	0.0
345.4200	90.01	-1.00	9194.957	0.0	38145.220	0.0
345.4220	42.00	-.17	16615.449	0.0	45565.545	0.0
345.4303	25.00	-2.31	30419.610	2.5	59360.720	2.5
345.4349	26.02	-4.72	117950.320	4.0	146891.040	3.0
345.4355	28.01	-3.35	104503.220	2.5	133443.890	2.5
345.4465	24.01	-4.04	38509.070	3.5	67448.820	4.5
345.4470	27.00	-.96	26450.020	2.5	55389.730	1.5
345.4494	26.00	-3.47	24335.764	2.0	53275.270	2.0
345.4495	25.01	-.89	72648.800	4.0	101588.300	3.0
345.4528	28.01	-1.67	101258.010	1.5	130197.230	1.5
345.4567	26.00	-4.07	23110.925	3.0	52049.820	2.0
345.4600	24.00	-2.95	31352.420	1.0	60291.040	1.0
345.4632	28.01	-4.34	105588.890	4.5	134527.240	3.5
345.4638	23.00	-2.57	11100.650	4.5	40038.950	4.5
345.4696	22.00	-1.51	16875.190	2.0	45813.010	2.0
345.4743	22.00	-4.41	18037.225	4.0	46974.650	5.0
345.4773	10.01	.02	277325.600	1.5	306262.770	1.5
345.4791	28.01	-1.07	101247.370	2.5	130184.390	2.5
345.4847	28.01	-3.75	101754.800	2.5	130691.350	1.5
345.4853	26.00	-4.99	24338.766	3.0	53275.270	2.0
345.4893	24.00	-1.54	37244.170	4.0	66180.340	5.0
345.4894	25.00	-2.16	37420.240	5.5	66356.400	4.5
345.4900	64.01	-.59	241.973	0.0	29186.371	0.0
345.4909	8.02	-.22	365619.120	2.0	394555.150	2.0
345.4910	25.00	-4.09	30354.210	3.5	59290.230	3.5
345.4932	25.00	-3.58	33825.490	2.5	62761.330	2.5
345.4933	24.00	-2.68	31355.210	2.0	60291.040	1.0
345.4970	62.01	-1.47	3468.273	0.0	32412.084	0.0
345.4975	24.01	-3.98	39824.520	4.5	68760.000	3.5
345.5006	22.00	-4.67	11531.760	2.0	40466.979	2.0
345.5030	76.00	-.75	13308.491	0.0	42251.800	0.0
345.5031	25.00	-3.30	30425.710	1.5	59360.720	2.5
345.5057	24.01	-2.67	52298.120	3.5	81232.910	2.5
345.5150	8.02	.52	365846.460	4.0	394780.470	5.0
345.5200	4.00	-.40	42565.000	0.0	71506.885	0.0
345.5202	27.00	-3.31	26232.050	3.5	55165.630	2.5
345.5211	26.02	-3.56	84671.870	3.0	113605.370	3.0
345.5220	45.00	-1.06	3226.301	0.0	32168.018	0.0
345.5233	27.00	-1.29	1809.330	1.5	30742.650	.5
345.5269	24.00	-1.62	20520.920	3.0	49453.940	4.0
345.5269	24.01	-4.96	40415.340	.5	69348.360	1.5
345.5270	64.00	-.28	1693.808	0.0	30635.106	0.0
345.5319	23.03	0.00	258288.800	1.0	287221.400	2.0
345.5354	22.00	-1.10	17075.310	4.0	46007.620	4.0
345.5382	24.00	-3.89	27223.050	2.0	56155.120	2.0
345.5410	22.00	-1.31	16961.420	3.0	45891.260	3.0
345.5420	45.00	-.83	11856.655	0.0	40796.697	0.0
345.5528	25.01	-4.01	53781.700	3.0	82712.550	3.0
345.5600	24.00	-1.00	20523.690	4.0	49453.940	4.0
345.5629	24.00	-1.70	20523.940	5.0	49453.940	4.0
345.5748	22.00	-2.87	6598.749	2.0	35527.760	1.0
345.5786	23.00	-6.28	8715.720	3.5	37644.410	4.5
345.5853	28.01	-4.24	102742.740	1.5	131670.870	2.5
345.5854	26.02	-3.62	122829.550	3.0	151757.670	2.0
345.5885	21.00	-2.81	168.340	2.5	29096.200	3.5
345.5910	40.00	-.48	4113.534	0.0	33049.473	0.0
345.6000	26.01	-5.00	13474.430	2.5	42401.330	1.5
345.6028	28.01	-1.38	101247.370	2.5	130174.030	1.5
345.6062	28.01	-3.35	101258.010	1.5	130184.390	2.5
345.6073	24.00	-4.41	25106.340	3.0	54032.630	2.0
345.6150	42.00	.29	18228.600	0.0	47162.529	0.0
345.6270	25.00	-2.46	34423.270	3.5	63347.910	4.5
345.6279	25.01	-4.47	73780.810	3.0	102705.370	3.0
345.6307	24.00	-2.19	33113.270	4.0	62037.600	5.0
345.6362	28.01	-1.79	70635.460	2.5	99559.330	2.5
345.6370	26.00	-3.12	22838.320	2.0	51762.120	2.0
345.6388	22.01	-.01	16625.250	1.5	45548.900	1.5
345.6390	42.00	-1.26	0.000	0.0	28931.920	0.0
345.6425	27.00	-2.55	25937.590	4.5	54860.930	4.5
345.6477	8.01	-4.66	245816.290	1.5	274739.200	2.5
345.6503	18.02	-3.70	243145.760	2.0	272068.450	1.0
345.6512	27.00	-2.06	21780.470	5.5	50703.080	5.5
345.6522	25.01	-2.31	73780.810	3.0	102703.340	4.0
345.6540	41.00	-.37	9275.615	0.0	38206.280	0.0
345.6609	10.01	-.16	252798.480	.5	281720.280	1.5
345.6620	44.00	-.17	14921.641	0.0	43851.636	0.0
345.6627	22.00	-.50	19937.859	1.0	48859.510	1.0
345.6647	22.00	-.83	12118.394	4.0	41039.874	5.0
345.6670	58.01	-1.49	967.890	0.0	29897.467	0.0
345.6694	25.02	-3.13	85173.880	1.5	114094.970	1.5
345.6770	58.01	-.45	6533.259	0.0	35461.999	0.0
345.6796	23.00	-5.44	8578.520	2.5	37496.760	2.5
345.6810	25.01	-2.59	73785.250	2.0	102705.370	3.0
345.6821	24.00	-2.36	28637.000	3.0	57557.030	3.0
345.6832	25.00	-2.05	30419.610	2.5	59339.550	3.5
345.6914	28.00	-1.14	29668.918	3.0	58588.168	3.0
345.6922	27.00	-2.26	816.000	3.5	29735.180	3.5
345.6922	26.01	-2.01	31483.200	3.5	60402.380	2.5
345.6975	28.01	-4.43	110573.360	2.5	139492.100	2.5
345.7005	24.00	-3.81	24093.160	2.0	53011.650	1.0
345.7006	10.01	-.88	277344.290	2.5	306262.770	1.5
345.7026	22.01	-3.90	39926.830	2.5	68845.140	2.5
345.7036	10.01	-4.38	279218.660	2.5	308136.890	1.5
345.7050	63.00	-1.09	0.000	0.0	28926.397	0.0
345.7070	45.00	-.56	10243.505	0.0	39169.734	0.0
345.7082	26.00	-1.99	29056.312	3.0	57974.160	2.0
345.7085	10.01	-.49	277325.600	1.5	306243.420	2.5
345.7110	23.00	-5.25	2311.370	3.5	31228.980	2.5
345.7147	23.01	-.91	20980.920	2.0	49898.220	2.0
345.7180	40.00	-.73	4113.534	0.0	33038.643	0.0
345.7252	28.01	-4.43	98969.440	5.5	127885.860	4.5
345.7286	22.00	-2.64	6661.003	3.0	35577.140	2.0
345.7300	28.01	-3.75	101258.010	1.5	130174.030	1.5
345.7331	24.00	-2.12	33060.740	3.0	61976.500	4.0
345.7450	21.00	.29	16210.800	3.5	45125.570	4.5
345.7465	26.02	-4.26	122843.030	1.0	151757.670	2.0
345.7476	22.00	-2.33	6842.964	5.0	35757.510	4.0
345.7509	26.00	-2.28	19788.248	4.0	48702.518	4.0
345.7560	40.01	-.24	4436.164	0.0	33356.294	0.0
345.7560	63.01	-1.37	10001.532	0.0	38923.662	0.0
345.7578	23.03	-1.94	257143.200	2.0	286056.900	3.0
345.7605	24.01	-.56	39824.520	4.5	68737.990	5.5
345.7651	28.01	-3.67	102742.740	1.5	131655.830	.5
345.7688	28.01	-3.84	93528.440	3.5	122441.220	4.5
345.7721	23.00	-3.77	21963.500	3.5	50876.000	4.5
345.7741	26.02	-4.65	84671.870	3.0	113584.200	2.0
345.7746	28.01	-2.81	107142.210	1.5	136054.500	1.5
345.7790	41.00	-.32	8952.985	0.0	37873.191	0.0
345.7798	18.00	-4.81	95399.870	1.0	124311.720	1.0
345.7850	29.00	-3.40	11211.395	0.0	40131.099	0.0
345.7900	28.00	-3.84	26665.903	3.0	55576.965	3.0
345.7930	45.00	-.06	13389.148	0.0	42308.183	0.0
345.7935	24.00	-4.81	32097.360	6.0	61008.070	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
345.7972	22.00	-2.15	20126.055	3.0	49036.460	4.0
345.7975	23.00	-4.74	21841.450	2.5	50751.830	3.5
345.7997	22.00	-2.44	6742.757	4.0	35652.950	3.0
345.8003	8.01	-1.21	232959.260	3.5	261869.400	2.5
345.8021	27.00	-1.60	16778.160	2.5	45688.150	2.5
345.8026	25.01	-4.81	38901.800	4.0	67811.750	3.0
345.8028	18.01	-4.12	174820.930	.5	203730.860	1.5
345.8044	30.02	-3.41	233610.400	2.0	262520.200	2.0
345.8046	25.02	-4.38	115762.600	1.5	144672.380	2.5
345.8085	24.00	.29	31048.000	7.0	59957.460	7.0
345.8127	26.01	-4.49	15844.710	4.5	44753.820	3.5
345.8135	22.00	-.45	20006.032	2.0	48915.070	2.0
345.8150	42.00	0.00	20164.380	0.0	49081.576	0.0
345.8219	26.02	-4.62	122628.340	2.0	151536.680	1.0
345.8221	28.01	-1.81	107142.210	1.5	136050.530	2.5
345.8226	25.01	-3.00	43339.100	2.0	72247.380	3.0
345.8244	24.00	-1.35	31049.330	6.0	59957.460	7.0
345.8280	70.01	.33	39844.815	0.0	68760.924	0.0
345.8302	26.00	-1.53	19552.474	1.0	48460.120	0.0
345.8340	24.00	-2.24	24056.110	5.0	52963.440	4.0
345.8344	24.00	-3.04	24897.550	4.0	53804.840	3.0
345.8347	26.02	-4.97	200514.460	4.0	229421.730	4.0
345.8350	25.00	-4.03	38669.600	3.5	67576.840	4.5
345.8351	22.00	-3.11	19421.576	3.0	48328.810	4.0
345.8380	76.00	-.30	14760.326	0.0	43675.598	0.0
345.8409	25.01	-3.78	53805.800	4.0	82712.550	3.0
345.8432	26.02	-3.87	122628.340	2.0	151534.900	2.0
345.8435	25.01	-3.22	52373.180	3.0	81279.710	4.0
345.8439	27.02	-4.76	143677.100	3.5	172583.600	3.5
345.8439	27.02	-4.76	143677.100	3.5	172583.600	3.5
345.8456	28.00	-.09	1713.080	1.0	30619.440	2.0
345.8477	28.00	-3.72	25753.578	4.0	54659.759	5.0
345.8503	6.00	-2.57	60393.140	2.0	89299.100	3.0
345.8524	26.02	-3.97	122628.340	2.0	151534.130	3.0
345.8545	28.00	-.93	28068.091	4.0	56973.707	5.0
345.8603	23.00	-3.11	22121.170	4.5	51026.300	5.5
345.8756	28.01	-1.83	107082.210	2.5	135986.060	3.5
345.8830	25.00	-1.95	30354.210	3.5	59257.440	4.5
345.8880	75.00	-.32	17099.394	0.0	46010.487	0.0
345.8891	26.01	-4.08	47674.780	1.5	76577.500	.5
345.8898	26.02	-2.18	89783.590	4.0	118686.250	4.0
345.8929	23.03	-.70	255463.300	2.0	284365.700	1.0
345.8930	40.01	-.16	7662.464	0.0	36573.139	0.0
345.8950	41.00	-.79	5887.999	0.0	34798.507	0.0
345.9012	28.01	-4.29	101246.160	.5	130147.870	.5
345.9049	22.01	-1.38	34543.360	3.5	63444.760	3.5
345.9069	8.01	-1.19	232796.270	2.5	261697.500	1.5
345.9096	28.01	-3.16	107082.210	2.5	135983.220	1.5
345.9128	24.00	-1.19	25177.390	4.0	54078.130	5.0
345.9153	23.00	-2.67	11100.650	4.5	40001.180	3.5
345.9160	28.01	-2.24	92792.080	3.5	121692.550	4.5
345.9235	23.00	-3.83	21032.520	3.5	49932.370	4.5
345.9279	26.00	-3.94	26479.366	1.0	55378.842	2.0
345.9284	24.01	-1.58	39684.000	3.5	68583.440	2.5
345.9321	10.01	.25	277344.290	2.5	306243.420	2.5
345.9323	26.02	-2.09	201293.750	2.0	230192.860	3.0
345.9339	6.00	-4.24	60333.430	0.0	89232.410	1.0
345.9384	23.03	.04	254824.100	1.0	283722.700	1.0
345.9411	22.00	-.03	20126.055	3.0	49024.430	3.0
345.9411	25.02	-3.28	115774.000	3.5	144672.380	2.5
345.9422	26.00	-1.88	21715.735	5.0	50614.020	4.0
345.9428	29.00	-1.46	44442.294	0.0	73348.807	0.0
345.9439	23.00	-2.69	17136.440	6.5	46034.580	5.5
345.9460	26.00	-3.94	26627.612	4.0	55525.580	5.0
345.9503	26.02	-3.54	200524.120	5.0	229421.730	4.0
345.9536	8.02	-1.22	365619.120	2.0	394516.450	1.0
345.9606	26.00	-4.02	26479.366	1.0	55376.117	1.0
345.9629	23.00	-2.79	8578.520	2.5	37475.080	3.5
345.9643	25.01	-4.79	79540.760	1.0	108437.200	2.0
345.9684	23.00	-2.81	16917.150	5.5	45813.250	4.5
345.9697	25.01	-2.67	52383.720	4.0	81279.710	4.0
345.9700	41.00	-.27	9436.930	0.0	38341.170	0.0
345.9830	58.01	-.19	9517.587	0.0	38420.741	0.0
345.9863	23.03	-.69	255445.500	3.0	284340.100	4.0
345.9876	25.01	-4.14	79544.510	2.0	108439.000	3.0
345.9914	26.00	-1.03	24335.764	2.0	53229.940	1.0
345.9920	42.00	-.67	11050.080	0.0	39952.482	0.0
345.9958	26.00	-2.13	18378.187	2.0	47271.999	1.0
345.9971	25.00	-2.06	37737.220	3.5	66630.920	4.5
345.9988	24.01	-2.52	34813.060	5.5	63706.620	4.5
345.9990	8.02	-.20	365719.160	3.0	394612.700	3.0
346.0031	29.01	-1.87	117666.600	4.0	146559.800	4.0
346.0043	25.01	-2.55	9472.970	2.0	38366.070	2.0
346.0092	25.01	-4.52	79544.510	2.0	108437.200	2.0
346.0102	23.00	-4.42	2424.890	4.5	31317.500	4.5
346.0157	25.02	-3.39	115780.230	2.5	144672.380	2.5
346.0160	58.01	-1.35	2097.096	0.0	30997.494	0.0
346.0175	25.00	-1.15	37630.620	4.5	66522.620	4.5
346.0230	42.00	.12	18228.600	0.0	47128.413	0.0
346.0238	8.01	-2.29	232462.830	2.5	261354.300	2.5
346.0280	25.01	-3.76	79550.280	3.0	108441.400	4.0
346.0289	8.01	-4.81	246028.950	3.5	274920.000	2.5
346.0333	25.01	-.76	14593.820	3.0	43484.500	2.0
346.0414	29.01	-3.89	117666.600	4.0	146556.600	3.0
346.0415	24.00	-.55	24282.340	4.0	53172.330	5.0
346.0420	24.00	-2.80	33040.100	2.0	61930.050	3.0
346.0431	28.01	-3.07	101258.010	1.5	130147.870	.5
346.0460	75.00	.09	0.000	0.0	28897.892	0.0
346.0472	22.00	-1.90	16875.190	2.0	45764.710	1.0
346.0508	28.01	-3.06	107142.210	1.5	136031.430	2.5
346.0516	27.00	-2.24	21215.900	.5	50105.050	1.5
346.0524	24.00	-2.97	31352.420	1.0	60241.500	0.0
346.0524	10.00	-2.40	134818.640	0.0	163707.721	1.0
346.0536	24.00	-2.62	25038.610	5.0	53927.590	4.0
346.0543	27.00	-3.62	25269.250	3.5	54158.170	4.5
346.0558	8.01	-4.61	185340.680	1.5	214229.480	1.5
346.0567	25.01	-4.31	79550.280	3.0	108439.000	3.0
346.0632	24.00	-1.59	37205.880	3.0	66094.060	4.0
346.0637	22.00	-2.93	19573.968	4.0	48462.110	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
346.0687	21.00	-.07	16021.780	1.5	44909.500	2.5
346.0720	27.00	-.39	7442.410	3.5	36329.860	2.5
346.0738	23.01	-4.60	18293.870	2.0	471d1.170	3.0
346.0758	23.00	-2.60	22313.990	5.5	51201.120	6.5
346.0770	46.00	-.22	6533.259	0.0	35428.563	0.0
346.0780	42.00	-.38	16615.449	0.0	45510.669	0.0
346.0790	27.00	-.26	26063.110	1.5	54949.970	1.5
346.0800	21.00	-.40	16022.720	2.5	44909.500	2.5
346.0904	18.01	-2.54	161048.640	1.5	189934.550	.5
346.0907	22.00	-3.98	19322.988	2.0	48208.870	3.0
346.0933	24.01	-3.25	38563.150	4.5	67448.820	4.5
346.0962	25.01	-2.74	44899.820	3.0	73785.250	2.0
346.0970	66.01	-.10	0.000	0.0	28893.634	0.0
346.0987	24.00	-3.38	24897.550	4.0	53782.770	4.0
346.1020	90.00	-.96	0.000	0.0	28893.216	0.0
346.1045	24.01	-4.04	38509.070	3.5	67393.800	3.5
346.1059	25.01	-3.61	79558.380	4.0	108443.000	5.0
346.1075	18.00	-3.05	93750.639	1.0	122635.128	2.0
346.1085	9.02	-4.03	440359.260	3.5	469243.660	4.5
346.1090	40.00	-.10	7985.094	0.0	36877.726	0.0
346.1128	27.00	-3.16	24627.790	4.5	53511.830	5.5
346.1134	27.00	-2.12	15774.040	1.5	44658.030	1.5
346.1158	27.00	-.24	26063.110	1.5	54946.900	2.5
346.1160	69.01	-1.05	8872.327	0.0	37764.375	0.0
346.1164	28.01	-2.24	77736.790	4.5	106620.530	3.5
346.1169	27.00	.65	25568.680	5.5	54452.380	6.5
346.1180	57.00	-.62	1048.548	0.0	29940.429	0.0
346.1181	28.00	-1.57	29084.478	4.0	57968.080	3.0
346.1184	24.00	-3.35	31987.060	4.0	60870.630	4.0
346.1206	28.01	-4.81	110573.360	2.5	139456.750	1.5
346.1220	90.00	-.22	4920.109	0.0	33811.656	0.0
346.1250	25.01	-4.47	79558.380	4.0	108441.400	4.0
346.1286	24.01	-4.04	39877.280	3.5	68760.000	3.5
346.1302	28.01	-4.35	72375.420	1.5	101258.010	1.5
346.1325	22.00	-6.93	6556.828	1.0	35439.228	1.0
346.1340	7.03	-.65	465223.000	0.0	494113.545	0.0
346.1340	58.01	-.74	4194.191	0.0	33084.736	0.0
346.1380	63.01	-.95	9840.217	0.0	38730.428	0.0
346.1494	25.01	-1.75	44899.820	3.0	73780.810	3.0
346.1508	22.01	-.95	1087.210	3.5	29968.080	4.5
346.1564	23.01	-2.94	8640.210	2.0	37520.610	3.0
346.1576	28.02	-4.94	83033.800	2.0	111914.100	2.0
346.1623	18.03	-2.58	257348.890	1.5	286228.800	1.5
346.1634	24.01	-3.49	35569.020	2.5	64448.840	2.5
346.1638	6.00	-3.79	60352.630	1.0	89232.410	1.0
346.1649	28.00	-1.01	204.786	3.0	29084.478	4.0
346.1666	8.01	-4.53	245902.850	2.5	274782.400	3.5
346.1735	23.00	-3.64	8578.520	2.5	37457.500	1.5
346.1763	16.01	-3.33	129787.710	.5	158666.450	1.5
346.1790	58.01	-.73	7178.519	0.0	36065.309	0.0
346.1825	24.01	-2.42	38509.070	3.5	67387.300	2.5
346.1870	20.01	-1.29	60611.280	1.5	89489.130	2.5
346.1887	28.01	-4.24	102742.740	1.5	131620.450	1.5
346.1940	29.01	-3.21	108335.430	2.0	137212.700	1.0
346.1950	64.01	-.82	3387.616	0.0	32273.071	0.0
346.2014	20.01	-2.24	60611.280	1.5	89487.930	1.5
346.2040	45.00	.02	2581.041	0.0	31465.745	0.0
346.2130	22.01	-2.78	40074.710	3.5	68950.390	3.5
346.2172	21.00	-1.40	16141.040	2.5	45016.370	3.5
346.2188	30.02	-.87	234866.900	1.0	263742.100	2.0
346.2188	30.02	-2.03	234866.900	1.0	263742.100	2.0
346.2200	69.01	-.35	0.000	0.0	28883.369	0.0
346.2210	92.00	-.60	0.000	0.0	28883.286	0.0
346.2216	26.00	-4.45	23192.486	2.0	52067.450	2.0
346.2230	24.00	-1.45	28682.180	2.0	57557.030	3.0
346.2354	26.00	-1.94	17726.985	2.0	46600.800	1.0
346.2380	25.01	-2.29	44521.520	4.0	73395.120	3.0
346.2491	11.01	-2.17	268766.670	1.0	297639.340	2.0
346.2578	28.01	-3.25	72375.420	1.5	101247.370	2.5
346.2640	72.01	-1.39	4839.451	0.0	33719.150	0.0
346.2650	41.00	-1.43	2097.096	0.0	30976.711	0.0
346.2690	62.01	-1.26	5242.739	0.0	34122.021	0.0
346.2714	24.01	-2.69	19528.380	.5	48399.190	1.5
346.2723	28.01	-4.26	72375.420	1.5	101246.160	.5
346.2737	25.00	-2.02	30419.610	2.5	59290.230	3.5
346.2803	27.00	-.01	5075.830	1.5	33945.900	2.5
346.2810	26.00	-2.45	22838.320	2.0	51708.330	2.0
346.2828	28.00	.22	32973.414	4.0	61843.280	5.0
346.2850	90.01	-.41	9598.245	0.0	38476.192	0.0
346.2867	25.01	-1.25	79540.760	1.0	108410.300	2.0
346.2894	24.00	-2.81	33060.740	3.0	61930.050	3.0
346.2971	28.01	-2.96	101357.200	4.5	130225.870	3.5
346.3000	64.01	-1.10	1129.205	0.0	30005.902	0.0
346.3020	40.01	.97	11856.655	0.0	40733.185	0.0
346.3078	23.01	-2.41	20343.000	2.0	49210.780	3.0
346.3140	44.00	-1.76	2016.438	0.0	30891.967	0.0
346.3206	22.00	-2.86	8492.421	1.0	37359.130	2.0
346.3220	58.01	-.40	7017.204	0.0	35892.066	0.0
346.3229	10.01	-4.70	224087.020	1.5	252953.540	1.5
346.3236	23.00	-1.32	8476.200	1.5	37342.660	2.5
346.3250	74.00	-2.05	2903.671	0.0	31778.283	0.0
346.3255	27.02	-4.88	77622.900	4.5	106489.200	3.5
346.3304	26.00	-2.77	11976.239	4.0	40842.130	3.0
346.3316	25.01	-.85	79544.510	2.0	108410.300	2.0
346.3328	25.01	-.85	79544.510	2.0	108410.200	3.0
346.3350	25.00	-1.79	34423.270	3.5	63288.780	3.5
346.3360	7.03	-.07	465463.000	0.0	494336.695	0.0
346.3376	28.00	-2.56	15609.861	2.0	44475.158	2.0
346.3393	23.00	-2.68	553.020	4.5	29416.170	3.5
346.3394	29.01	-2.83	118071.340	1.0	146936.480	2.0
346.3412	25.01	-3.38	37811.570	1.0	66676.560	2.0
346.3496	27.00	-1.76	14399.280	.5	43263.570	1.5
346.3499	29.00	-2.65	30811.173	0.0	59683.709	0.0
346.3504	24.00	-.93	24940.610	2.0	53804.840	3.0
346.3589	9.01	-2.23	254546.130	4.0	283409.650	3.0
346.3613	9.01	-3.29	254546.330	3.0	283409.650	3.0
346.3624	24.00	-2.43	33113.270	4.0	61976.500	4.0
346.3627	13.01	-2.63	121480.300	3.0	150343.500	2.0
346.3627	13.01	-1.45	121480.300	3.0	150343.500	3.0

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WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
346.3627	13.01	-.02	121480.300	3.0	150343.500	4.0
346.3632	9.01	-4.84	254546.490	2.0	283409.650	3.0
346.3651	10.03	-.46	643239.000	.5	672102.000	1.5
346.3699	13.01	-1.08	121480.900	2.0	150343.500	2.0
346.3699	13.01	-.55	121480.900	2.0	150343.500	3.0
346.3720	90.01	-.08	13147.176	0.0	42017.870	0.0
346.3735	13.01	-.35	121481.200	1.0	150343.500	2.0
346.3748	28.01	-2.71	107082.210	2.5	135944.400	3.5
346.3760	58.01	-.57	5565.369	0.0	34435.730	0.0
346.3810	41.00	.42	12905.203	0.0	41775.147	0.0
346.3818	23.01	-1.94	23391.090	5.0	52252.700	6.0
346.3828	28.01	-2.50	76727.360	5.5	105588.890	4.5
346.3839	28.00	-2.60	29668.918	3.0	58530.350	3.0
346.3877	25.00	-3.88	38120.180	4.5	66981.300	3.5
346.3880	66.01	-.87	4678.136	0.0	33547.496	0.0
346.3944	24.00	-1.19	37233.500	5.0	66094.060	4.0
346.3960	26.01	-4.14	13474.430	2.5	42334.860	2.5
346.3970	73.00	-1.76	0.000	0.0	28868.610	0.0
346.3980	64.01	.28	3387.616	0.0	32256.143	0.0
346.3998	24.01	-2.83	19631.280	1.5	48491.390	2.5
346.4009	25.01	-1.42	79550.280	3.0	108410.300	2.0
346.4021	25.01	-.78	79550.280	3.0	108410.200	3.0
346.4033	25.01	-.59	79550.280	3.0	108410.100	4.0
346.4044	28.01	-4.42	101366.140	2.5	130225.870	3.5
346.4057	28.00	-4.21	27414.893	2.0	56274.516	2.0
346.4117	18.00	-3.50	93750.639	1.0	122609.760	1.0
346.4125	28.00	-.05	32973.414	4.0	61832.470	4.0
346.4129	18.01	-.71	158730.210	2.5	187589.230	2.5
346.4152	24.00	-3.88	24056.110	5.0	52914.940	6.0
346.4152	26.02	-3.65	122898.840	2.0	151757.670	2.0
346.4172	23.01	-2.57	20343.000	2.0	49201.660	2.0
346.4210	58.01	-.39	5081.424	0.0	33948.034	0.0
346.4215	28.01	-2.47	101357.200	4.5	130215.500	4.5
346.4247	26.02	-4.22	88663.870	4.0	117521.910	4.0
346.4310	25.01	-2.73	52379.380	2.0	81236.890	1.0
346.4339	10.00	-2.10	134041.840	2.0	162899.113	2.0
346.4360	70.00	-.89	0.000	0.0	28865.360	0.0
346.4401	26.01	-2.93	36252.960	2.5	65109.710	3.5
346.4421	25.02	-3.53	115762.600	1.5	144619.190	1.5
346.4430	62.01	-1.79	1451.835	0.0	30316.612	0.0
346.4453	38.01	.49	24516.650	0.0	53381.236	0.0
346.4492	26.01	-2.22	33466.500	4.5	62322.500	3.5
346.4600	24.02	-4.95	128782.200	3.0	157637.300	3.0
346.4604	25.02	-3.69	109780.400	2.5	138635.460	2.5
346.4618	23.02	-4.36	56669.050	1.5	85524.000	2.5
346.4668	21.00	-3.73	168.340	2.5	29022.670	2.5
346.4730	75.00	-.05	0.000	0.0	28862.278	0.0
346.4794	22.00	-1.16	20006.032	2.0	48859.510	1.0
346.4816	24.00	-1.53	20517.400	2.0	49370.700	3.0
346.4873	22.00	-4.07	11531.760	2.0	40384.580	1.0
346.4905	28.01	-2.57	70706.770	1.5	99559.330	2.5
346.4914	26.00	-1.67	20874.482	3.0	49726.964	4.0
346.4932	27.00	-.65	26597.640	1.5	55449.970	2.5
346.4933	10.01	-4.76	279324.890	1.5	308177.220	1.5
346.4980	24.00	-1.20	21810.840	1.0	50662.770	1.0
346.4993	25.01	-1.63	79558.380	4.0	108410.200	3.0
346.5005	25.01	-.81	79558.380	4.0	108410.100	4.0
346.5009	28.01	-2.75	101357.200	4.5	130208.890	3.5
346.5021	22.00	-1.73	16961.420	3.0	45813.010	2.0
346.5042	25.01	-.38	79558.380	4.0	108409.800	5.0
346.5054	29.01	-3.70	110365.980	2.0	139217.300	2.0
346.5134	18.00	-3.85	93750.639	1.0	122601.290	1.0
346.5152	28.02	-3.82	103306.100	3.0	132156.600	4.0
346.5169	24.00	-1.49	21810.840	1.0	50661.200	0.0
346.5225	24.00	-.54	37244.170	4.0	66094.060	4.0
346.5238	24.00	-.82	20520.920	3.0	49370.700	3.0
346.5240	23.01	-2.01	22273.540	1.0	51123.310	2.0
346.5248	28.01	-1.84	101357.200	4.5	130206.900	4.5
346.5309	28.00	-1.80	29668.918	3.0	58518.110	4.0
346.5402	28.01	-1.93	101357.200	4.5	130205.620	5.5
346.5440	76.00	.05	17583.339	0.0	46439.704	0.0
346.5449	28.00	-2.99	27414.893	2.0	56262.920	3.0
346.5496	22.01	-.77	16625.250	1.5	45472.890	.5
346.5518	26.00	-4.79	23192.486	2.0	52039.939	1.0
346.5524	25.01	-2.40	52373.180	3.0	81220.580	3.0
346.5571	24.00	-1.60	20523.690	4.0	49370.700	3.0
346.5630	40.00	-1.18	1209.863	0.0	30064.646	0.0
346.5642	28.01	-1.99	24788.200	1.5	53634.620	1.5
346.5657	25.00	-1.84	38008.700	5.5	66855.000	4.5
346.5668	23.03	-1.82	226617.100	1.0	255463.300	2.0
346.5770	90.01	-.65	6613.917	0.0	35467.534	0.0
346.5783	18.01	-.89	161089.310	.5	189934.550	.5
346.5786	27.00	-.51	0.000	4.5	28845.220	5.5
346.5792	25.01	-4.45	47073.560	3.0	75918.730	2.0
346.5860	41.00	-.99	1129.205	0.0	29982.073	0.0
346.5862	26.00	-1.45	888.132	1.0	29732.721	1.0
346.5869	24.01	-4.16	38509.070	3.5	67353.600	4.5
346.5920	90.01	-1.52	4032.876	0.0	32885.244	0.0
346.5943	24.00	-1.72	21810.840	1.0	50654.760	2.0
346.6003	28.01	-4.03	101144.630	3.5	129988.050	2.5
346.6022	23.00	-4.91	2424.890	4.5	31268.150	3.5
346.6083	28.01	-2.57	101366.140	2.5	130208.890	3.5
346.6150	22.00	-4.73	6842.964	5.0	35685.160	6.0
346.6175	8.02	-.35	365846.460	4.0	394688.440	4.0
346.6188	27.00	-3.44	26063.110	1.5	54904.990	2.5
346.6200	48.00	.87	30488.543	0.0	59338.581	0.0
346.6265	24.01	-3.57	35607.600	3.5	64448.840	2.5
346.6269	25.01	-2.70	52379.380	2.0	81220.580	3.0
346.6274	26.00	-1.99	19390.165	6.0	48231.330	5.0
346.6284	24.01	-2.09	39742.360	2.5	68583.440	2.5
346.6292	28.01	-3.61	107142.210	1.5	135983.220	1.5
346.6293	25.01	-2.03	79569.100	5.0	108410.100	4.0
346.6300	92.00	.16	3710.246	0.0	32559.451	0.0
346.6329	25.01	-.98	79569.100	5.0	108409.800	5.0
346.6329	25.01	-.21	79569.100	5.0	108409.800	6.0
346.6332	18.01	-.59	155351.030	1.5	184191.710	.5
346.6339	26.00	-4.43	22996.661	4.0	51837.279	3.0
346.6356	22.00	-6.62	6598.749	2.0	35439.228	1.0
346.6363	18.01	-2.30	157233.930	3.5	186074.350	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
346.6380	23.00	-3.61	8715.720	3.5	37556.000	3.5
346.6439	24.00	-4.68	23163.270	0.0	52003.060	1.0
346.6493	24.01	-4.33	20512.620	2.5	49351.960	2.5
346.6500	26.00	-3.01	6928.266	5.0	35767.546	4.0
346.6500	64.01	-.93	5242.739	0.0	34090.280	0.0
346.6501	6.00	-3.37	60393.140	2.0	89232.410	1.0
346.6520	90.00	-.23	4920.109	0.0	33767.483	0.0
346.6539	25.02	-3.47	115780.230	2.5	144619.190	1.5
346.6578	10.00	-2.05	134818.640	0.0	163657.268	1.0
346.6582	26.01	-3.59	69606.640	3.5	98445.240	4.5
346.6588	25.01	-3.56	37847.900	2.0	66686.450	3.0
346.6595	23.01	-1.54	18269.490	1.0	47107.980	1.0
346.6754	27.00	-2.27	18775.010	.5	47612.180	1.5
346.6791	25.01	-3.55	52383.720	4.0	81220.580	3.0
346.6830	42.00	-1.74	0.000	0.0	28844.795	0.0
346.6848	26.01	-2.57	38164.240	2.5	67000.630	2.5
346.6852	8.01	-4.48	245902.850	2.5	274739.200	2.5
346.6858	26.02	-3.80	122921.370	1.0	151757.670	2.0
346.6862	26.01	-3.91	44915.070	3.5	73751.340	4.5
346.6862	24.00	-2.12	31048.000	7.0	59884.270	6.0
346.6887	55.00	-7.08	0.000	0.0	28844.321	0.0
346.6896	8.02	-1.22	365719.160	3.0	394555.150	2.0
346.6931	30.02	-1.94	233610.400	2.0	262446.100	3.0
346.6950	64.01	-.64	3387.616	0.0	32231.412	0.0
346.6970	42.00	-.20	18147.942	0.0	46991.572	0.0
346.6973	24.01	-2.33	38509.070	3.5	67344.420	2.5
346.6979	25.01	-3.71	37851.150	3.0	66686.450	3.0
346.6991	24.00	-1.43	24282.340	4.0	53117.540	4.0
346.7022	24.00	.21	31049.330	6.0	59864.270	6.0
346.7093	24.01	-3.46	19798.010	2.5	48632.360	3.5
346.7138	28.00	-1.91	30392.052	1.0	59226.030	1.0
346.7139	26.02	-3.53	93512.640	4.0	122346.610	3.0
346.7170	22.00	-1.57	20006.032	2.0	48839.740	3.0
346.7179	24.01	-3.27	20518.330	3.5	49351.960	2.5
346.7188	28.01	-3.80	106283.160	2.5	135116.720	2.5
346.7199	26.01	-4.53	73751.340	4.5	102584.810	5.5
346.7205	22.00	-2.49	18141.229	5.0	46974.650	5.0
346.7230	25.01	-4.76	37811.570	1.0	66644.780	1.0
346.7243	9.01	-2.23	254541.410	4.0	283374.510	3.0
346.7248	9.01	-3.82	254541.450	2.0	283374.510	3.0
346.7249	9.01	-2.79	254541.460	3.0	283374.510	3.0
346.7255	27.00	-1.11	26450.020	2.5	55283.020	2.5
346.7257	22.00	-1.41	8492.421	1.0	37325.407	2.0
346.7270	64.01	.06	3387.616	0.0	32228.750	0.0
346.7323	24.00	-2.69	31987.060	4.0	60619.500	3.0
346.7329	23.01	-2.39	18269.490	1.0	47101.880	2.0
346.7378	25.00	-3.60	23296.670	3.5	52128.650	2.5
346.7419	28.01	-2.46	106133.140	1.5	134964.780	1.5
346.7470	41.00	-.37	8630.355	0.0	37469.826	0.0
346.7497	28.00	-2.23	1332.153	3.0	30163.140	2.0
346.7520	13.01	-1.33	121480.300	3.0	150311.100	3.0
346.7538	24.01	-2.87	38563.150	4.5	67393.800	3.5
346.7590	27.00	-2.82	23184.230	2.5	52014.450	1.5
346.7592	13.01	-.42	121480.900	2.0	150311.100	3.0
346.7600	72.00	.10	15566.901	0.0	44405.291	0.0
346.7660	48.00	.37	30488.543	0.0	59326.434	0.0
346.7664	29.01	-2.55	117666.600	4.0	146496.200	3.0
346.7682	26.00	-3.43	23783.617	5.0	52613.072	5.0
346.7691	28.00	-1.89	30163.140	2.0	58992.520	2.0
346.7703	24.00	-.76	24056.110	5.0	52885.390	5.0
346.7712	30.02	-4.04	221052.200	4.0	249881.400	4.0
346.7729	8.01	-4.93	185340.680	1.5	214169.740	.5
346.7746	24.00	-1.37	31055.350	5.0	59884.270	6.0
346.7748	55.00	-7.24	0.000	0.0	28837.159	0.0
346.7777	25.01	-3.90	37847.900	2.0	66676.560	2.0
346.7780	58.01	-1.39	1855.123	0.0	30692.016	0.0
346.7811	9.01	-3.24	254546.130	4.0	283374.510	3.0
346.7835	9.01	-4.40	254546.330	3.0	283374.510	3.0
346.7840	18.02	-3.88	240150.660	0.0	268978.800	1.0
346.7850	42.00	.41	18228.600	0.0	47064.911	0.0
346.7870	62.01	-.96	5242.739	0.0	34078.883	0.0
346.7880	39.01	-1.64	3226.301	0.0	32062.362	0.0
346.7880	63.00	-1.09	0.000	0.0	28836.061	0.0
346.7917	12.02	-1.10	532971.200	3.0	561798.700	3.0
346.7928	28.01	-1.38	101357.200	4.5	130184.610	5.5
346.7943	23.01	-3.57	18353.890	3.0	47181.170	3.0
346.7950	26.00	-4.72	23192.486	2.0	52019.706	1.0
346.7955	24.00	-4.11	33934.880	3.0	62762.060	4.0
346.7956	22.00	-3.18	11639.804	3.0	40466.979	2.0
346.7960	75.00	.39	20325.695	0.0	49161.091	0.0
346.8080	64.01	-1.03	3064.986	0.0	31899.384	0.0
346.8106	18.02	-2.46	243424.970	3.0	272250.900	3.0
346.8110	58.01	-.74	4274.849	0.0	33108.998	0.0
346.8139	26.00	-4.97	26550.466	0.0	55376.117	1.0
346.8168	25.01	-4.01	37851.150	3.0	66676.560	2.0
346.8202	24.01	-3.28	38509.070	3.5	67334.200	3.5
346.8314	19.02	-.35	208687.800	1.5	237512.000	2.5
346.8380	25.00	-.83	37630.620	4.5	66454.270	3.5
346.8387	25.01	-3.99	53781.700	3.0	82605.290	4.0
346.8400	74.00	-.72	13711.778	0.0	42543.516	0.0
346.8441	25.01	-2.62	49517.580	5.0	78340.720	6.0
346.8475	20.00	-2.33	15157.901	0.0	43980.767	1.0
346.8503	26.00	-4.94	23244.826	1.0	52067.450	2.0
346.8521	24.01	-4.81	36101.820	3.5	64924.300	3.5
346.8536	25.01	-2.55	53597.130	2.0	82419.480	3.0
346.8561	28.01	-4.62	71770.830	2.5	100592.980	3.5
346.8669	24.00	-1.34	25106.340	3.0	53927.590	4.0
346.8677	26.01	-1.50	33501.320	3.5	62322.500	3.5
346.8754	28.01	-1.72	105838.060	3.5	134658.600	4.5
346.8847	26.00	-1.90	20641.110	4.0	49460.876	5.0
346.8849	28.01	-2.01	107082.210	2.5	135901.960	2.5
346.8890	58.01	-1.26	967.890	0.0	29795.555	0.0
346.8962	26.00	-2.97	18378.187	2.0	47197.000	2.0
346.8972	27.00	-2.12	26450.020	2.5	55268.750	3.5
346.8990	64.01	.06	3387.616	0.0	32214.450	0.0
346.9006	26.00	-1.21	26627.612	4.0	55446.060	4.0
346.9030	28.01	-2.52	101366.140	2.5	130184.390	2.5
346.9032	8.01	-2.65	232536.060	1.5	261354.300	2.5
346.9066	22.00	-1.71	17075.310	4.0	45893.260	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
346.9129	25.02	-2.79	85173.880	1.5	113991.310	.5
346.9145	28.01	-4.36	106283.160	2.5	135100.450	3.5
346.9196	22.00	-5.30	6742.757	4.0	35559.627	5.0
346.9207	24.00	-3.08	33113.270	4.0	61930.050	3.0
346.9220	42.00	.30	16534.792	0.0	45359.715	0.0
346.9241	18.01	-4.42	172213.800	1.5	201030.300	.5
346.9261	25.01	-4.25	46903.260	2.0	75719.590	1.0
346.9271	9.01	-2.88	254541.450	2.0	283357.700	2.0
346.9272	9.01	-2.47	254541.460	3.0	283357.700	2.0
346.9282	9.01	-3.90	254541.540	1.0	283357.700	2.0
346.9310	64.01	-1.26	3387.616	0.0	32211.791	0.0
346.9384	26.00	-4.89	22946.810	1.0	51762.120	2.0
346.9425	29.01	-2.22	118071.340	1.0	146886.310	1.0
346.9434	24.00	-1.43	21847.880	2.0	50662.770	1.0
346.9440	41.00	-.16	9275.615	0.0	38098.710	0.0
346.9457	22.00	-1.49	16875.190	2.0	45689.890	3.0
346.9479	28.00	-2.30	2216.519	2.0	31031.042	3.0
346.9528	23.01	-1.85	18293.870	2.0	47107.980	1.0
346.9590	24.00	-.74	24303.940	3.0	53117.540	4.0
346.9620	21.00	-.24	16009.710	.5	44823.060	1.5
346.9620	45.00	-.57	10243.505	0.0	39065.105	0.0
346.9630	23.00	-4.31	21841.450	2.5	50654.720	2.5
346.9630	42.00	.30	24681.201	0.0	53502.718	0.0
346.9673	27.00	-.85	21780.470	5.5	50593.380	4.5
346.9705	21.00	-1.73	16096.860	1.5	44909.500	2.5
346.9740	68.00	-1.17	0.000	0.0	28820.603	0.0
346.9742	9.01	-2.77	254541.450	2.0	283353.780	1.0
346.9753	9.01	-3.10	254541.540	1.0	283353.780	1.0
346.9775	28.01	-4.69	100010.170	.5	128822.230	1.5
346.9782	10.01	-2.80	279324.890	1.5	308136.890	1.5
346.9828	26.00	-1.67	21038.987	2.0	49850.610	3.0
346.9858	9.01	-2.43	254546.330	3.0	283357.700	2.0
346.9877	9.01	-3.35	254546.490	2.0	283357.700	2.0
346.9920	90.01	-.50	4113.534	0.0	32932.642	0.0
346.9940	40.01	-.85	7985.094	0.0	36804.036	0.0
347.0088	27.00	-2.42	26597.640	1.5	55407.100	1.5
347.0100	28.01	-4.95	103025.580	2.5	131834.940	2.5
347.0158	28.01	-1.48	105861.190	2.5	134670.070	1.5
347.0211	28.00	-3.46	204.786	3.0	29013.228	2.0
347.0238	26.01	-1.06	70523.730	3.5	99331.950	4.5
347.0245	26.01	-4.03	31999.120	3.5	60807.280	4.5
347.0263	23.01	-1.38	18293.870	2.0	47101.880	2.0
347.0278	28.01	-2.86	101366.140	2.5	130174.030	1.5
347.0350	9.01	-2.82	254546.490	2.0	283353.780	1.0
347.0399	24.00	-4.17	24833.860	3.0	53640.740	3.0
347.0399	24.00	-.85	21847.880	2.0	50654.760	2.0
347.0410	58.01	-1.50	967.890	0.0	29782.929	0.0
347.0412	8.01	-.37	211521.980	1.5	240328.750	.5
347.0422	27.00	-2.69	23207.760	1.5	52014.450	1.5
347.0484	24.01	-2.72	38563.150	4.5	67369.330	5.5
347.0557	21.00	-.49	16210.800	3.5	45016.370	3.5
347.0660	45.00	.02	3387.616	0.0	32200.580	0.0
347.0743	28.01	-1.81	105838.060	3.5	134642.090	3.5
347.0792	8.01	-.12	211712.660	2.5	240516.280	1.5
347.0858	24.00	-.77	37205.880	3.0	66008.950	3.0
347.0860	60.01	-1.53	1613.150	0.0	30424.453	0.0
347.0920	42.00	.30	18389.915	0.0	47200.720	0.0
347.0954	26.00	-2.77	26627.612	4.0	55429.890	5.0
347.0974	28.01	-4.20	105439.850	1.5	134241.960	.5
347.1074	21.00	-.55	16021.780	1.5	44823.060	1.5
347.1117	29.01	-1.95	121981.680	2.0	150782.600	2.0
347.1124	22.00	-2.60	18037.225	4.0	46838.090	4.0
347.1187	21.00	-1.57	16022.720	2.5	44823.060	1.5
347.1190	40.00	-.53	0.000	0.0	28808.564	0.0
347.1190	41.00	.67	16776.764	0.0	45585.328	0.0
347.1210	90.00	-.56	3790.903	0.0	32599.301	0.0
347.1267	26.00	-1.79	17927.378	1.0	46727.055	2.0
347.1290	25.01	-3.79	53805.800	4.0	82605.290	4.0
347.1342	18.02	-3.67	214346.700	1.0	243145.760	2.0
347.1346	26.00	-2.76	18378.187	2.0	47177.210	1.0
347.1364	8.01	-1.57	232462.830	2.5	261261.700	1.5
347.1379	27.00	.01	25568.680	5.5	54367.430	5.5
347.1386	28.01	-1.97	24835.930	.5	53634.620	1.5
347.1419	27.00	-2.57	17233.680	3.5	46032.100	4.5
347.1452	26.00	-2.32	19552.474	1.0	48350.620	1.0
347.1491	24.00	-1.59	21856.940	3.0	50654.760	2.0
347.1545	28.01	-3.38	104646.520	3.5	133443.890	2.5
347.1586	28.00	-.85	29832.810	3.0	58629.840	2.0
347.1595	18.01	-2.27	157673.320	2.5	186470.280	1.5
347.1621	28.00	-1.73	29832.810	3.0	58629.550	3.0
347.1742	25.01	-3.16	53017.160	1.0	81812.900	2.0
347.1900	27.00	-3.22	15774.040	1.5	44568.470	2.5
347.1911	25.02	-2.50	109841.120	3.5	138635.460	2.5
347.1950	90.00	-.53	7178.519	0.0	35980.777	0.0
347.2000	23.03	.20	255146.800	2.0	283940.400	2.0
347.2011	29.01	-3.45	118142.970	3.0	146936.480	2.0
347.2017	24.00	-1.34	20517.400	2.0	49310.860	3.0
347.2059	24.01	-2.26	39684.000	3.5	68477.110	4.5
347.2066	22.00	-6.09	6661.003	3.0	35454.051	4.0
347.2141	29.00	-1.05	44442.294	0.0	73242.968	0.0
347.2171	22.00	-1.87	17215.440	5.0	46007.620	4.0
347.2182	27.00	-.49	26597.640	1.5	55389.730	1.5
347.2210	25.01	-2.82	37851.150	3.0	66643.010	4.0
347.2246	24.00	-2.69	24282.340	4.0	53073.900	3.0
347.2250	45.00	-.88	9114.300	0.0	37914.070	0.0
347.2380	24.01	-2.68	38563.150	4.5	67353.600	4.5
347.2386	25.01	-3.69	53597.130	2.0	82387.530	3.0
347.2400	72.00	-1.12	0.000	0.0	28798.526	0.0
347.2441	24.00	-.62	20620.920	3.0	49310.860	3.0
347.2453	28.00	-.74	28068.091	4.0	56857.933	4.0
347.2480	71.01	-.12	12340.601	0.0	41138.463	0.0
347.2488	28.01	-4.84	100010.170	.5	128799.720	.5
347.2520	73.00	-.34	17260.709	0.0	46058.239	0.0
347.2542	28.00	-.73	879.813	2.0	29668.918	3.0
347.2553	22.00	-1.41	20126.055	3.0	48915.070	2.0
347.2560	92.01	-1.56	2258.411	0.0	31055.610	0.0
347.2571	10.00	-1.53	134041.840	2.0	162830.703	3.0
347.2594	18.02	-3.37	196613.910	2.0	225402.590	3.0
347.2635	23.00	-3.74	21963.500	3.5	50751.830	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
347.2684	25.00	-1.54	37630.620	4.5	66418.550	5.5
347.2703	27.00	-.75	25568.680	5.5	54356.450	4.5
347.2720	75.00	-.67	14518.354	0.0	43314.226	0.0
347.2760	22.00	-2.89	19421.576	3.0	48208.870	3.0
347.2775	24.00	-1.29	20523.690	4.0	49310.860	3.0
347.2799	22.00	-1.39	19937.859	1.0	48724.830	1.0
347.2858	22.00	-1.65	19937.859	1.0	48724.340	2.0
347.2873	23.00	-5.62	9824.580	2.5	38610.940	3.5
347.2896	24.00	-3.46	23933.900	4.0	52720.070	4.0
347.2900	40.00	-1.39	4113.534	0.0	32907.913	0.0
347.2901	26.01	-3.14	38214.500	1.5	67000.630	2.5
347.2978	15.01	-.77	76764.960	2.0	105550.450	2.0
347.2989	25.00	-2.85	37737.220	3.5	66522.620	4.5
347.3002	26.00	-3.32	26339.682	2.0	55124.974	3.0
347.3020	41.00	.36	13066.518	0.0	41859.902	0.0
347.3030	90.01	-.52	8952.985	0.0	37746.287	0.0
347.3081	29.01	-2.75	108014.660	3.0	136799.300	2.0
347.3106	22.00	-2.77	19322.988	2.0	48107.420	2.0
347.3220	42.00	-.40	16534.792	0.0	45326.518	0.0
347.3220	64.01	-.41	241.973	0.0	29033.699	0.0
347.3228	26.00	-3.85	25899.974	4.0	54683.390	4.0
347.3244	25.01	-3.28	44899.820	3.0	73683.110	4.0
347.3274	23.00	-6.25	8715.720	3.5	37498.760	2.5
347.3280	27.00	-.58	21920.090	4.5	50703.080	5.5
347.3390	22.00	-.96	18192.577	6.0	46974.650	5.0
347.3410	90.01	-.95	9598.245	0.0	38388.396	0.0
347.3423	12.02	-.29	559987.100	1.0	588768.900	2.0
347.3439	27.00	-2.32	15774.040	1.5	44555.710	1.5
347.3495	28.01	-2.56	70778.120	3.5	99559.330	2.5
347.3495	23.03	.37	255445.500	3.0	284226.700	3.0
347.3500	26.00	-3.69	7985.783	2.0	36766.950	3.0
347.3532	28.01	-1.70	105861.190	2.5	134642.090	3.5
347.3613	24.00	-1.22	21847.880	2.0	50628.110	3.0
347.3621	26.00	-3.69	24118.815	4.0	52898.980	5.0
347.3640	10.03	-1.86	642472.000	2.5	671252.000	3.5
347.3750	44.00	-.15	10566.135	0.0	39353.469	0.0
347.3816	26.01	-.76	70314.740	4.5	99093.290	5.5
347.3834	26.02	-1.53	89907.850	4.0	118686.250	4.0
347.3834	26.02	-3.56	89907.850	5.0	118686.250	4.0
347.3900	73.00	-1.26	9920.875	0.0	38706.966	0.0
347.3918	24.02	-3.88	71321.800	3.0	100099.500	4.0
347.3960	62.01	-1.34	2984.328	0.0	31769.921	0.0
347.3970	27.00	-1.50	0.000	4.5	28777.270	3.5
347.4040	27.00	.06	4690.180	2.5	33466.870	3.5
347.4057	25.01	-1.06	14593.820	3.0	43370.370	3.0
347.4143	25.01	-1.19	14781.190	2.0	43557.030	1.0
347.4214	28.01	-3.24	106007.890	2.5	134783.140	2.5
347.4220	58.01	-.97	3306.958	0.0	32090.397	0.0
347.4233	28.01	-2.34	100078.780	1.5	128853.870	2.5
347.4259	26.00	-4.52	23244.826	1.0	52019.706	1.0
347.4276	27.00	-4.36	25739.930	2.5	54514.670	3.5
347.4308	25.01	-2.41	52373.180	3.0	81147.650	2.0
347.4364	24.00	-.96	24299.890	2.0	53073.900	3.0
347.4375	26.00	-3.87	22996.661	4.0	51770.577	3.0
347.4406	26.02	-4.02	89783.590	4.0	118557.250	5.0
347.4528	27.00	-2.39	4690.180	2.5	33462.830	2.5
347.4560	7.03	-.55	465301.000	0.0	494081.623	0.0
347.4575	18.02	-2.39	242923.960	1.0	271696.220	0.0
347.4578	29.00	-1.86	44522.951	0.0	73303.424	0.0
347.4704	22.00	-5.38	11531.760	2.0	40302.950	3.0
347.4707	24.00	-.60	21856.940	3.0	50628.110	3.0
347.4721	24.01	-3.41	38563.150	4.5	67334.200	3.5
347.4763	20.00	-1.85	15210.063	1.0	43980.767	1.0
347.4780	45.00	.02	3387.616	0.0	32166.416	0.0
347.4796	22.01	-3.70	40074.710	3.5	68845.140	2.5
347.4853	24.00	-1.28	24303.940	3.0	53073.900	3.0
347.4889	38.01	-.46	24516.650	0.0	53294.548	0.0
347.4951	27.00	-4.02	17233.680	3.5	46002.830	2.5
347.5030	42.00	.30	18389.915	0.0	47166.645	0.0
347.5034	21.00	-3.71	16141.040	2.5	44909.500	2.5
347.5050	29.01	-3.84	88362.030	2.0	117130.360	2.0
347.5057	25.01	-3.56	52379.380	2.0	81147.650	2.0
347.5100	24.01	-1.93	19631.280	1.5	48399.190	1.5
347.5169	28.00	-3.95	27943.543	1.0	56710.889	2.0
347.5198	15.01	-1.42	103630.600	2.0	132397.700	2.0
347.5242	10.01	-2.34	252953.540	1.5	281720.280	1.5
347.5250	26.01	-4.74	13673.210	1.5	42439.880	.5
347.5259	24.01	-1.35	45669.540	1.5	74436.140	2.5
347.5302	8.02	-1.52	365846.460	4.0	394612.700	3.0
347.5451	26.00	-1.31	704.003	2.0	29469.010	2.0
347.5479	24.00	-1.23	37244.170	4.0	66008.950	3.0
347.5508	22.00	-4.38	19421.576	3.0	48186.110	4.0
347.5556	23.00	-.87	8578.520	2.5	37342.660	2.5
347.5560	24.01	-3.77	40228.440	5.5	68992.550	4.5
347.5580	41.00	-.11	12905.203	0.0	41677.379	0.0
347.5642	26.00	-.54	17550.180	3.0	46313.610	2.0
347.5645	23.03	-.05	255463.300	2.0	284226.700	3.0
347.5671	18.02	-2.49	243424.970	3.0	272188.160	2.0
347.5680	25.02	-4.89	148206.900	5.5	176970.010	5.5
347.5680	58.01	-1.04	1855.123	0.0	30626.471	0.0
347.5740	26.01	-3.70	13474.430	2.5	42237.050	3.5
347.5757	18.01	-4.10	173393.380	2.5	202155.860	2.5
347.5759	23.01	-4.69	23391.090	5.0	52153.550	5.0
347.5767	25.00	-1.45	30354.210	3.5	59116.600	2.5
347.5840	74.00	-.93	12098.628	0.0	40868.652	0.0
347.5865	26.00	-1.95	19621.004	5.0	48382.585	5.0
347.5873	26.00	-2.08	22946.810	1.0	51708.330	2.0
347.5909	29.01	-3.32	121981.680	2.0	150742.900	3.0
347.5999	29.00	-.42	44522.951	0.0	73291.659	0.0
347.6009	27.00	-4.14	14036.280	1.5	42796.670	1.5
347.6025	25.00	-3.98	37148.660	5.5	65908.920	4.5
347.6086	28.01	-2.04	107142.210	1.5	135901.960	2.5
347.6134	23.00	-1.80	8715.720	3.5	37475.080	3.5
347.6251	23.01	-2.11	18269.490	1.0	47027.880	0.0
347.6296	23.01	-6.95	18293.870	2.0	47051.890	3.0
347.6310	70.01	-2.35	0.000	0.0	28766.134	0.0
347.6314	26.00	-2.03	18378.187	2.0	47136.058	2.0
347.6321	28.00	-4.66	27414.893	2.0	56172.704	3.0
347.6339	26.00	-1.09	29056.312	3.0	57813.970	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
347.6350	27.00	-.40	26232.050	3.5	54989.620	3.5
347.6393	10.01	-3.27	279137.620	3.5	307894.840	2.5
347.6426	24.00	-1.84	31049.330	6.0	59806.270	5.0
347.6440	75.00	-.44	14921.641	0.0	43686.700	0.0
347.6443	29.01	-2.58	117666.600	4.0	146423.400	4.0
347.6444	22.00	-2.26	8602.340	2.0	37359.130	2.0
347.6460	77.00	-1.54	6291.287	0.0	35056.180	0.0
347.6461	23.00	-4.41	21032.520	3.5	49789.170	3.5
347.6530	90.01	-1.09	6613.917	0.0	35378.231	0.0
347.6617	28.00	-.27	29832.810	3.0	58588.168	3.0
347.6636	18.02	-2.24	240257.590	1.0	269012.800	2.0
347.6680	22.00	-3.58	19573.968	4.0	48328.810	4.0
347.6681	23.00	-3.41	22121.170	4.5	50876.000	4.5
347.6685	27.01	-3.81	18031.500	2.0	46786.300	1.0
347.6704	26.00	-1.76	978.076	0.0	29732.721	1.0
347.6742	10.01	-4.20	279422.890	.5	308177.220	1.5
347.6746	28.00	-2.14	29013.228	2.0	57767.520	1.0
347.6747	18.01	.10	155043.070	2.5	183797.360	2.5
347.6790	55.00	-2.47	0.000	0.0	28762.163	0.0
347.6840	58.01	.72	10566.135	0.0	39327.684	0.0
347.6841	24.01	-4.06	45730.740	2.5	74484.250	2.5
347.6847	28.00	-1.50	28068.091	4.0	56821.553	3.0
347.6849	8.01	-3.96	246028.950	3.5	274782.400	3.5
347.6857	26.00	-1.63	20874.482	3.0	49627.861	4.0
347.6893	28.01	-4.47	99132.780	5.5	127885.860	4.5
347.6936	28.01	-4.19	98467.250	3.5	127219.970	3.5
347.6963	22.01	-2.54	1215.580	4.5	29968.080	4.5
347.7005	26.00	-2.45	19552.474	1.0	48304.623	2.0
347.7140	75.00	.10	27020.269	0.0	55779.537	0.0
347.7147	24.00	-1.20	24286.540	1.0	53037.520	2.0
347.7154	24.00	.04	31055.350	5.0	59806.270	5.0
347.7187	22.01	-1.07	983.800	2.5	29734.450	3.5
347.7217	23.01	-3.63	20980.920	2.0	49731.320	2.0
347.7220	73.00	-.59	15324.929	0.0	44083.535	0.0
347.7241	24.00	-1.06	25177.390	4.0	53927.590	4.0
347.7282	22.00	-1.35	16961.420	3.0	45711.280	4.0
347.7334	23.02	-1.05	63303.120	4.5	92052.550	4.5
347.7346	26.00	-4.83	23270.374	0.0	52019.706	1.0
347.7450	58.01	-.52	7017.204	0.0	35773.908	0.0
347.7450	73.00	-.95	9678.902	0.0	38435.606	0.0
347.7492	18.02	-2.20	242923.960	1.0	271672.080	1.0
347.7508	23.01	-1.33	18353.890	3.0	47101.880	2.0
347.7577	28.01	-3.97	106369.300	1.5	135116.720	2.5
347.7629	27.00	-2.68	25568.680	5.5	54315.670	5.5
347.7647	10.01	-.18	251522.120	1.5	280268.960	2.5
347.7770	77.00	-1.14	10485.478	0.0	39239.536	0.0
347.7822	26.02	-3.28	89697.520	3.0	118442.920	3.0
347.7831	27.00	-.21	25937.590	4.5	54682.910	4.5
347.7853	26.00	-2.56	17927.378	1.0	46672.523	0.0
347.7870	22.00	-3.86	17215.440	5.0	45960.439	6.0
347.7879	28.00	.09	29084.478	4.0	57829.405	5.0
347.7972	24.00	-4.98	25038.610	5.0	53782.770	4.0
347.8058	28.01	-2.02	100078.780	1.5	128822.230	1.5
347.8089	24.00	-4.17	24897.550	4.0	53640.740	3.0
347.8120	90.01	-.91	9114.300	0.0	37865.464	0.0
347.8159	24.01	-3.15	38269.670	3.5	67012.280	2.5
347.8213	29.01	-4.43	108335.430	2.0	137077.600	3.0
347.8229	18.01	-2.73	155351.030	1.5	184093.060	.5
347.8233	15.01	-1.64	103630.600	2.0	132372.600	1.0
347.8257	12.02	-2.62	534197.700	1.0	562939.500	2.0
347.8300	40.01	-1.23	725.918	0.0	29475.595	0.0
347.8314	28.00	-1.90	29888.505	2.0	58629.840	2.0
347.8337	28.00	-2.03	15734.018	1.0	44475.158	2.0
347.8349	28.00	-.56	29888.505	2.0	58629.550	3.0
347.8364	26.00	-2.11	19621.004	5.0	48361.920	4.0
347.8378	17.01	-2.16	149798.300	2.0	178539.100	2.0
347.8500	40.01	-.43	9678.902	0.0	38426.926	0.0
347.8529	26.00	-3.17	26140.164	3.0	54879.720	2.0
347.8530	76.00	.04	17583.339	0.0	46331.115	0.0
347.8549	27.00	-.51	18389.570	1.5	47128.960	2.5
347.8549	26.01	-4.15	18886.750	.5	47626.140	.5
347.8639	25.00	-4.83	37148.660	5.5	65887.310	5.5
347.8647	25.00	-2.82	34845.260	.5	63583.840	1.5
347.8690	7.03	.02	377206.000	0.0	405952.453	0.0
347.8690	41.00	-.22	5887.999	0.0	34634.452	0.0
347.8736	27.00	-1.36	15184.040	2.5	43921.890	2.5
347.8762	24.00	-1.33	24299.890	2.0	53037.520	2.0
347.8777	27.00	-3.18	17233.680	3.5	45971.190	3.5
347.8778	23.02	-2.86	63315.050	3.5	92052.550	4.5
347.8790	40.00	-.47	4355.506	0.0	33101.133	0.0
347.8793	26.00	-3.58	19552.474	1.0	48289.852	1.0
347.8811	15.01	-1.30	76813.220	1.0	105550.450	2.0
347.8821	27.00	-2.97	25739.930	2.5	54477.070	3.5
347.8840	70.01	.61	30085.255	0.0	58830.469	0.0
347.8859	22.00	-4.79	19322.988	2.0	48059.820	3.0
347.8910	45.00	-.35	3226.301	0.0	31970.937	0.0
347.8920	22.00	-1.27	8436.618	0.0	37172.947	1.0
347.8923	29.01	-1.28	117666.600	4.0	146402.900	5.0
347.8946	23.01	-1.63	25191.080	2.0	53927.190	3.0
347.8947	11.02	-1.41	442710.500	1.5	471446.600	1.5
347.8976	22.00	-2.05	19322.988	2.0	48058.850	1.0
347.8990	72.01	.28	17260.709	0.0	46004.684	0.0
347.9020	40.01	-.66	4194.191	0.0	32937.918	0.0
347.9060	28.00	-4.15	14728.847	0.0	43464.019	1.0
347.9102	25.00	-2.39	38120.180	4.5	66855.000	4.5
347.9130	24.00	-1.50	24277.060	0.0	53011.650	1.0
347.9170	90.01	-.91	6613.917	0.0	35356.404	0.0
347.9253	24.00	-2.33	24303.940	3.0	53037.520	2.0
347.9255	28.00	-.58	28068.091	4.0	56801.654	5.0
347.9280	72.01	-1.10	2984.328	0.0	31725.907	0.0
347.9294	9.02	-4.95	414897.720	3.5	443630.960	3.5
347.9390	40.01	.36	5726.684	0.0	34467.354	0.0
347.9430	42.00	.04	16615.449	0.0	45355.789	0.0
347.9519	10.01	-.22	276677.130	.5	305408.510	.5
347.9530	62.01	-1.45	2177.753	0.0	30917.267	0.0
347.9559	28.01	-4.62	99154.810	4.5	127885.860	4.5
347.9560	41.01	.12	10485.478	0.0	39224.744	0.0
347.9570	27.00	-2.50	14399.280	.5	43130.240	.5
347.9610	58.01	-1.28	0.000	0.0	28738.853	0.0
347.9641	28.00	-3.99	29013.228	2.0	57743.596	3.0
347.9645	25.00	-2.55	35114.980	2.5	63845.320	1.5
347.9695	26.00	-2.54	23783.617	5.0	52513.546	6.0
347.9724	28.01	-4.90	109846.000	3.5	138575.690	2.5
347.9822	24.00	-3.37	31355.210	2.0	60084.090	1.0
347.9831	23.01	-1.74	8640.210	2.0	37369.010	2.0
347.9871	22.00	-1.94	16961.420	3.0	45689.890	3.0
347.9914	26.01	-3.98	13673.210	1.5	42401.330	1.5
347.9949	18.02	-1.74	211563.830	1.0	240291.660	2.0
348.0011	27.00	-1.54	15184.040	2.5	43911.360	1.5
348.0039	55.00	-3.43	0.000	0.0	28735.310	0.0
348.0050	90.00	-.43	8065.752	0.0	36800.971	0.0
348.0090	42.00	0.00	18147.942	0.0	46882.831	0.0
348.0128	26.00	-4.68	23110.925	3.0	51837.279	3.0
348.0146	21.00	-2.39	16096.860	1.5	44823.060	1.5
348.0169	28.00	-.05	29084.478	4.0	57810.494	4.0
348.0170	28.00	-1.19	30392.052	1.0	59118.060	2.0
348.0195	22.00	-1.69	12118.394	4.0	40844.190	3.0
348.0197	25.00	-3.34	37630.620	4.5	66356.400	4.5
348.0215	8.01	-2.75	232536.060	1.5	261261.700	1.5
348.0270	58.01	-1.12	0.000	0.0	28733.403	0.0
348.0278	24.00	-1.48	24286.540	1.0	53011.650	1.0
348.0315	28.01	-2.40	92325.850	3.5	121050.660	2.5
348.0334	28.01	-3.26	74300.930	1.5	103025.580	2.5
348.0380	75.00	-.03	16534.792	0.0	45267.287	0.0
348.0410	40.01	-.32	7420.492	0.0	36152.739	0.0
348.0470	25.00	-2.53	35041.370	3.5	63764.900	2.5
348.0505	18.01	-.99	158167.710	1.5	186890.950	2.5
348.0520	73.00	-.70	5968.656	0.0	34699.995	0.0
348.0526	22.00	-.41	8602.340	2.0	37325.407	2.0
348.0527	25.00	-3.51	37164.250	6.5	65887.310	5.5
348.0560	18.02	.37	196679.800	3.0	225402.590	3.0
348.0718	10.01	.08	276677.130	.5	305398.620	1.5
348.0751	18.02	-2.48	240257.590	1.0	268978.800	1.0
348.0760	18.02	-3.71	240291.660	2.0	269012.800	2.0
348.0784	28.01	-2.08	100078.780	1.5	128799.720	.5
348.0803	25.01	-3.89	53698.700	2.0	82419.480	3.0
348.0850	75.00	-.37	14518.354	0.0	43246.969	0.0
348.0883	28.01	-2.95	71770.830	2.5	100490.950	1.5
348.0885	28.00	-3.89	33112.368	3.0	61832.470	4.0
348.0888	22.01	-1.77	8710.470	1.5	37430.550	.5
348.0980	58.01	.13	12259.943	0.0	40987.485	0.0
348.1043	22.00	-2.12	20006.032	2.0	48724.830	1.0
348.1050	41.00	-1.10	4920.109	0.0	33647.074	0.0
348.1103	22.00	-.78	20006.032	2.0	48724.340	2.0
348.1128	19.02	-1.26	212725.400	1.5	241443.500	2.5
348.1150	40.01	.47	6371.944	0.0	35098.083	0.0
348.1150	46.00	.31	10001.532	0.0	38727.671	0.0
348.1160	58.01	-.72	5404.054	0.0	34130.111	0.0
348.1169	26.02	-4.95	92523.910	5.0	121241.670	4.0
348.1175	28.01	-4.12	109846.000	3.5	138563.710	3.5
348.1240	8.01	-4.14	232462.830	2.5	261180.000	3.5
348.1255	25.00	-1.57	37737.220	3.5	66454.270	3.5
348.1280	64.01	.34	4758.794	0.0	33483.861	0.0
348.1292	26.00	-3.13	25091.620	0.0	53808.370	1.0
348.1300	44.00	-.51	7985.094	0.0	36709.996	0.0
348.1302	22.00	-6.97	6842.964	5.0	35559.627	5.0
348.1330	25.00	-1.80	34423.270	3.5	63139.700	2.5
348.1430	27.00	-2.82	26450.020	2.5	55165.630	2.5
348.1522	27.00	-2.40	26232.050	3.5	54946.900	2.5
348.1539	24.00	-.73	24200.230	6.0	52914.940	6.0
348.1564	26.00	-2.85	18378.187	2.0	47092.693	3.0
348.1591	25.00	-4.70	37789.930	2.5	66504.210	1.5
348.1606	25.01	-4.76	79458.380	2.0	108172.540	1.0
348.1614	29.00	-1.67	30569.200	0.0	59291.511	0.0
348.1625	10.01	-3.17	279422.890	.5	308136.890	1.5
348.1663	22.00	-.79	20126.055	3.0	48839.740	3.0
348.1750	69.01	-.69	8711.012	0.0	37432.201	0.0
348.1790	42.00	.19	20003.065	0.0	48723.924	0.0
348.1800	64.01	.12	3952.218	0.0	32672.995	0.0
348.1820	74.00	-.08	19115.832	0.0	47836.444	0.0
348.1830	23.00	-3.30	22313.990	5.5	51026.300	5.5
348.1859	25.01	-2.83	79458.380	2.0	108170.450	2.0
348.1897	24.00	-2.33	24299.890	2.0	53011.650	1.0
348.1915	26.01	-4.40	32875.630	6.5	61587.240	5.5
348.1933	10.01	-.25	224087.020	1.5	252798.480	.5
348.1953	22.00	-7.26	6742.757	4.0	35454.051	4.0
348.2047	26.01	-5.01	16369.390	3.5	45079.910	2.5
348.2052	25.01	-1.82	43536.900	4.0	72247.380	3.0
348.2110	76.00	-.89	10082.190	0.0	38800.410	0.0
348.2140	58.01	-.67	3629.588	0.0	32347.560	0.0
348.2199	27.00	-2.07	22475.360	4.5	51184.630	3.5
348.2214	18.02	-1.45	240291.660	2.0	269000.800	3.0
348.2230	75.00	.30	22019.503	0.0	50736.733	0.0
348.2230	76.00	-1.01	11292.053	0.0	40009.283	0.0
348.2322	26.02	-2.93	122829.550	3.0	151537.800	4.0
348.2350	58.01	-.30	4758.794	0.0	33475.034	0.0
348.2362	24.01	-2.92	38362.560	1.5	67070.480	1.5
348.2388	26.01	-4.41	36126.410	1.5	64834.120	1.5
348.2400	42.00	-.52	11775.998	0.0	40491.826	0.0
348.2427	24.00	-4.43	24833.860	3.0	53541.250	2.0
348.2530	26.01	-3.95	72043.210	1.5	100749.750	2.5
348.2550	90.01	-.86	9517.587	0.0	38232.178	0.0
348.2576	24.01	-1.10	39877.280	3.5	68583.440	2.5
348.2583	27.00	-3.85	15774.040	1.5	44480.140	2.5
348.2600	64.01	-.48	3387.616	0.0	32101.795	0.0
348.2625	24.01	-2.75	35356.060	1.5	64061.820	1.5
348.2634	27.00	-.16	25739.930	2.5	54445.610	2.5
348.2668	24.01	-1.99	45730.740	2.5	74436.140	2.5
348.2674	26.02	-4.18	122829.550	3.0	151534.900	2.0
348.2701	28.00	-1.23	29084.478	4.0	57789.611	4.0
348.2706	28.01	-4.66	70635.460	2.5	99340.550	3.5
348.2718	28.01	-4.40	71770.830	2.5	100475.820	3.5
348.2760	90.01	-1.81	1774.465	0.0	30487.325	0.0
348.2768	26.02	-3.38	122829.550	3.0	151534.130	3.0
348.2810	40.00	-.97	564.603	0.0	29277.051	0.0
348.2856	25.00	-2.53	37630.620	4.5	66354.470	3.5
348.2922	25.01	-.97	14781.190	2.0	43484.500	2.0
348.2980	7.03	-.20	377206.000	0.0	405917.046	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
348.2988	22.00	-2.83	0.000	2.0	28702.768	3.0
348.3009	26.00	-3.09	7376.762	4.0	36079.353	3.0
348.3010	40.00	-.05	7985.094	0.0	36695.893	0.0
348.3029	23.01	-5.46	18353.890	3.0	47056.320	4.0
348.3083	25.00	-.47	17052.290	4.5	45754.270	3.5
348.3088	9.02	-3.21	384493.060	1.5	413195.000	2.5
348.3133	27.00	-1.41	18389.570	1.5	47091.140	.5
348.3160	44.00	-1.61	1129.205	0.0	29838.768	0.0
348.3164	28.01	-3.24	105838.060	3.5	134539.370	2.5
348.3248	24.00	-.43	21856.940	3.0	50557.560	4.0
348.3290	44.00	-1.61	1129.205	0.0	29837.696	0.0
348.3308	24.00	-4.80	24940.610	2.0	53640.740	3.0
348.3364	28.00	-3.36	29888.505	2.0	58588.168	3.0
348.3387	27.00	-.39	26250.490	.5	54949.970	1.5
348.3405	27.00	-.61	4142.660	3.5	32841.990	4.5
348.3430	78.00	-1.23	10001.532	0.0	38708.869	0.0
348.3481	21.00	-1.69	16210.800	3.5	44909.500	2.5
348.3506	24.00	-1.08	25106.340	3.0	53804.840	3.0
348.3509	24.00	-.63	28637.000	3.0	57335.470	4.0
348.3514	28.00	-1.10	28068.091	4.0	56766.523	4.0
348.3540	40.01	.20	6049.314	0.0	34755.745	0.0
348.3554	10.01	-4.10	279324.890	1.5	308022.990	.5
348.3566	23.01	-4.31	18353.890	3.0	47051.890	3.0
348.3622	28.00	-2.06	29832.810	3.0	58530.350	3.0
348.3654	24.01	-3.10	38315.000	2.5	67012.280	2.5
348.3670	42.00	-.03	18147.942	0.0	46853.302	0.0
348.3689	25.00	-2.58	30419.610	2.5	59116.600	2.5
348.3705	22.00	-1.09	18141.229	5.0	46838.090	4.0
348.3761	29.00	-.27	44442.294	0.0	73146.904	0.0
348.3770	28.00	-1.30	2216.519	2.0	30912.838	1.0
348.3777	22.01	.13	34748.500	4.5	63444.760	3.5
348.3794	27.00	-2.32	1406.840	2.5	30102.960	2.5
348.3826	25.01	-2.96	53017.160	1.0	81713.020	0.0
348.3832	29.01	-2.12	117231.690	1.0	145927.500	2.0
348.3840	42.00	.28	18728.600	0.0	46932.559	0.0
348.3945	26.02	-4.10	122843.030	1.0	151537.910	0.0
348.4040	45.00	-1.71	3226.301	0.0	31928.612	0.0
348.4050	41.01	-.73	6129.972	0.0	34832.201	0.0
348.4081	18.02	-1.15	211563.830	1.0	240257.590	1.0
348.4094	26.02	-3.74	122843.030	1.0	151536.680	1.0
348.4127	24.01	-2.00	19798.010	2.5	48491.390	2.5
348.4161	24.01	-2.79	45730.740	2.5	74423.840	3.5
348.4199	16.01	-2.63	130134.080	2.5	158826.870	2.5
348.4222	30.02	-.98	234866.900	1.0	263559.500	1.0
348.4222	30.02	-2.14	234866.900	1.0	263559.500	1.0
348.4311	26.02	-4.03	122843.030	1.0	151534.900	2.0
348.4320	23.01	-2.46	23391.090	5.0	52082.880	4.0
348.4332	26.01	-4.23	33466.500	4.5	62158.190	4.5
348.4376	22.00	-4.82	15108.121	3.0	43799.455	2.0
348.4389	23.00	-4.55	21963.500	3.5	50654.720	2.5
348.4400	27.00	-1.59	21920.090	4.5	50611.220	3.5
348.4480	77.00	-1.11	9759.560	0.0	38458.247	0.0
348.4612	37.00	-7.72	0.000	0.0	28697.600	0.0
348.4620	73.00	-2.49	0.000	0.0	28697.534	0.0
348.4624	22.00	-1.08	17215.440	5.0	45904.730	6.0
348.4637	28.01	-2.70	105838.060	3.5	134527.240	3.5
348.4645	23.01	-2.80	8841.970	3.0	37531.090	4.0
348.4680	25.01	-2.90	53698.700	2.0	82387.530	3.0
348.4740	58.01	-.80	2823.013	0.0	31519.559	0.0
348.4757	22.00	-1.25	18037.225	4.0	46725.420	3.0
348.4842	26.00	-2.04	19788.248	4.0	48475.740	3.0
348.4884	28.00	-4.06	22102.349	4.0	50789.500	4.0
348.4886	18.02	-2.63	240291.660	2.0	268978.800	1.0
348.4887	37.00	-7.90	0.000	0.0	28695.335	0.0
348.4900	7.03	-.68	377206.000	0.0	405901.228	0.0
348.4980	26.00	-3.00	19552.474	1.0	48238.832	2.0
348.5042	22.00	-1.99	19421.576	3.0	48107.420	2.0
348.5050	58.01	-.42	0.000	0.0	28693.993	0.0
348.5084	28.01	-3.90	100609.010	2.5	129294.510	2.5
348.5087	10.01	-1.91	277325.600	1.5	306011.070	.5
348.5096	24.02	-3.69	71736.000	5.0	100421.400	5.0
348.5099	27.00	-1.47	26597.640	1.5	55283.020	2.5
348.5109	28.00	-.54	29832.810	3.0	58518.110	4.0
348.5126	24.00	-2.27	24200.230	6.0	52885.390	5.0
348.5200	90.01	-.82	8307.725	0.0	37000.483	0.0
348.5270	78.00	-.80	10082.190	0.0	38774.372	0.0
348.5278	17.01	-4.84	158177.100	1.0	186861.000	2.0
348.5320	40.01	-.41	7420.492	0.0	36112.262	0.0
348.5342	26.00	-.45	17726.985	2.0	46410.366	1.0
348.5364	27.00	.76	25138.880	6.5	53822.080	7.5
348.5389	25.01	-2.37	39813.380	2.0	68496.370	1.0
348.5468	24.00	-3.68	27597.220	3.0	56279.560	4.0
348.5504	10.01	-2.34	279324.890	1.5	308006.930	.5
348.5507	21.00	-3.35	16141.040	2.5	44823.060	1.5
348.5610	25.01	-3.95	52373.180	3.0	81054.350	2.0
348.5614	22.00	-1.21	17075.310	4.0	45756.450	5.0
348.5617	20.01	-2.18	60533.020	.5	89214.130	.5
348.5619	27.01	-3.68	17771.500	3.0	46452.600	2.0
348.5619	24.00	-3.47	24282.340	4.0	52963.440	4.0
348.5689	22.00	-1.15	8492.421	1.0	37172.947	1.0
348.5696	27.00	-1.83	15774.040	1.5	44454.510	.5
348.5720	25.00	-1.91	35165.050	1.5	63845.320	1.5
348.5730	39.00	.80	17018.737	0.0	45707.132	0.0
348.5739	26.01	-2.67	36126.410	1.5	64806.520	.5
348.5760	70.01	-.11	32182.351	0.0	60870.499	0.0
348.5777	25.00	-2.06	33825.490	2.5	62505.290	3.5
348.5811	23.01	-1.68	20522.140	1.0	49201.660	2.0
348.5820	68.00	-.57	403.288	0.0	29090.943	0.0
348.5828	23.00	-5.67	2153.200	1.5	30832.580	2.5
348.5863	23.00	-1.62	13801.530	1.5	42480.620	.5
348.5878	28.00	-1.79	1713.080	1.0	30392.052	1.0
348.5918	23.01	-1.40	8841.970	3.0	37520.610	3.0
348.5930	41.00	-.06	13389.148	0.0	42075.897	0.0
348.5930	42.00	-.51	11050.080	0.0	39736.829	0.0
348.5942	25.01	-2.63	52373.180	3.0	81051.620	3.0
348.5974	28.01	-4.57	105861.190	2.5	134539.370	2.5
348.6050	23.01	-3.76	25191.080	2.0	53868.630	2.0
348.6072	26.01	-4.28	32909.870	5.5	61587.240	5.5
348.6092	28.01	-4.34	92373.450	2.5	121050.660	2.5
348.6187	24.00	-4.48	25106.340	3.0	53782.770	4.0
348.6199	25.00	-3.55	34463.370	1.5	63139.700	2.5
348.6200	64.00	-.41	483.945	0.0	29168.473	0.0
348.6217	10.01	-2.58	279218.660	2.5	307894.840	2.5
348.6364	25.01	-2.74	52379.380	2.0	81054.350	2.0
348.6409	24.02	-4.04	71166.100	2.0	99840.700	3.0
348.6467	24.01	-2.78	38396.360	.5	67070.480	1.5
348.6552	26.00	-1.98	17927.378	1.0	46600.800	1.0
348.6568	27.00	-.91	21920.090	4.5	50593.380	4.5
348.6611	27.00	-3.20	26232.050	3.5	54904.990	2.5
348.6696	25.01	-4.07	52379.380	2.0	81051.620	3.0
348.6825	14.02	.45	201599.480	3.0	230270.660	4.0
348.6927	14.02	.26	201598.280	2.0	230268.620	3.0
348.6972	14.02	.12	201597.730	1.0	230267.700	2.0
348.6993	25.01	-2.95	39826.570	1.0	68496.370	1.0
348.7003	23.00	-.96	13810.900	.5	42480.620	.5
348.7039	14.02	-.62	201598.280	2.0	230267.700	2.0
348.7040	29.01	-1.99	117231.690	1.0	145901.100	1.0
348.7073	14.02	-.64	201599.480	3.0	230268.620	3.0
348.7076	28.01	-4.65	92373.450	2.5	121042.570	1.5
348.7151	26.02	-3.23	118686.250	4.0	147354.750	5.0
348.7185	14.02	-2.16	201599.480	3.0	230267.700	2.0
348.7200	13.01	-2.72	121480.300	3.0	150148.400	2.0
348.7200	13.01	-1.54	121480.300	3.0	150148.400	3.0
348.7200	13.01	-.11	121480.300	3.0	150148.400	4.0
348.7224	25.01	-3.32	52383.720	4.0	81051.620	3.0
348.7250	76.00	-.59	14760.326	0.0	43436.217	0.0
348.7273	13.01	-1.17	121480.900	2.0	150148.400	2.0
348.7273	13.01	-.64	121480.900	2.0	150148.400	3.0
348.7281	27.00	-2.65	25269.250	3.5	53936.680	2.5
348.7309	13.01	-.44	121481.200	1.0	150148.400	2.0
348.7314	18.01	-1.85	157673.320	2.5	186340.480	1.5
348.7334	23.03	-2.06	226796.300	2.0	255463.300	2.0
348.7380	69.00	-.84	0.000	0.0	28674.822	0.0
348.7449	28.01	-3.13	105861.190	2.5	134527.240	3.5
348.7566	29.00	-1.21	46620.047	0.0	75293.339	0.0
348.7570	72.01	-.32	17744.654	0.0	46417.914	0.0
348.7598	20.00	-1.63	15315.943	2.0	43980.767	1.0
348.7608	28.01	-2.72	70778.120	3.5	99442.860	4.5
348.7613	23.03	-.20	225804.100	2.0	254468.800	2.0
348.7635	27.00	-.87	26232.050	3.5	54896.570	3.5
348.7657	25.00	-4.66	37789.930	2.5	66454.270	3.5
348.7703	24.00	-2.89	24056.110	5.0	52720.070	4.0
348.7706	27.00	-1.49	15184.040	2.5	43847.980	3.5
348.7719	25.01	-4.29	65567.070	2.0	94230.900	2.0
348.7802	22.00	-3.28	11639.804	3.0	40302.950	3.0
348.7836	25.00	-2.31	38120.180	4.5	66783.050	3.5
348.7915	29.01	-4.17	110365.980	2.0	139028.200	2.0
348.7955	27.00	-2.79	16195.680	.5	44857.570	.5
348.7958	25.00	-2.42	33825.490	2.5	62487.360	2.5
348.7984	26.01	-3.78	13673.210	1.5	42334.860	2.5
348.7998	9.02	-4.94	440582.120	4.5	469243.660	4.5
348.8031	28.01	-4.81	88171.880	4.5	116833.150	4.5
348.8144	18.01	-2.77	179931.770	1.5	208592.110	.5
348.8184	18.01	-2.99	179931.770	1.5	208591.780	1.5
348.8246	24.00	-2.69	24303.940	3.0	52963.440	4.0
348.8267	26.02	-4.61	89783.590	4.0	118442.920	3.0
348.8272	9.02	-3.23	440582.120	4.5	469241.410	5.5
348.8291	8.01	-3.82	232602.570	.5	261261.700	1.5
348.8293	28.00	-.56	29084.478	4.0	57743.596	3.0
348.8315	25.00	-1.41	17282.000	3.5	45940.930	2.5
348.8337	28.01	-4.81	98561.220	2.5	127219.970	3.5
348.8351	27.00	.10	21920.090	4.5	50578.730	3.5
348.8424	24.00	-1.15	23933.900	4.0	52591.940	5.0
348.8426	24.00	-3.42	27703.840	4.0	56361.860	5.0
348.8427	25.00	-2.72	34423.270	3.5	63081.280	2.5
348.8432	25.00	-.99	37737.220	3.5	66395.190	2.5
348.8440	29.01	-2.34	117231.690	1.0	145869.600	0.0
348.8443	25.01	-2.89	49427.320	4.0	78085.200	5.0
348.8463	25.01	-3.13	79512.730	3.0	108170.450	2.0
348.8550	58.01	-.17	7017.204	0.0	35682.409	0.0
348.8690	25.01	-1.09	14901.180	1.0	43557.030	1.0
348.8707	28.01	-2.76	67880.160	2.5	96535.870	3.5
348.8709	23.03	-3.81	257143.200	2.0	285798.900	2.0
348.8721	23.03	-.53	255445.500	3.0	284101.100	3.0
348.8736	26.00	-4.19	25899.974	4.0	54555.450	4.0
348.8782	8.01	-2.42	229946.600	2.5	258601.700	1.5
348.8858	29.00	-1.23	44522.951	0.0	73185.625	0.0
348.8912	26.02	-2.58	105895.350	1.0	134549.380	1.0
348.9007	28.01	-4.74	100078.780	1.5	128732.030	1.5
348.9071	26.02	-4.87	89697.520	3.0	118350.240	4.0
348.9087	24.01	-2.64	39824.520	4.5	68477.110	4.5
348.9090	41.01	-.64	7823.779	0.0	36484.547	0.0
348.9164	26.01	-3.89	32875.630	6.5	61527.590	6.5
348.9203	24.01	-3.98	36272.660	4.5	64924.300	3.5
348.9313	25.00	-3.95	34463.370	1.5	63114.110	1.5
348.9341	25.01	-2.25	44745.460	2.0	73395.970	2.0
348.9367	26.01	-3.17	33501.320	3.5	62151.610	2.5
348.9370	92.00	.08	0.000	0.0	28658.468	0.0
348.9399	27.00	.05	7442.410	3.5	36092.440	2.5
348.9403	28.01	-4.14	106133.140	1.5	134783.140	2.5
348.9407	26.00	-2.36	24118.815	4.0	52768.780	4.0
348.9412	25.00	-2.28	35114.980	2.5	63764.900	2.5
348.9437	24.01	-2.28	38362.560	1.5	67012.280	2.5
348.9444	25.01	-3.26	44745.460	2.0	73395.120	3.0
348.9476	26.02	-4.79	89907.850	4.0	118557.250	5.0
348.9476	26.02	-3.10	89907.850	5.0	118557.250	5.0
348.9486	24.01	-4.04	45669.540	1.5	74318.860	2.5
348.9500	23.03	-.58	226796.300	2.0	255445.500	3.0
348.9570	92.01	-.96	5726.684	0.0	34383.510	0.0
348.9664	26.00	-.85	23783.617	5.0	52431.470	6.0
348.9732	28.00	-1.29	29320.782	3.0	57966.080	3.0
348.9739	22.01	-2.25	1087.210	3.5	29734.450	3.5
348.9770	46.00	-.19	11614.683	0.0	40269.867	0.0
348.9862	23.00	-3.41	8715.720	3.5	37361.950	4.5
348.9936	23.01	-1.84	20622.990	3.0	49268.610	4.0
349.0130	58.01	-.43	5565.369	0.0	34217.597	0.0
349.0185	27.00	-3.02	16467.900	4.5	45111.480	4.5
349.0237	26.02	-3.32	105906.230	2.0	134545.380	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
349.0284	26.02	-4.45	105906.230	2.0	134549.000	3.0
349.0337	9.02	-3.65	491131.370	4.5	519773.700	4.5
349.0396	28.00	-.72	29888.505	2.0	58530.350	3.0
349.0460	9.02	-3.74	491132.380	3.5	519773.700	3.5
349.0465	26.00	-.43	29056.312	3.0	57697.590	4.0
349.0524	15.01	-1.00	103756.900	1.0	132397.700	2.0
349.0548	26.02	-3.77	118686.250	4.0	147326.850	4.0
349.0575	26.00	-1.36	415.932	3.0	29056.312	3.0
349.0659	25.01	-3.29	44745.460	2.0	73385.150	1.0
349.0692	24.00	-1.65	28637.000	3.0	57276.420	3.0
349.0737	27.00	-2.80	4142.660	3.5	32781.710	2.5
349.0745	26.00	-2.50	18378.187	2.0	47017.170	3.0
349.0764	22.00	-3.20	0.000	2.0	28638.832	2.0
349.0778	27.00	-3.28	13795.520	2.5	42434.230	2.5
349.0835	22.00	-3.92	19421.576	3.0	48059.820	3.0
349.0860	75.00	-.52	17099.394	0.0	45745.630	0.0
349.0875	18.01	-1.03	144709.910	.5	173347.830	1.5
349.0884	26.02	-3.81	122898.840	2.0	151536.680	1.0
349.0889	23.03	.61	255463.300	2.0	284101.100	3.0
349.0892	25.01	-3.04	53781.700	3.0	82419.480	3.0
349.0930	73.00	-.93	10888.765	0.0	39534.427	0.0
349.0987	28.00	-1.98	29888.505	2.0	58525.507	1.0
349.1030	41.00	-.91	1129.205	0.0	29774.046	0.0
349.1059	22.01	-1.21	907.960	1.5	29544.370	2.5
349.1070	45.00	-.71	11856.655	0.0	40501.168	0.0
349.1101	26.02	-3.25	122898.840	2.0	151534.900	2.0
349.1112	22.00	-1.90	17075.310	4.0	45711.280	4.0
349.1155	24.00	-2.28	33040.100	2.0	61675.720	2.0
349.1187	22.01	-1.67	24961.340	1.5	53596.700	1.5
349.1195	26.02	-3.10	122898.840	2.0	151534.130	3.0
349.1242	18.01	.07	155351.030	1.5	183985.940	1.5
349.1243	22.00	-2.29	19573.968	4.0	48208.870	3.0
349.1298	28.01	-3.29	109148.050	4.5	137782.500	4.5
349.1316	27.00	-1.52	1809.330	1.5	30443.630	1.5
349.1414	8.01	-3.35	229968.200	1.5	258601.700	1.5
349.1480	41.00	-1.57	1129.205	0.0	29770.354	0.0
349.1500	76.00	.15	19761.092	0.0	48402.077	0.0
349.1536	18.01	.52	155043.070	2.5	183675.570	3.5
349.1551	25.00	-2.96	17451.520	2.5	46083.890	1.5
349.1570	24.00	-4.39	27816.880	5.0	56449.100	6.0
349.1760	23.00	-4.34	22121.170	4.5	50751.830	3.5
349.1770	42.00	.11	18389.915	0.0	47028.686	0.0
349.1914	13.01	-1.42	121480.300	3.0	150109.700	3.0
349.1950	64.01	-.60	0.000	0.0	28637.294	0.0
349.1958	26.00	-4.65	23110.925	3.0	51739.964	2.0
349.1977	27.00	-1.69	26232.050	3.5	54860.930	4.5
349.1987	13.01	-.51	121480.900	2.0	150109.700	3.0
349.1989	24.00	-2.42	31987.060	4.0	60615.840	3.0
349.2023	28.01	-4.70	109148.050	4.5	137776.550	3.5
349.2095	28.01	-4.99	105439.850	1.5	134067.760	1.5
349.2128	24.00	-3.27	31377.960	4.0	60005.600	5.0
349.2133	27.02	-4.86	79425.300	2.5	108052.900	2.5
349.2151	24.00	-2.56	25177.390	4.0	53804.840	3.0
349.2214	23.00	-1.34	8715.720	3.5	37342.660	2.5
349.2275	25.01	-1.05	52653.270	4.0	81279.710	4.0
349.2344	28.01	-4.16	105981.500	4.5	134607.370	4.5
349.2402	30.02	.21	233610.400	2.0	262235.800	3.0
349.2466	22.01	.02	34543.360	3.5	63168.230	2.5
349.2620	62.01	-1.74	1451.835	0.0	30083.636	0.0
349.2790	25.00	-3.00	38008.700	5.5	66630.920	4.5
349.2953	28.00	-.23	879.813	2.0	29500.690	1.0
349.3042	25.00	-3.14	37148.660	5.5	65768.810	4.5
349.3080	26.02	-4.32	105929.160	3.0	134549.000	3.0
349.3095	26.02	-4.43	118686.250	4.0	147305.970	3.0
349.3110	58.01	-.79	4436.164	0.0	33063.948	0.0
349.3157	23.01	-1.50	8640.210	2.0	37259.420	1.0
349.3161	25.00	-1.32	37737.220	3.5	66356.400	4.5
349.3165	26.02	-4.32	157684.300	2.0	186303.440	3.0
349.3220	28.01	-3.66	71770.830	2.5	100389.520	2.5
349.3275	22.00	-2.00	170.132	3.0	28788.372	4.0
349.3283	26.00	-3.30	11976.239	4.0	40594.413	4.0
349.3316	25.00	-2.57	34463.370	1.5	63081.280	2.5
349.3321	26.01	-4.80	73966.940	6.5	102584.810	5.5
349.3340	42.00	-.64	12259.943	0.0	40885.843	0.0
349.3349	25.00	-1.78	38120.180	4.5	66737.820	3.5
349.3390	27.01	-6.71	19189.900	4.0	47807.200	4.0
349.3416	26.02	-3.80	109570.840	2.0	138187.930	3.0
349.3467	26.01	-1.15	33466.500	4.5	62083.170	4.5
349.3483	26.02	-3.64	122921.370	1.0	151537.910	0.0
349.3520	90.01	-.76	7743.122	0.0	36367.547	0.0
349.3557	28.01	-4.03	105981.500	4.5	134597.430	5.5
349.3567	26.00	-3.73	22845.856	5.0	51461.707	4.0
349.3585	15.01	-1.20	103756.900	1.0	132372.600	1.0
349.3633	26.02	-3.30	122921.370	1.0	151536.680	1.0
349.3655	25.01	-2.63	65567.070	2.0	94182.200	3.0
349.3673	24.00	-1.45	33060.740	3.0	61675.720	2.0
349.3685	26.00	-1.58	21999.132	4.0	50614.020	4.0
349.3686	26.01	-4.98	50076.100	1.5	78690.980	2.5
349.3720	58.01	-.83	3629.588	0.0	32252.374	0.0
349.3722	22.00	-3.12	17075.310	4.0	45689.890	3.0
349.3803	9.02	-4.79	440069.510	1.5	468683.430	2.5
349.3850	26.02	-3.46	122921.370	1.0	151534.900	2.0
349.3891	28.01	-4.81	105439.850	1.5	134053.050	2.5
349.3965	24.00	-3.58	27597.220	3.0	56209.810	3.0
349.3982	23.00	-5.11	2220.130	2.5	30832.580	2.5
349.3990	92.00	-.52	564.603	0.0	29185.177	0.0
349.3992	27.00	-.22	25739.930	2.5	54352.300	3.5
349.4013	24.00	-2.83	31393.400	5.0	60005.600	5.0
349.4020	22.00	-3.44	19573.968	4.0	48186.110	4.0
349.4125	18.03	-3.39	257348.890	1.5	285960.170	.5
349.4149	22.00	-8.63	6842.964	5.0	35454.051	4.0
349.4165	26.00	-2.16	19552.474	1.0	48163.427	2.0
349.4194	23.01	-2.71	20242.320	4.0	48853.040	5.0
349.4206	25.01	-2.24	43696.190	3.0	72306.810	2.0
349.4227	23.01	-2.52	18269.490	1.0	46879.940	2.0
349.4242	26.00	-2.53	19621.004	5.0	48231.330	5.0
349.4250	44.00	-.66	8952.985	0.0	37571.430	0.0
349.4294	27.01	-3.42	24074.600	2.0	52684.500	1.0
349.4307	25.00	-4.24	34938.700	4.5	63548.490	4.5
349.4379	25.01	-2.05	39808.140	3.0	68417.340	2.0
349.4400	64.01	-.30	564.603	0.0	29181.819	0.0
349.4440	45.00	-.60	11856.655	0.0	40473.544	0.0
349.4487	8.01	-2.10	232745.980	1.5	261354.300	2.5
349.4490	66.01	-.02	806.575	0.0	29423.054	0.0
349.4504	24.01	-2.67	20024.180	3.5	48632.360	3.5
349.4575	25.00	-3.28	34938.700	4.5	63546.300	3.5
349.4589	26.00	-3.60	22996.661	4.0	51604.146	3.0
349.4670	26.01	-3.02	18360.650	1.5	46967.470	2.5
349.4674	8.01	-1.54	232747.510	2.5	261354.300	2.5
349.4681	28.01	-3.01	109148.050	4.5	137754.780	5.5
349.4698	28.00	-1.61	30619.440	2.0	59226.030	1.0
349.4720	75.00	-.65	17180.052	0.0	45794.648	0.0
349.4791	25.01	-4.06	53781.700	3.0	82387.530	3.0
349.4792	28.01	-2.68	109148.050	4.5	137753.870	4.5
349.4837	9.02	-4.13	491168.250	2.5	519773.700	3.5
349.4846	24.00	-3.32	25177.390	4.0	53782.770	4.0
349.4861	25.00	-1.59	37789.930	2.5	66395.190	2.5
349.4953	24.00	-1.01	24056.110	5.0	52660.610	6.0
349.5010	58.01	-.96	3548.931	0.0	32161.152	0.0
349.5019	25.01	-3.11	39813.380	2.0	68417.340	2.0
349.5022	24.01	-4.23	45669.540	1.5	74273.480	1.5
349.5072	25.01	-3.14	52718.800	0.0	81322.330	1.0
349.5131	24.00	-4.15	24282.340	4.0	52885.390	5.0
349.5155	20.01	-1.88	60611.280	1.5	89214.130	.5
349.5161	26.01	-3.91	32909.870	5.5	61512.670	4.5
349.5222	27.02	-4.65	78927.800	3.5	107530.100	3.5
349.5237	26.01	-4.20	15844.710	4.5	44446.890	3.5
349.5250	74.00	.65	19519.120	0.0	48129.377	0.0
349.5288	26.00	-2.24	20641.110	4.0	49242.872	3.0
349.5320	23.02	-4.97	56922.500	2.5	85524.000	2.5
349.5359	24.01	-1.74	19798.010	2.5	48399.190	1.5
349.5370	40.00	-.21	11856.655	0.0	40465.930	0.0
349.5419	22.00	-2.95	18593.990	3.0	47194.680	4.0
349.5446	28.00	-.01	30392.052	1.0	58992.520	2.0
349.5450	8.01	-1.36	232753.860	3.5	261354.300	2.5
349.5491	10.01	-2.75	279422.890	.5	308022.990	.5
349.5522	25.00	-3.31	35165.050	1.5	63764.900	2.5
349.5524	24.01	-.60	39877.280	3.5	68477.110	4.5
349.5617	26.01	-2.54	33466.500	4.5	62065.570	3.5
349.5681	27.00	-.25	5075.830	1.5	33674.380	2.5
349.5713	22.00	-1.79	20126.055	3.0	48724.340	2.0
349.5718	28.01	-3.46	25036.380	2.5	53634.620	1.5
349.5720	22.00	-1.09	8492.421	1.0	37090.650	0.0
349.5750	72.01	-.99	6291.287	0.0	34897.452	0.0
349.5765	18.01	-1.95	174409.830	1.5	203007.690	1.5
349.5830	15.01	-2.05	103166.370	1.0	131763.700	1.0
349.5839	25.00	-3.55	37737.220	3.5	66334.470	3.5
349.5847	25.01	-1.44	14959.840	0.0	43557.030	1.0
349.5919	26.02	-4.66	97041.380	3.0	125637.980	3.0
349.5930	72.01	-.41	15002.299	0.0	43606.991	0.0
349.5931	22.00	-4.94	19421.576	3.0	48018.080	4.0
349.5940	58.01	-.76	4194.191	0.0	32798.801	0.0
349.5953	28.00	-2.55	15609.861	2.0	44206.185	3.0
349.5956	22.00	-2.66	0.000	2.0	28596.293	1.0
349.5970	44.00	-.69	8711.012	0.0	37315.376	0.0
349.5973	23.00	-4.83	8578.520	2.5	37174.680	3.5
349.6003	25.01	-4.06	53597.130	2.0	82193.040	2.0
349.6029	23.03	-2.81	257690.800	3.0	286286.500	4.0
349.6030	41.00	-.03	12259.943	0.0	40863.817	0.0
349.6061	27.00	-1.00	21780.470	5.5	50375.910	5.5
349.6090	39.01	-.87	0.000	0.0	28603.383	0.0
349.6127	28.01	-2.69	109148.050	4.5	137742.950	5.5
349.6196	26.00	-2.77	19788.248	4.0	48382.585	5.0
349.6207	24.00	-.98	28682.180	2.0	57276.420	3.0
349.6210	40.01	.22	241.973	0.0	28844.374	0.0
349.6221	26.00	-3.85	23110.925	3.0	51705.052	2.0
349.6270	23.01	-1.12	20617.050	2.0	49210.780	3.0
349.6280	26.02	-4.39	122944.150	4.0	151537.800	4.0
349.6291	22.01	-2.45	24961.340	1.5	53554.900	2.5
349.6330	58.01	-1.07	2581.041	0.0	31182.460	0.0
349.6338	28.00	-.52	29084.478	4.0	57677.649	5.0
349.6420	92.01	-1.07	1693.808	0.0	30294.491	0.0
349.6421	23.03	.86	255747.600	3.0	284340.100	4.0
349.6632	25.01	-4.55	39826.570	1.0	68417.340	2.0
349.6664	26.01	-4.85	31811.870	2.5	60402.380	2.5
349.6676	27.00	-.31	4142.660	3.5	32733.070	3.5
349.6785	25.01	-2.79	79512.730	3.0	108102.250	3.0
349.6788	27.00	-3.11	25568.680	5.5	54158.170	4.5
349.6790	27.00	.24	25138.880	6.5	53728.360	6.5
349.6810	90.00	-1.43	0.000	0.0	28597.493	0.0
349.6826	25.01	-1.91	14781.190	2.0	43370.370	3.0
349.6956	24.01	-3.69	45730.740	2.5	74318.860	2.5
349.6996	23.01	-2.59	20622.990	3.0	49210.780	3.0
349.7000	22.00	-3.41	15156.787	4.0	43744.550	4.0
349.7004	26.00	-2.32	21999.132	4.0	50586.857	3.0
349.7028	23.01	-1.36	20980.920	2.0	49568.450	3.0
349.7090	64.00	-.80	483.945	0.0	29079.148	0.0
349.7098	26.00	-.07	17550.180	3.0	46137.140	3.0
349.7113	18.02	-1.16	211563.830	1.0	240150.660	0.0
349.7139	26.00	-.75	17726.985	2.0	46313.610	2.0
349.7154	12.02	-2.02	562634.200	1.0	591220.700	1.0
349.7207	23.01	-1.40	18293.870	2.0	46879.940	2.0
349.7209	26.00	-1.75	20641.110	4.0	49227.160	3.0
349.7233	26.00	-2.55	26224.961	3.0	54810.820	4.0
349.7384	26.00	-2.30	26406.490	1.0	54991.110	1.0
349.7385	23.01	-1.87	20617.050	2.0	49201.660	2.0
349.7455	10.01	-2.26	279422.890	.5	308006.930	.5
349.7469	18.02	-2.73	242923.960	1.0	271507.880	2.0
349.7490	72.00	-1.00	0.000	0.0	28591.933	0.0
349.7500	24.00	-2.97	28637.000	3.0	57220.670	2.0
349.7543	25.01	-1.56	14901.180	1.0	43484.500	2.0
349.7566	26.02	-2.56	114325.350	5.0	142908.480	5.0
349.7656	25.02	-3.69	109780.400	2.5	138362.800	3.5
349.7674	22.00	-4.33	20006.032	2.0	48586.280	3.0
349.7705	27.02	-4.36	77383.100	3.5	105965.100	2.5
349.7723	26.01	-3.07	33501.320	3.5	62083.170	4.5
349.7738	25.01	-4.76	53805.800	4.0	82387.530	3.0
349.7810	41.00	-1.07	322.630	0.0	28911.947	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
349.7842	26.00	-1.82	888.132	1.0	29469.010	2.0
349.7850	73.00	-1.33	1935.780	0.0	30524.770	0.0
349.7876	26.01	-3.81	72169.150	1.5	100749.750	2.5
349.7887	26.00	-1.18	24335.764	2.0	52916.278	2.0
349.7947	22.00	-4.62	18145.400	2.0	46725.420	3.0
349.7998	12.02	-.92	536152.000	1.0	564731.600	1.0
349.8017	25.00	-4.35	23549.200	2.5	52128.650	2.5
349.8051	8.01	-2.39	232462.830	2.5	261042.000	2.5
349.8063	29.00	-1.24	43474.403	0.0	72061.653	0.0
349.8064	10.00	-2.59	134459.287	1.0	163038.351	2.0
349.8112	23.01	-3.31	20622.990	3.0	49201.660	2.0
349.8172	26.00	-1.55	22650.415	6.0	51228.595	5.0
349.8189	28.00	-4.23	0.000	4.0	28578.046	3.0
349.8274	28.01	-2.56	92325.850	3.5	120903.200	3.5
349.8285	18.02	-.91	214346.700	1.0	242923.960	1.0
349.8307	27.00	-3.01	25937.590	4.5	54514.670	3.5
349.8329	24.02	-4.27	66222.700	5.0	94799.600	5.0
349.8451	23.03	-1.04	255146.800	2.0	283722.700	1.0
349.8473	24.00	-3.15	27703.840	4.0	56279.560	4.0
349.8540	76.00	-.79	10082.190	0.0	38665.542	0.0
349.8630	41.00	-.07	5242.739	0.0	33825.356	0.0
349.8724	26.00	-2.63	19788.248	4.0	48361.920	4.0
349.8730	45.00	-.60	3387.616	0.0	31969.416	0.0
349.8737	26.02	-4.94	87901.870	3.0	116475.440	3.0
349.8745	26.00	-3.39	22996.661	4.0	51570.160	3.0
349.8749	28.00	-4.15	29013.228	2.0	57586.700	2.0
349.8764	14.01	-2.93	97972.350	.5	126545.700	.5
349.8813	28.01	-3.44	99418.610	3.5	127991.560	3.5
349.8825	23.01	-3.12	20280.190	5.0	48853.040	5.0
349.8917	17.03	-.56	219454.000	1.0	248026.100	2.0
349.8940	44.00	.05	0.000	0.0	28580.084	0.0
349.8950	90.00	-.26	7420.492	0.0	36000.495	0.0
349.8980	72.00	-1.44	4516.821	0.0	33096.579	0.0
349.9100	22.00	-.93	8602.340	2.0	37172.947	1.0
349.9110	68.00	.26	403.288	0.0	28981.984	0.0
349.9180	10.01	-2.98	279324.890	1.5	307894.640	2.5
349.9255	28.00	-1.84	30619.440	2.0	59188.780	3.0
349.9258	23.00	-5.41	8715.720	3.5	37285.030	4.5
349.9330	92.01	-1.35	2258.411	0.0	30835.310	0.0
349.9403	10.01	-2.63	290371.950	2.5	318940.080	1.5
349.9420	27.00	-3.76	26597.640	1.5	55165.630	2.5
349.9465	25.01	-3.24	49517.580	5.0	78085.200	5.0
349.9480	18.01	-2.77	132481.140	2.5	161048.640	1.5
349.9503	25.01	-2.11	52653.270	4.0	81220.580	3.0
349.9580	40.01	-.76	3226.301	0.0	31801.159	0.0
349.9584	26.02	-3.65	89783.590	4.0	118350.240	4.0
349.9667	18.02	-.30	196589.200	1.0	225155.180	1.0
349.9799	25.00	-1.81	38008.700	5.5	66573.600	5.5
349.9811	23.01	-2.12	8640.210	2.0	37205.010	3.0
349.9822	25.00	-2.43	33825.490	2.5	62390.200	1.5
349.9878	26.01	-2.95	33501.320	3.5	62065.570	3.5
349.9950	69.00	-.95	0.000	0.0	28571.837	0.0
349.9967	18.01	-2.56	155351.030	1.5	183914.560	.5
349.9980	90.01	-.87	7904.437	0.0	36476.029	0.0
349.9986	24.01	-2.34	39742.360	2.5	68305.730	1.5
350.0070	92.00	-.33	0.000	0.0	28570.857	0.0
350.0101	28.01	-3.23	70778.120	3.5	99340.550	3.5
350.0148	26.00	-4.47	23192.486	2.0	51754.534	1.0
350.0153	23.00	-4.43	22313.990	5.5	50876.000	4.5
350.0197	28.01	-4.63	103663.500	1.5	132225.150	1.5
350.0286	6.00	-4.28	60352.630	1.0	88913.560	2.0
350.0292	26.02	-1.85	93388.750	4.0	121949.620	5.0
350.0324	29.00	-1.28	44522.951	0.0	73091.735	0.0
350.0326	28.01	-3.24	100309.290	5.5	128869.890	5.5
350.0329	22.01	-2.26	983.800	2.5	29544.370	2.5
350.0337	23.00	-1.98	13801.530	1.5	42362.040	.5
350.0353	23.01	-2.06	25191.080	2.0	53751.460	1.0
350.0372	25.02	-4.48	109780.400	2.5	138340.620	2.5
350.0414	25.00	-3.06	38008.700	5.5	66568.580	6.5
350.0447	24.00	-3.30	32097.360	6.0	60656.970	7.0
350.0496	28.01	-2.92	109148.050	4.5	137707.260	3.5
350.0540	62.01	-1.09	4355.506	0.0	32922.527	0.0
350.0554	18.02	-1.63	196589.200	1.0	225147.930	2.0
350.0558	23.03	-.50	256739.900	0.0	285298.600	1.0
350.0568	26.00	-1.49	20874.482	3.0	49433.108	2.0
350.0640	8.01	-2.98	232796.270	2.5	261354.300	2.5
350.0656	24.00	-3.44	27597.220	3.0	56155.120	2.0
350.0846	28.00	-1.55	1332.153	3.0	29888.505	2.0
350.0883	10.01	-2.77	279218.660	2.5	307774.710	1.5
350.1039	28.01	-4.04	99340.550	3.5	127895.330	3.5
350.1110	56.00	-.79	0.000	0.0	28562.370	0.0
350.1122	15.01	-1.78	102799.200	1.0	131353.300	2.0
350.1135	28.01	-3.85	105499.050	3.5	134053.050	2.5
350.1160	76.00	-.03	14760.326	0.0	43322.288	0.0
350.1165	14.01	-2.77	97972.350	.5	126526.100	1.5
350.1216	10.00	-2.12	134459.287	1.0	163012.621	1.0
350.1233	28.01	-4.03	100309.290	5.5	128862.490	4.5
350.1270	24.02	-1.78	71868.500	6.0	100421.400	5.0
350.1314	26.02	-3.58	93388.750	4.0	121941.290	4.0
350.1350	40.00	-1.16	564.603	0.0	29125.015	0.0
350.1450	58.01	-.84	1855.123	0.0	30414.720	0.0
350.1479	25.01	-2.92	43696.190	3.0	72247.380	3.0
350.1485	23.00	-2.02	13810.900	.5	42362.040	.5
350.1490	40.00	-.43	7985.094	0.0	36544.364	0.0
350.1560	22.00	-3.31	18287.560	4.0	46838.090	4.0
350.1576	29.01	-3.17	120092.200	2.0	148642.600	2.0
350.1625	8.01	-1.98	232711.700	.5	261261.700	1.5
350.1711	27.01	-1.07	17771.500	3.0	46320.800	4.0
350.1748	26.02	-2.59	89697.520	3.0	118246.520	3.0
350.1767	26.02	-1.95	93392.450	3.0	121941.290	4.0
350.1864	26.01	-4.81	50142.930	2.5	78690.980	2.5
350.1879	25.01	-3.87	55759.270	3.0	84307.200	4.0
350.1917	22.00	-4.41	19322.988	2.0	47870.610	2.0
350.1940	90.01	-1.41	7259.177	0.0	35814.778	0.0
350.2042	22.00	-4.03	20126.055	3.0	48672.660	4.0
350.2078	28.01	-2.87	100309.290	5.5	128855.600	6.5
350.2132	22.00	-4.87	18593.990	3.0	47139.860	4.0
350.2148	28.01	-4.34	105981.500	4.5	134527.240	3.5
350.2177	22.00	-4.57	19573.968	4.0	48119.470	5.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
350.2201	28.01	-4.67	99340.550	3.5	127885.860	4.5
350.2236	28.01	-4.75	79823.030	3.5	108368.050	2.5
350.2241	24.00	-3.00	27816.880	5.0	56361.860	5.0
350.2278	27.00	-.29	3482.820	4.5	32027.500	3.5
350.2285	28.01	-3.06	100309.290	5.5	128853.910	4.5
350.2295	25.00	-1.67	37789.930	2.5	66334.470	3.5
350.2420	44.00	-.99	8469.040	0.0	37020.727	0.0
350.2456	26.00	-2.95	26140.164	3.0	54683.390	4.0
350.2500	73.00	-.90	11130.738	0.0	49681.773	0.0
350.2509	27.00	-2.93	25739.930	2.5	54282.730	2.5
350.2516	24.01	-4.37	45730.740	2.5	74273.480	1.5
350.2520	45.00	-.33	0.000	0.0	28550.872	0.0
350.2593	28.00	-3.18	0.000	4.0	28542.113	5.0
350.2616	27.00	-1.33	1406.840	2.5	29948.760	2.5
350.2696	18.02	-.69	196613.910	2.0	225155.180	1.0
350.2700	24.00	-1.10	28679.430	1.0	57220.670	2.0
350.2728	22.00	-2.02	17215.440	5.0	45756.450	5.0
350.2730	75.00	-.31	20325.695	0.0	48874.855	0.0
350.2770	90.01	-.75	8952.985	0.0	37501.819	0.0
350.2847	26.00	-3.14	26339.682	2.0	54879.720	2.0
350.2870	73.00	-.70	10888.765	0.0	39436.784	0.0
350.2901	27.00	-.39	26450.020	2.5	54989.620	3.5
350.2916	27.00	-2.81	25937.590	4.5	54477.070	3.5
350.2950	23.03	-3.52	227712.500	4.0	256251.700	4.0
350.2975	29.01	-2.46	120092.200	2.0	148631.200	3.0
350.3037	24.00	-1.68	28682.180	2.0	57220.670	2.0
350.3060	75.00	0.00	15647.559	0.0	44194.030	0.0
350.3070	15.01	-1.60	76764.960	2.0	105303.190	1.0
350.3122	28.01	-2.08	100332.090	4.5	128869.890	5.5
350.3200	41.00	-.28	9275.615	0.0	37820.945	0.0
350.3210	64.01	-.40	10566.135	0.0	39111.384	0.0
350.3343	24.02	-4.06	131267.300	4.0	159803.300	4.0
350.3362	24.01	-1.94	40202.140	6.5	68737.990	5.5
350.3364	24.00	-2.52	24056.110	5.0	52591.940	5.0
350.3457	26.02	-3.06	89907.850	4.0	118442.920	3.0
350.3465	26.01	-4.06	13904.870	.5	42439.880	.5
350.3477	28.01	-2.58	100332.090	4.5	128867.000	3.5
350.3498	28.00	-3.41	28569.210	2.0	57103.946	3.0
350.3538	26.02	-4.96	158257.370	1.0	186791.780	2.0
350.3540	24.00	-4.19	25106.340	3.0	53640.740	3.0
350.3580	10.01	-.09	252798.480	.5	281332.550	.5
350.3587	18.02	.13	196613.910	2.0	225147.930	2.0
350.3626	15.01	-1.09	103630.600	2.0	132164.300	2.0
350.3710	28.01	-2.75	92792.080	3.5	121325.090	2.5
350.3718	27.00	-1.53	17233.680	3.5	45766.630	3.5
350.3739	25.00	-3.74	17637.150	.5	46169.930	.5
350.3756	22.00	-2.85	170.132	3.0	28702.768	3.0
350.3789	16.01	-3.64	130134.080	2.5	158666.450	1.5
350.3870	73.00	-.55	9920.875	0.0	38460.747	0.0
350.3945	24.00	-2.33	31987.060	4.0	60518.160	3.0
350.3945	24.00	-3.06	31987.060	4.0	60518.160	3.0
350.4031	28.01	-1.85	100332.090	4.5	128862.490	4.5
350.4050	26.02	-4.08	114325.350	5.0	142855.590	4.0
350.4060	23.00	-3.58	10892.500	3.5	39422.660	2.5
350.4111	28.01	-4.89	92373.450	2.5	120903.200	3.5
350.4117	23.03	-.86	226617.100	1.0	255146.800	2.0
350.4170	25.00	-1.98	33825.490	2.5	62354.760	1.5
350.4172	24.00	-3.48	35398.020	4.0	63927.270	5.0
350.4237	28.01	-2.90	77332.470	2.5	105861.190	2.5
350.4348	28.01	-2.31	100309.290	5.5	128837.110	5.5
350.4410	42.00	.88	18147.942	0.0	46683.416	0.0
350.4413	26.02	-3.41	93392.450	3.0	121919.740	3.0
350.4444	23.01	-.84	8841.970	3.0	37369.010	2.0
350.4451	26.00	-2.04	22838.320	2.0	51365.300	3.0
350.4532	18.02	-2.65	243145.760	2.0	271672.080	1.0
350.4534	27.01	-5.73	27484.300	3.0	56010.600	2.0
350.4554	22.00	-2.83	11776.806	4.0	40302.950	3.0
350.4565	23.01	-1.29	18353.890	3.0	46879.940	2.0
350.4584	28.00	-1.48	28578.046	3.0	57103.946	3.0
350.4633	28.02	-4.48	81686.900	6.0	110212.400	5.0
350.4660	76.00	-.94	4113.534	0.0	32646.972	0.0
350.4670	29.01	-2.76	88605.160	1.0	117130.360	2.0
350.4730	27.00	-1.51	20500.710	1.5	49025.420	1.5
350.4797	22.00	-1.74	15220.390	5.0	43744.550	4.0
350.4864	26.00	-1.59	18378.187	2.0	46901.808	1.0
350.4883	22.01	.42	15257.530	4.5	43780.990	4.5
350.4980	73.00	-1.56	3871.561	0.0	32402.394	0.0
350.5053	26.00	-.98	24335.764	2.0	52857.840	1.0
350.5070	68.00	-.32	7097.862	0.0	35627.963	0.0
350.5085	28.01	-3.12	100332.090	4.5	128853.910	4.5
350.5126	27.00	-.46	25138.880	6.5	53660.370	5.5
350.5146	6.00	-3.07	60352.630	1.0	88873.950	2.0
350.5160	23.00	-5.00	2311.370	3.5	30832.580	2.5
350.5180	73.00	-.78	12179.286	0.0	40708.491	0.0
350.5230	72.01	-.05	8307.725	0.0	36836.523	0.0
350.5257	6.00	-3.61	60393.140	2.0	88913.560	2.0
350.5300	63.01	-2.23	1613.150	0.0	30141.379	0.0
350.5320	42.00	.56	20245.038	0.0	48773.104	0.0
350.5325	27.00	-.29	25269.250	3.5	53789.120	3.5
350.5366	27.00	-2.76	25269.250	3.5	53788.780	4.5
350.5410	45.00	-.98	10888.765	0.0	39416.098	0.0
350.5413	25.00	-3.25	34938.700	4.5	63457.850	5.5
350.5444	24.02	-4.98	71321.800	3.0	99840.700	3.0
350.5448	22.01	-6.35	1215.580	4.5	29734.450	3.5
350.5456	17.01	-.58	146333.800	2.0	174852.600	3.0
350.5480	40.01	.61	12259.943	0.0	40786.707	0.0
350.5495	25.00	-4.85	37630.620	4.5	66149.100	3.5
350.5510	64.01	.02	3952.218	0.0	32478.738	0.0
350.5543	25.01	-4.49	52718.800	0.0	81236.890	1.0
350.5600	22.00	-4.05	19322.988	2.0	47840.620	3.0
350.5613	22.00	-3.54	15156.787	4.0	43674.310	4.0
350.5670	40.01	-.36	1290.520	0.0	29815.738	0.0
350.5691	23.00	-.49	13801.530	1.5	42318.420	1.5
350.5692	24.00	-2.12	31987.060	4.0	60503.940	4.0
350.5702	23.03	-.09	256781.800	1.0	285298.600	1.0
350.5810	41.00	-.57	9356.272	0.0	37880.351	0.0
350.5835	8.01	-1.74	232745.980	1.5	261261.700	1.5
350.5844	10.01	-3.01	254165.010	1.5	282680.650	.5
350.5845	26.02	-3.08	114339.950	4.0	142855.590	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
350.5873	25.00	-2.68	17568.480	1.5	46083.890	1.5
350.5875	22.01	-1.92	15265.600	3.5	43780.990	4.5
350.5897	22.00	-4.36	19421.576	3.0	47936.790	3.0
350.5923	28.01	-4.04	105439.850	1.5	133954.850	.5
350.6023	8.01	-1.77	232747.510	2.5	261261.700	1.5
350.6050	40.01	-.31	9920.875	0.0	38443.001	0.0
350.6056	25.00	-2.17	38008.700	5.5	66522.620	4.5
350.6075	26.00	-4.53	25899.974	4.0	54413.740	3.0
350.6147	22.00	-4.14	20006.032	2.0	48519.210	2.0
350.6158	22.00	-3.27	18525.070	2.0	47038.160	3.0
350.6218	12.02	-2.09	536152.000	1.0	564664.600	2.0
350.6223	26.00	-4.78	23192.486	2.0	51705.052	2.0
350.6250	58.01	-1.33	2500.383	0.0	31020.682	0.0
350.6312	27.00	.06	4142.660	3.5	32654.500	2.5
350.6400	26.01	-3.36	72238.630	2.5	100749.750	2.5
350.6447	25.00	-4.76	38120.180	4.5	66630.920	4.5
350.6485	25.00	-2.47	34938.700	4.5	63449.130	5.5
350.6500	26.00	-2.27	18378.187	2.0	46888.494	2.0
350.6516	24.00	-3.34	20517.400	2.0	49027.580	2.0
350.6562	23.01	-2.65	26839.820	3.0	55349.630	3.0
350.6563	21.01	-3.92	29742.120	1.0	58251.920	2.0
350.6592	24.01	-4.47	38362.560	1.5	66872.120	.5
350.6594	24.01	-2.94	40228.440	5.5	68737.990	5.5
350.6638	22.00	-1.44	386.874	4.0	28896.062	5.0
350.6646	28.01	-1.76	100309.290	5.5	128818.410	6.5
350.6728	25.01	-4.82	71390.140	3.0	99898.600	4.0
350.6810	66.01	-.56	806.575	0.0	29322.520	0.0
350.6831	29.01	-2.61	116375.470	3.0	144883.090	2.0
350.6837	25.00	-4.26	34343.900	4.5	62851.470	3.5
350.6843	23.00	-1.14	13810.900	.5	42318.420	1.5
350.6850	62.01	-1.35	3468.273	0.0	31983.892	0.0
350.6850	90.01	-.44	15163.614	0.0	43679.233	0.0
350.6931	26.02	-2.12	93412.930	2.0	121919.740	3.0
350.6949	24.00	-2.32	20520.920	3.0	49027.580	2.0
350.7034	24.00	-3.47	27703.840	4.0	56209.810	3.0
350.7038	8.01	-3.55	232536.060	1.5	261042.000	2.5
350.7041	25.00	-3.48	34938.700	4.5	63444.610	4.5
350.7050	92.00	-.67	564.603	0.0	29078.596	0.0
350.7081	28.01	-3.12	77332.470	2.5	105838.060	3.5
350.7135	26.00	-.97	29469.010	2.0	57974.160	2.0
350.7151	28.01	-1.62	100332.090	4.5	128837.110	5.5
350.7195	25.01	-4.93	71390.140	3.0	99894.800	3.0
350.7196	26.00	-3.83	22845.856	5.0	51350.505	4.0
350.7281	29.01	-2.79	118071.340	1.0	146575.300	2.0
350.7317	26.02	-3.53	114351.920	3.0	142855.590	4.0
350.7320	45.00	-.33	2581.041	0.0	31092.839	0.0
350.7340	92.00	-.24	0.000	0.0	28511.636	0.0
350.7364	10.01	-2.55	280473.580	1.5	308976.870	.5
350.7368	26.00	-4.61	24772.019	1.0	53275.270	2.0
350.7374	24.01	-2.69	38509.070	3.5	67012.280	2.5
350.7390	71.01	-1.43	0.000	0.0	28511.229	0.0
350.7391	26.01	-3.41	18886.750	.5	47389.820	1.5
350.7396	26.01	-4.19	50187.950	3.5	78690.980	2.5
350.7407	29.00	-1.67	43474.403	0.0	71985.494	0.0
350.7442	25.02	-2.36	85173.880	1.5	113676.530	2.5
350.7449	15.01	-1.01	103630.600	2.0	132133.200	3.0
350.7531	23.01	-1.21	22273.540	1.0	50775.470	2.0
350.7568	9.00	-3.00	118405.267	.5	146906.900	1.5
350.7670	40.01	-.85	7662.464	0.0	36171.417	0.0
350.7688	28.00	-5.91	1332.153	3.0	29832.810	3.0
350.7714	24.00	-4.47	23512.000	1.0	52012.440	2.0
350.7775	27.00	-2.37	26450.020	2.5	54949.970	1.5
350.7820	70.01	-.02	36860.487	0.0	65368.221	0.0
350.7830	25.02	-2.81	109841.120	3.5	138340.620	2.5
350.7836	22.00	-2.48	18695.230	4.0	47194.680	4.0
350.7855	27.01	-1.58	22414.500	3.0	50913.800	2.0
350.7938	28.00	-2.12	30619.440	2.0	59118.060	2.0
350.7950	58.01	-.80	1371.178	0.0	29877.856	0.0
350.7951	23.00	-3.81	10892.500	3.5	39391.020	4.5
350.7960	41.00	-.74	80.658	0.0	28587.254	0.0
350.8120	42.00	-.01	12259.943	0.0	40765.239	0.0
350.8153	27.00	-1.74	26450.020	2.5	54946.900	2.5
350.8204	26.01	-4.10	13904.870	.5	42401.330	1.5
350.8238	28.01	-4.54	106620.530	3.5	135116.720	2.5
350.8241	8.01	-3.35	232462.830	2.5	260959.000	1.5
350.8243	25.01	-2.76	44899.820	3.0	73395.970	2.0
350.8281	22.00	-3.32	17215.440	5.0	45711.280	4.0
350.8347	25.01	-2.25	44899.820	3.0	73395.120	3.0
350.8396	23.03	-.59	255445.500	3.0	283940.400	2.0
350.8420	71.00	-1.10	1935.780	0.0	30438.639	0.0
350.8465	25.01	-4.42	53698.700	2.0	82193.040	2.0
350.8470	58.01	-1.03	2500.383	0.0	31002.836	0.0
350.8476	26.00	-.94	24118.815	4.0	52613.072	5.0
350.8520	26.00	-.98	20641.110	4.0	49135.003	3.0
350.8565	24.01	-4.53	20512.620	2.5	49006.150	1.5
350.8603	26.00	-3.66	23110.925	3.0	51604.146	3.0
350.8655	24.01	-3.90	35569.020	2.5	64061.820	1.5
350.8710	58.01	.04	12259.943	0.0	40760.446	0.0
350.8740	74.00	-1.73	3306.958	0.0	31807.217	0.0
350.8749	22.00	-4.15	19421.576	3.0	47913.610	4.0
350.8752	25.00	-4.02	38351.780	.5	66843.790	1.5
350.8850	92.01	-1.31	1693.808	0.0	30193.174	0.0
350.8893	24.00	-3.44	31393.400	5.0	59884.270	6.0
350.8926	17.01	-.58	146330.000	1.0	174820.600	2.0
350.9003	15.01	-1.33	76813.220	1.0	105303.190	1.0
350.9022	23.01	-1.31	20363.220	6.0	48853.040	5.0
350.9035	28.00	-1.86	29320.782	3.0	57810.494	4.0
350.9073	25.00	-1.38	17451.520	2.5	45940.930	2.5
350.9113	26.00	-1.17	22845.856	5.0	51334.940	4.0
350.9162	25.00	-1.79	37420.240	5.5	65908.920	4.5
350.9192	23.01	-3.87	20242.320	4.0	48730.760	4.0
350.9320	40.00	-.26	564.603	0.0	29060.152	0.0
350.9326	18.02	-.46	180679.000	1.0	209166.350	0.0
350.9339	28.01	-2.79	101740.270	3.5	130227.520	2.5
350.9340	24.00	-1.65	33040.100	2.0	61527.340	1.0
350.9362	28.00	-2.31	29481.020	4.0	57968.080	3.0
350.9382	23.01	-3.53	11514.760	1.0	40001.660	2.0
350.9394	17.01	-.10	146333.800	2.0	174820.600	2.0
350.9456	28.02	-4.11	103306.100	3.0	131792.400	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
350.9472	24.01	-3.47	76879.030	3.5	105365.400	4.5
350.9511	22.00	-4.73	19573.968	4.0	48059.820	3.0
350.9542	28.01	-1.89	101740.270	3.5	130225.870	3.5
350.9603	23.01	-2.80	18269.490	1.0	46754.590	1.0
350.9681	25.01	-3.92	56883.380	1.0	85367.850	2.0
350.9719	26.00	-4.04	23270.374	0.0	51754.534	1.0
350.9777	18.01	-.16	155708.020	.5	184191.710	.5
350.9793	28.00	-3.57	25753.578	4.0	54237.136	4.0
350.9833	22.01	-1.09	15257.530	4.5	43740.770	3.5
350.9840	27.00	-1.08	4690.180	2.5	33173.360	3.5
350.9864	26.00	-1.16	17927.378	1.0	46410.366	1.0
350.9930	25.01	-1.41	43528.300	5.0	72010.750	4.0
350.9930	25.00	-3.30	35041.370	3.5	63523.820	2.5
350.9936	23.00	-5.63	2153.200	1.5	30635.600	2.5
351.0000	57.01	-1.94	967.890	0.0	29457.918	0.0
351.0030	74.00	-1.78	2903.671	0.0	31393.456	0.0
351.0090	14.02	-3.60	225526.330	3.0	254007.480	3.0
351.0132	6.00	-2.65	60393.140	2.0	88873.950	2.0
351.0135	24.00	-.83	31987.060	4.0	60467.850	5.0
351.0179	9.02	-4.96	440202.480	2.5	468682.910	3.5
351.0242	28.01	-3.85	106620.530	3.5	135100.450	3.5
351.0260	41.01	.77	15970.189	0.0	44458.107	0.0
351.0332	28.00	-.65	1713.080	1.0	30192.268	0.0
351.0332	15.01	-1.32	76824.000	0.0	105303.190	1.0
351.0343	23.03	-1.42	255747.600	3.0	284226.700	3.0
351.0346	9.00	-4.42	118427.823	1.5	146906.900	1.5
351.0391	24.00	-.34	31009.000	3.0	59487.710	4.0
351.0414	27.00	-1.39	816.000	3.5	29294.520	3.5
351.0437	26.00	-1.99	20037.815	0.0	48516.150	1.0
351.0439	22.00	-9.23	6556.828	1.0	35035.147	2.0
351.0460	40.01	-.59	4436.164	0.0	32922.459	0.0
351.0472	26.01	-4.06	50212.930	2.5	78690.980	2.5
351.0506	9.00	-3.31	118427.823	1.5	146905.600	2.5
351.0519	14.02	-2.69	225526.330	3.0	254004.000	2.0
351.0522	24.00	-.96	24200.230	6.0	52677.880	7.0
351.0543	28.01	-1.57	100389.520	2.5	128867.000	3.5
351.0590	23.03	-2.12	255463.300	2.0	283940.400	2.0
351.0690	58.01	-.84	5726.684	0.0	34211.113	0.0
351.0695	25.01	-3.36	39808.140	3.0	68284.380	3.0
351.0721	10.00	-2.00	134041.840	2.0	162517.872	1.0
351.0755	24.01	-3.94	38396.360	.5	66872.120	.5
351.0762	13.01	-4.09	105438.400	1.0	133914.100	2.0
351.0780	42.00	-.67	28068.817	0.0	56552.516	0.0
351.0820	28.01	-1.50	101740.270	3.5	130215.500	4.5
351.0827	22.01	.31	15265.600	3.5	43740.770	3.5
351.0829	24.00	-2.26	28679.430	1.0	57154.590	0.0
351.0846	22.00	-3.31	15108.121	3.0	43583.140	3.0
351.0850	83.00	-.30	15324.929	0.0	43808.060	0.0
351.0886	9.03	-2.56	423606.400	1.0	452081.100	2.0
351.0946	23.00	-4.76	2220.130	2.5	30694.340	3.5
351.0990	25.01	-4.88	43536.900	4.0	72010.750	4.0
351.1040	73.00	-.78	5565.369	0.0	34046.959	0.0
351.1117	18.02	.23	180679.000	1.0	209151.820	2.0
351.1185	25.00	-.82	17282.000	3.5	45754.270	3.5
351.1190	41.00	-.25	10162.848	0.0	38643.221	0.0
351.1230	62.01	-1.23	806.575	0.0	29286.623	0.0
351.1242	26.01	-3.39	32875.630	6.5	61347.440	7.5
351.1270	25.02	-3.05	109841.120	3.5	138312.700	4.5
351.1273	26.00	-4.47	26140.164	3.0	54611.720	2.0
351.1342	25.01	-4.26	39813.380	2.0	68284.380	3.0
351.1405	23.01	-2.35	18269.490	1.0	46739.980	2.0
351.1440	25.01	-2.53	43850.420	2.0	72320.620	1.0
351.1440	92.00	-.75	0.000	0.0	28478.345	0.0
351.1466	28.01	-4.54	72375.420	1.5	100845.410	.5
351.1560	90.01	-.78	4436.164	0.0	32913.536	0.0
351.1580	10.01	-1.55	280268.960	2.5	308738.030	1.5
351.1580	92.01	-1.83	241.973	0.0	28719.183	0.0
351.1606	25.00	-3.30	35114.980	2.5	63583.840	1.5
351.1609	28.00	-1.40	29320.782	3.0	57789.611	4.0
351.1625	22.00	-2.73	170.132	3.0	28638.832	2.0
351.1635	28.01	-2.25	101740.270	3.5	130208.890	3.5
351.1696	18.02	-.60	196679.800	3.0	225147.930	2.0
351.1712	10.03	-.85	642934.000	3.5	671402.000	2.5
351.1735	25.02	-2.26	84610.530	.5	113078.340	1.5
351.1741	26.00	-3.00	20641.110	4.0	49108.876	4.0
351.1780	45.00	-.36	16050.847	0.0	44526.435	0.0
351.1809	24.01	-1.62	20024.180	3.5	48491.390	2.5
351.1823	29.01	-2.84	120092.200	2.0	148559.300	2.0
351.1826	25.00	-.63	37420.240	5.5	65887.310	5.5
351.1872	28.00	-1.62	30163.140	2.0	58629.840	2.0
351.1881	28.01	-1.60	101740.270	3.5	130206.900	4.5
351.1908	28.00	-.62	30163.140	2.0	58629.550	3.0
351.1953	26.02	-4.81	89697.520	3.0	118163.560	2.0
351.1983	25.00	-4.09	23549.200	2.5	52015.000	1.5
351.1983	25.00	-4.92	23549.200	2.5	52015.000	3.5
351.1999	26.02	-4.76	158417.310	2.0	186882.980	3.0
351.2029	8.01	-4.75	232796.270	2.5	261261.700	1.5
351.2047	23.01	-2.78	22273.540	1.0	50738.820	1.0
351.2060	23.00	-4.89	8715.720	3.5	37180.900	4.5
351.2076	26.00	-3.07	22996.661	4.0	51461.707	4.0
351.2121	29.00	-.48	43474.403	0.0	71947.226	0.0
351.2141	23.01	-2.02	26839.820	3.0	55304.340	4.0
351.2162	28.01	-1.51	100389.520	2.5	128853.870	2.5
351.2220	64.01	-.29	3387.616	0.0	31859.637	0.0
351.2221	29.01	-2.13	108335.430	2.0	136799.300	2.0
351.2221	26.00	-1.00	22996.661	4.0	51460.530	3.0
351.2280	75.00	-.65	16534.792	0.0	45006.326	0.0
351.2285	24.00	-3.87	25177.390	4.0	53640.740	3.0
351.2310	28.01	-4.04	105439.850	1.5	133903.000	1.5
351.2368	24.00	-4.02	27816.880	5.0	56279.560	4.0
351.2409	27.00	-3.49	16195.680	.5	44658.030	1.5
351.2424	22.00	-4.16	20126.055	3.0	48586.280	3.0
351.2433	23.00	-5.07	0.000	1.5	28462.150	2.5
351.2500	64.01	.66	10001.532	0.0	38471.283	0.0
351.2610	23.01	-2.95	18293.870	2.0	46754.590	1.0
351.2637	27.00	-.12	4690.180	2.5	33150.680	1.5
351.2652	24.00	-2.45	24200.230	6.0	52660.610	6.0
351.2656	23.00	-4.18	2311.370	3.5	30771.720	4.5
351.2671	26.00	-3.47	23244.826	1.0	51705.052	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
351.2727	26.00	-2.14	26351.049	5.0	54810.820	4.0
351.2740	90.01	-.82	9678.902	0.0	38146.708	0.0
351.2793	26.00	-3.87	23110.925	3.0	51570.160	3.0
351.2827	23.00	-3.97	8715.720	3.5	37174.680	3.5
351.2836	28.00	-4.50	27414.893	2.0	55873.780	2.0
351.2864	18.01	-3.79	132630.650	1.5	161089.310	.5
351.2914	23.00	-4.82	137.380	2.5	28595.640	3.5
351.2930	62.01	-.99	5242.739	0.0	33709.005	0.0
351.2930	57.01	-1.84	1855.123	0.0	30321.389	0.0
351.2933	25.01	-2.76	59537.400	4.0	87995.500	5.0
351.2955	26.00	-2.40	24772.019	1.0	53229.940	1.0
351.2990	76.00	-.04	12663.231	0.0	41129.011	0.0
351.3009	24.01	-1.66	38269.670	3.5	66727.160	2.5
351.3049	22.01	-4.51	1087.210	3.5	29544.370	2.5
351.3057	26.00	-2.48	12560.933	3.0	41018.029	2.0
351.3100	25.00	-4.40	34938.700	4.5	63395.450	3.5
351.3100	45.00	-.62	13873.093	0.0	42337.982	0.0
351.3144	25.01	-3.36	43850.420	2.0	72306.810	2.0
351.3199	27.00	-.38	25269.250	3.5	53725.200	4.5
351.3215	27.00	.32	21920.090	4.5	50375.910	5.5
351.3229	17.01	-.24	146330.000	1.0	174785.700	1.0
351.3251	24.01	-2.92	54784.670	3.5	83240.200	4.5
351.3280	72.00	-.53	10485.478	0.0	38948.908	0.0
351.3320	27.00	-3.39	26450.020	2.5	54904.990	2.5
351.3348	23.00	-5.04	14514.750	1.5	42969.490	1.5
351.3382	27.00	-2.29	17233.680	3.5	45688.150	2.5
351.3391	25.02	-4.48	109780.400	2.5	138234.790	1.5
351.3449	22.00	-3.95	15220.390	5.0	43674.310	4.0
351.3473	27.00	-.65	816.000	3.5	29269.730	4.5
351.3511	25.00	-4.09	38120.180	4.5	66573.600	5.5
351.3513	17.01	-2.27	121499.000	2.0	149952.400	1.0
351.3543	24.00	-3.36	28679.430	1.0	57132.590	1.0
351.3546	25.02	-4.32	149234.400	2.5	177687.540	3.5
351.3610	73.00	-.42	11695.340	0.0	40156.097	0.0
351.3628	28.01	-4.70	99442.860	4.5	127895.330	3.5
351.3640	77.00	-.74	0.000	0.0	28460.514	0.0
351.3650	64.00	.22	967.890	0.0	29428.323	0.0
351.3699	17.01	-.60	146333.800	2.0	174785.700	1.0
351.3700	42.00	0.00	18228.600	0.0	46688.628	0.0
351.3790	58.01	-1.09	967.890	0.0	29427.189	0.0
351.3820	26.00	-1.30	6928.266	5.0	35379.189	5.0
351.3822	19.02	-.40	209461.300	.5	237912.200	1.5
351.3827	27.00	-.27	26232.050	3.5	54682.910	4.5
351.3847	24.00	-2.13	28637.000	3.0	57087.700	2.0
351.3859	25.01	-1.67	85895.270	2.0	114345.870	3.0
351.3860	76.00	-.29	16131.504	0.0	44590.236	0.0
351.3863	23.01	-1.37	20280.190	5.0	48730.760	4.0
351.3883	24.00	-1.84	28682.180	2.0	57132.590	1.0
351.3926	28.00	-1.72	1713.080	1.0	30163.140	2.0
351.3956	10.01	-3.23	279324.890	1.5	307774.710	1.5
351.3987	28.01	-1.56	23108.280	2.5	51557.850	3.5
351.3987	25.01	-1.45	85895.270	2.0	114344.840	2.0
351.4013	27.00	-4.40	24326.110	3.5	52775.470	4.5
351.4025	23.00	-3.36	10892.500	3.5	39341.760	3.5
351.4068	25.01	-1.49	85895.270	2.0	114344.180	1.0
351.4070	57.00	-.83	1048.548	0.0	29505.579	0.0
351.4119	26.01	-3.84	38164.240	2.5	66612.740	1.5
351.4120	69.00	-1.56	0.000	0.0	28456.626	0.0
351.4176	18.02	.01	180679.000	1.0	209127.040	1.0
351.4205	27.01	-3.37	18338.500	1.0	46786.300	1.0
351.4230	23.03	.98	256251.700	4.0	284699.300	5.0
351.4284	26.02	-3.75	89907.850	5.0	118355.010	6.0
351.4336	25.00	-2.27	17637.150	.5	46083.890	1.5
351.4360	27.00	-1.17	26450.020	2.5	54896.570	3.5
351.4384	24.01	-3.49	35356.060	1.5	63802.410	.5
351.4387	18.01	.16	155351.030	1.5	183797.360	2.5
351.4414	23.01	-1.25	18293.870	2.0	46739.980	2.0
351.4415	25.01	-4.87	62572.200	2.0	91018.300	3.0
351.4471	26.00	-5.72	11976.239	4.0	40421.690	4.0
351.4490	44.00	-.82	2016.438	0.0	30470.069	0.0
351.4520	90.01	-.71	9356.272	0.0	37809.660	0.0
351.4587	23.00	-5.07	323.420	3.5	28768.130	4.5
351.4610	92.00	.06	0.000	0.0	28452.659	0.0
351.4630	26.00	-2.28	19390.165	6.0	47834.529	5.0
351.4654	22.00	-3.28	18593.990	3.0	47038.160	3.0
351.4660	28.01	-3.19	101740.270	3.5	130184.390	2.5
351.4661	22.00	-4.50	19573.968	4.0	48018.080	4.0
351.4701	24.00	-4.08	35398.020	4.0	63841.810	4.0
351.4788	26.00	-2.40	19788.248	4.0	48231.330	5.0
351.4798	28.01	-3.46	99442.860	4.5	127885.860	4.5
351.4801	6.00	-2.80	60393.140	2.0	88836.120	3.0
351.4874	26.02	-2.12	89907.850	4.0	118350.240	4.0
351.4874	26.02	-4.57	89907.850	5.0	118350.240	4.0
351.4963	6.00	-4.59	60352.630	1.0	88794.300	2.0
351.5038	24.00	-5.36	7593.160	2.0	36034.220	3.0
351.5049	28.00	-.09	879.813	2.0	29320.782	3.0
351.5080	25.01	-4.43	72247.380	3.0	100688.100	3.0
351.5099	24.00	-.38	31987.060	4.0	60427.630	5.0
351.5120	8.01	-2.67	229968.200	1.5	258408.600	.5
351.5191	10.00	-1.94	134459.287	1.0	162899.113	2.0
351.5236	29.01	-2.05	116375.470	3.0	144814.930	3.0
351.5237	23.00	-3.74	2424.890	4.5	30864.340	5.5
351.5420	41.01	.05	10162.848	0.0	38608.951	0.0
351.5434	22.00	-1.99	18287.560	4.0	46725.420	3.0
351.5454	9.02	-2.57	416185.420	2.5	444623.120	3.5
351.5462	28.01	-4.56	100389.520	2.5	128827.150	3.5
351.5470	27.00	-4.46	24326.110	3.5	52763.680	3.5
351.5489	22.01	-1.18	40330.250	.5	68767.660	1.5
351.5540	4.00	-.91	42565.000	0.0	71010.132	0.0
351.5542	26.02	-2.62	93512.640	4.0	121949.620	5.0
351.5602	12.02	-.73	534197.700	1.0	562634.200	1.0
351.5614	22.00	-6.81	6598.749	2.0	35035.147	2.0
351.5685	25.00	-2.97	34938.700	4.5	63374.530	4.5
351.5797	25.01	-3.84	72247.380	3.0	100682.300	4.0
351.5798	24.00	-4.26	25106.340	3.0	53541.250	2.0
351.5818	26.01	-1.77	54870.620	2.5	83305.370	3.5
351.5950	77.00	-1.03	7017.204	0.0	35459.019	0.0
351.6000	23.01	-2.24	9097.810	4.0	37531.090	4.0
351.6047	13.01	-2.79	121480.300	3.0	149913.200	2.0
351.6047	13.01	-1.61	121480.300	3.0	149913.200	3.0
351.6047	13.01	-.18	121480.300	3.0	149913.200	4.0
351.6049	27.00	-2.60	25269.250	3.5	53702.130	3.5
351.6070	28.01	-1.86	100389.520	2.5	128822.230	1.5
351.6097	8.01	-2.33	232747.510	2.5	261180.000	3.5
351.6114	24.00	-2.02	31055.350	5.0	59487.710	4.0
351.6117	29.01	-2.91	118142.970	3.0	146575.300	2.0
351.6121	13.01	-1.25	121480.900	2.0	149913.200	2.0
351.6121	13.01	-.71	121480.900	2.0	149913.200	3.0
351.6158	13.01	-.51	121481.200	1.0	149913.200	2.0
351.6200	41.00	-.59	9275.615	0.0	37715.408	0.0
351.6208	28.00	.14	28542.113	5.0	56973.707	5.0
351.6242	25.00	-3.57	35114.980	2.5	63546.300	3.5
351.6244	15.01	-.31	103941.300	0.0	132372.600	1.0
351.6252	26.02	-4.46	105929.160	3.0	134360.400	4.0
351.6303	28.01	-4.66	105499.050	3.5	133929.880	3.5
351.6307	25.01	-4.53	62587.500	3.0	91018.300	3.0
351.6360	90.01	-.99	8307.725	0.0	36746.224	0.0
351.6365	27.00	-3.61	21780.470	5.5	50210.800	4.5
351.6382	24.00	-2.99	32097.360	6.0	60527.550	6.0
351.6404	26.00	-1.09	24338.766	3.0	52768.780	4.0
351.6405	10.03	-.57	643672.000	1.5	672102.000	1.5
351.6425	27.00	-.25	25937.590	4.5	54367.430	5.5
351.6455	29.01	-3.49	120092.200	2.0	148521.800	1.0
351.6548	26.00	-.95	23110.925	3.0	51539.770	2.0
351.6573	26.02	-4.39	93512.640	4.0	121941.290	4.0
351.6615	24.00	-3.51	31377.960	4.0	59806.270	5.0
351.6628	25.00	-4.15	34423.270	3.5	62851.470	3.5
351.6630	76.00	-.10	18954.517	0.0	47390.832	0.0
351.6650	75.00	-.49	13711.778	0.0	42147.932	0.0
351.6653	21.01	-2.22	29823.920	2.0	58251.920	2.0
351.6668	27.00	-2.67	15774.040	1.5	44201.920	2.5
351.6728	29.01	-2.74	108014.660	3.0	136442.050	3.0
351.6830	90.01	-1.03	7904.437	0.0	36339.135	0.0
351.6853	25.01	-3.84	53805.800	4.0	82232.180	5.0
351.6857	22.00	-1.87	15156.787	4.0	43583.140	3.0
351.6860	41.00	-.35	9356.272	0.0	37790.728	0.0
351.6883	8.01	-1.84	232753.860	3.5	261180.000	3.5
351.6940	46.00	.07	7662.464	0.0	36096.273	0.0
351.6987	27.01	-5.09	27585.300	1.0	56010.600	2.0
351.7020	70.00	-.21	19599.777	0.0	48032.939	0.0
351.7021	28.00	-1.15	30163.140	2.0	58588.168	3.0
351.7039	29.00	-1.34	43716.376	0.0	72149.385	0.0
351.7040	28.01	-4.66	101357.200	4.5	129782.070	3.5
351.7050	92.01	-1.09	6210.629	0.0	34643.549	0.0
351.7165	28.01	-4.85	105499.050	3.5	133922.910	4.5
351.7186	15.01	-3.60	103340.010	2.0	131763.700	1.0
351.7235	24.02	-3.64	71676.200	4.0	100099.500	4.0
351.7279	8.01	-2.46	232536.060	1.5	260959.000	1.5
351.7295	28.00	-3.28	29320.782	3.0	57743.596	3.0
351.7296	23.01	-.33	9097.810	4.0	37520.610	3.0
351.7330	75.00	-.39	14518.354	0.0	42949.010	0.0
351.7351	28.01	-3.37	105439.850	1.5	133862.210	1.5
351.7380	58.01	.38	7259.177	0.0	35689.429	0.0
351.7456	24.00	-1.31	26787.500	3.0	55209.010	4.0
351.7498	23.00	-5.06	9824.580	2.5	38245.750	3.5
351.7507	27.01	-2.78	18031.500	2.0	46452.600	2.0
351.7527	23.01	-1.69	18269.490	1.0	46690.430	1.0
351.7560	42.00	.64	25407.119	0.0	53835.916	0.0
351.7561	23.00	-2.75	14548.830	2.5	42969.490	1.5
351.7599	22.00	-4.45	19573.968	4.0	47994.320	5.0
351.7600	69.00	-1.08	0.000	0.0	28428.474	0.0
351.7607	25.00	-3.18	34250.520	5.5	62670.810	4.5
351.7670	41.01	.78	16131.504	0.0	44559.412	0.0
351.7725	22.01	-.98	40425.800	1.5	68845.140	2.5
351.7784	27.00	-.73	25937.590	4.5	54356.450	4.5
351.7793	25.00	-3.94	35165.050	1.5	63583.840	1.5
351.7890	64.01	-.38	10001.532	0.0	38427.662	0.0
351.7892	18.01	-3.07	132630.650	1.5	161048.640	1.5
351.7905	28.01	-2.92	105439.850	1.5	133857.730	.5
351.7928	17.01	-4.80	158723.700	1.0	187141.400	2.0
351.7978	24.00	-3.68	26787.500	3.0	55204.790	3.0
351.8034	25.01	-1.22	85960.410	3.0	114377.250	4.0
351.8035	29.01	-2.48	118142.970	3.0	146559.800	4.0
351.8051	27.01	-2.39	24267.800	1.0	52684.500	1.0
351.8064	24.00	-1.07	21847.880	2.0	50264.480	3.0
351.8102	23.01	-3.28	19191.500	6.0	47607.790	6.0
351.8122	24.00	-3.58	24303.940	3.0	52720.070	4.0
351.8185	10.01	-2.54	318828.550	3.5	347244.170	4.5
351.8204	23.00	-5.69	2220.130	2.5	30635.600	2.5
351.8207	24.01	-3.20	54625.760	2.5	83041.200	3.5
351.8214	26.01	-5.06	16369.390	3.5	44784.780	2.5
351.8220	42.00	.10	18389.915	0.0	46813.379	0.0
351.8227	26.00	-4.22	26140.164	3.0	54555.450	4.0
351.8291	26.00	-4.97	17550.180	3.0	45964.944	2.0
351.8298	27.00	-1.82	25937.590	4.5	54352.300	3.5
351.8346	27.00	.01	8460.810	2.5	36875.130	1.5
351.8370	58.01	-.32	10001.532	0.0	38423.784	0.0
351.8400	90.00	-.80	2823.013	0.0	31245.023	0.0
351.8422	28.01	-4.14	100389.520	2.5	128803.230	2.5
351.8432	29.01	-1.88	118142.970	3.0	146556.600	3.0
351.8526	24.00	-4.46	31393.400	5.0	59806.270	5.0
351.8614	24.01	-2.48	38315.000	2.5	66727.160	2.5
351.8627	28.00	.29	28542.113	5.0	56954.167	6.0
351.8648	25.00	-3.55	37737.220	3.5	66149.100	3.5
351.8676	26.00	-3.14	23192.486	2.0	51604.146	3.0
351.8682	15.01	-1.46	76813.220	1.0	105224.830	0.0
351.8704	18.01	-2.38	190592.170	1.5	219003.600	2.5
351.8715	25.01	-3.38	53781.700	3.0	82193.040	2.0
351.8739	26.01	-4.63	50076.100	1.5	78487.250	1.5
351.8750	72.01	-.29	14276.381	0.0	42695.564	0.0
351.8757	10.03	-2.07	642184.000	1.5	670595.000	2.5
351.8846	28.01	-2.78	93390.060	2.5	121800.340	1.5
351.8862	26.00	-.68	17726.985	2.0	46137.140	3.0
351.8876	22.00	-4.47	17075.310	4.0	45485.350	5.0
351.8890	90.01	-1.42	7259.177	0.0	35677.229	0.0
351.8894	18.01	-3.00	172213.800	1.5	200623.700	.5
351.8927	18.01	-3.41	190592.170	1.5	219001.800	1.5
351.8979	25.00	-3.20	34938.700	4.5	63347.910	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
351.8989	25.00	-4.72	23719.520	1.5	52128.650	2.5
351.9025	25.00	-3.95	35114.980	2.5	63523.820	2.5
351.9066	24.00	-3.33	26796.280	2.0	55204.790	3.0
351.9080	58.01	-.79	2581.041	0.0	30997.559	0.0
351.9095	24.00	-4.02	28679.430	1.0	57087.700	2.0
351.9122	26.00	-4.72	26339.682	2.0	54747.740	1.0
351.9128	24.00	-1.14	31009.000	3.0	59417.010	3.0
351.9131	23.00	-4.08	10892.500	3.5	39300.480	2.5
351.9186	24.00	-1.38	21856.940	3.0	50264.480	3.0
351.9204	15.01	-2.41	103756.900	1.0	132164.300	2.0
351.9214	23.02	-2.78	63303.120	4.5	91710.430	3.5
351.9240	26.02	-4.54	93512.640	4.0	121919.740	3.0
351.9240	81.00	.65	7743.122	0.0	36158.348	0.0
351.9247	9.02	-3.23	416168.300	1.5	444575.350	2.5
351.9358	26.02	-1.31	201164.210	2.0	229570.360	2.0
351.9436	24.00	-1.87	28682.180	2.0	57087.700	2.0
351.9437	9.01	-3.45	254541.450	2.0	282946.970	2.0
351.9438	9.01	-3.12	254541.460	3.0	282946.970	2.0
351.9446	25.02	-4.84	145643.450	2.5	174048.890	2.5
351.9448	9.01	-4.42	254541.540	1.0	282946.970	2.0
351.9450	9.02	-3.52	441158.600	1.5	469564.010	.5
351.9465	28.01	-2.10	70635.460	2.5	99040.750	1.5
351.9539	26.02	-4.73	88663.870	4.0	117068.560	3.0
351.9540	45.00	-1.08	10243.505	0.0	38656.309	0.0
351.9600	40.00	-.03	0.000	0.0	28412.320	0.0
351.9623	26.02	-1.44	201166.350	3.0	229570.360	2.0
351.9640	44.00	-1.22	1129.205	0.0	29541.202	0.0
351.9664	25.01	-2.62	59537.400	4.0	87941.080	4.0
351.9667	22.01	-2.83	25193.040	2.5	53596.700	1.5
351.9716	26.01	-3.48	31999.120	3.5	60402.380	2.5
351.9719	25.00	-2.53	35041.370	3.5	63444.610	4.5
351.9751	9.02	-2.75	441158.600	1.5	469561.580	1.5
351.9758	28.00	-1.76	2216.519	2.0	30619.440	2.0
351.9818	25.00	-3.04	38120.180	4.5	66522.620	4.5
351.9833	10.01	-2.67	318841.850	3.5	347244.170	4.5
351.9838	10.01	-2.58	318841.890	4.5	347244.170	4.5
351.9843	10.01	-2.54	318841.890	4.5	347244.130	5.5
351.9848	26.02	-4.04	97041.380	3.0	125443.580	4.0
351.9890	23.00	-2.84	8412.940	.5	36814.800	1.5
351.9935	22.00	-2.73	386.874	4.0	28788.372	4.0
351.9976	6.00	-3.69	60393.140	2.0	88794.300	2.0
351.9992	18.01	-.26	157673.320	2.5	186074.350	2.5
352.0009	23.01	-1.15	8640.210	2.0	37041.110	2.0
352.0012	26.01	-2.95	54904.500	3.5	83305.370	3.5
352.0031	29.00	-.54	44926.239	0.0	73335.080	0.0
352.0040	9.01	-2.46	254546.330	3.0	282946.970	2.0
352.0060	9.01	-3.36	254546.490	2.0	282946.970	2.0
352.0060	41.00	-.94	1532.493	0.0	29941.100	0.0
352.0071	21.01	-3.76	10944.510	2.0	39344.900	2.0
352.0074	27.00	-1.44	816.000	3.5	29216.370	2.5
352.0076	26.00	-3.94	26479.366	1.0	54879.720	2.0
352.0243	22.01	-.10	16515.790	.5	44914.800	1.5
352.0247	28.01	-4.04	105668.780	2.5	134067.760	1.5
352.0290	70.01	.28	30407.885	0.0	58814.636	0.0
352.0325	25.01	-3.52	52653.270	4.0	81051.620	3.0
352.0338	26.01	-4.35	38214.500	1.5	66612.740	1.5
352.0374	27.00	-7.17	14036.280	1.5	42434.230	2.5
352.0404	6.00	-4.03	60393.140	2.0	88790.850	1.0
352.0420	26.01	-3.33	72352.170	3.5	100749.750	2.5
352.0420	22.00	-4.46	7255.369	2.0	35652.950	3.0
352.0444	27.00	-4.83	14399.280	.5	42796.670	1.5
352.0471	10.00	-2.40	135888.717	1.0	164285.882	0.0
352.0500	26.02	-4.47	157982.000	3.0	186378.940	4.0
352.0520	58.01	-.81	1371.178	0.0	29776.073	0.0
352.0540	9.02	-3.21	441167.400	.5	469564.010	.5
352.0542	24.00	-1.60	28637.000	3.0	57033.600	4.0
352.0547	23.01	-1.99	18293.870	2.0	46690.430	1.0
352.0693	23.02	-1.17	63315.050	3.5	91710.430	3.5
352.0720	75.00	-.94	14921.641	0.0	43324.922	0.0
352.0735	8.01	-1.61	232959.260	3.5	261354.300	2.5
352.0765	8.02	-.55	350026.100	0.0	378420.900	1.0
352.0841	9.02	-3.88	441167.400	.5	469561.580	1.5
352.0849	26.00	-1.81	21038.987	2.0	49433.108	2.0
352.0870	40.01	-.80	4436.164	0.0	32838.235	0.0
352.0969	22.00	-4.92	20126.055	3.0	48519.210	2.0
352.0980	58.01	-.96	5565.369	0.0	33966.553	0.0
352.1069	26.02	-1.85	201178.010	1.0	229570.360	2.0
352.1090	63.01	1.20	26052.379	0.0	54452.675	0.0
352.1148	24.00	-4.04	24200.230	6.0	52591.940	5.0
352.1214	28.01	-2.60	100475.820	3.5	128867.000	3.5
352.1261	18.01	-.52	157233.930	3.5	185624.730	3.5
352.1263	26.00	-1.32	7376.762	4.0	35767.546	4.0
352.1324	22.00	-8.34	6556.828	1.0	34947.120	1.0
352.1369	9.02	-3.65	416185.420	2.5	444575.350	2.5
352.1385	29.01	-4.56	120092.200	2.0	148482.000	3.0
352.1410	42.00	.84	20003.065	0.0	48400.781	0.0
352.1507	23.01	-3.45	22273.540	1.0	50662.360	0.0
352.1520	26.00	-2.32	29320.050	1.0	57708.760	2.0
352.1524	24.00	-.52	31028.330	2.0	59417.010	3.0
352.1530	39.00	.17	14840.984	0.0	43237.732	0.0
352.1547	25.01	-4.59	72306.810	2.0	100695.300	1.0
352.1551	10.01	-2.48	254292.190	.5	282680.650	.5
352.1557	18.01	-4.59	173393.380	2.5	201781.790	2.5
352.1560	72.00	-.07	17825.312	0.0	46221.818	0.0
352.1567	27.00	.01	3482.820	4.5	31871.150	3.5
352.1633	26.01	-4.61	15844.710	4.5	44232.510	4.5
352.1732	27.00	-2.64	5075.830	1.5	33462.830	2.5
352.1736	27.00	-3.24	16470.600	1.5	44857.570	.5
352.1743	28.01	-4.50	106283.160	2.5	134670.070	1.5
352.1773	28.01	-2.28	100475.820	3.5	128862.490	4.5
352.1808	28.01	-4.12	71457.740	3.5	99844.130	3.5
352.1828	26.00	-.54	17927.378	1.0	46313.610	2.0
352.1845	23.01	-1.15	18353.890	3.0	46739.980	2.0
352.1869	13.01	-1.49	121480.300	3.0	149866.200	3.0
352.1880	58.01	-.18	4839.451	0.0	33233.377	0.0
352.1882	25.01	-4.00	72306.810	2.0	100692.600	2.0
352.1910	74.00	-.81	13227.833	0.0	41621.517	0.0
352.1923	25.01	-1.33	85960.410	3.0	114345.870	3.0
352.1943	13.01	-.59	121480.900	2.0	149866.200	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
352.1976	18.01	-3.21	155708.020	.5	184093.060	.5
352.2030	77.00	-1.14	4032.876	0.0	32425.593	0.0
352.2050	60.01	-1.39	2984.328	0.0	31376.883	0.0
352.2051	25.01	-1.75	85960.410	3.0	114344.840	2.0
352.2051	26.01	-5.89	16369.390	3.5	44753.820	3.5
352.2071	28.01	-4.59	105668.780	2.5	134053.050	2.5
352.2137	24.01	-1.12	45730.740	2.5	74114.480	3.5
352.2138	8.01	-3.88	232796.270	2.5	261160.000	3.5
352.2154	17.01	.14	146469.000	3.0	174852.600	3.0
352.2232	23.00	-5.11	2311.370	3.5	30694.340	3.5
352.2261	26.00	-.10	22845.856	5.0	51228.595	5.0
352.2291	27.00	-.63	26063.110	1.5	54445.610	2.5
352.2301	26.01	-4.33	75600.930	3.5	103983.350	3.5
352.2402	24.01	-3.71	54499.700	1.5	82881.300	2.5
352.2430	69.01	-1.02	8711.012	0.0	37100.504	0.0
352.2441	25.01	-3.80	72306.810	2.0	100688.100	3.0
352.2724	10.01	-2.36	252953.540	1.5	281332.550	.5
352.2746	24.00	-1.88	25548.640	5.0	53927.470	6.0
352.2838	28.01	-2.99	100475.820	3.5	128853.910	4.5
352.2839	27.00	-1.44	25937.590	4.5	54315.670	5.5
352.2843	28.01	-3.23	100475.820	3.5	128853.870	2.5
352.2872	9.01	-.05	227228.420	1.0	255606.240	1.0
352.2890	26.00	-4.66	23192.486	2.0	51570.160	3.0
352.3012	28.01	-2.95	70778.120	3.5	99154.810	4.5
352.3020	72.00	-.73	2339.068	0.0	30723.806	0.0
352.3062	28.00	-2.07	3409.925	2.0	31786.210	3.0
352.3114	25.00	-2.55	37586.030	1.5	65961.900	1.5
352.3173	26.00	-2.07	26224.961	3.0	54600.350	3.0
352.3261	25.01	-4.53	72320.620	1.0	100695.300	1.0
352.3299	26.00	-1.08	23192.486	2.0	51566.860	1.0
352.3328	22.00	-9.87	6661.003	3.0	35035.147	2.0
352.3427	27.00	-.35	5075.830	1.5	33449.180	.5
352.3438	28.00	-2.31	204.786	3.0	28578.046	3.0
352.3438	24.00	-1.41	21810.840	1.0	50184.100	2.0
352.3460	28.00	-2.15	30619.440	2.0	58992.520	2.0
352.3479	28.01	-3.40	106007.890	2.5	134380.820	3.5
352.3530	90.01	-1.34	7904.437	0.0	36285.067	0.0
352.3538	25.00	-1.55	17568.480	1.5	45940.930	2.5
352.3548	27.01	-1.61	22009.230	4.0	50381.660	3.0
352.3597	25.01	-4.63	72320.620	1.0	100692.600	2.0
352.3640	76.00	-1.58	0.000	0.0	28379.744	0.0
352.3696	27.00	-.62	15184.040	2.5	43555.220	3.5
352.3708	9.01	-3.14	254541.450	2.0	282912.540	1.0
352.3719	9.01	-3.40	254541.540	1.0	282912.540	1.0
352.3769	16.01	-1.87	128233.070	2.5	156603.670	3.5
352.3782	24.00	-1.63	32097.360	6.0	60467.850	5.0
352.3834	26.02	-3.45	105895.350	1.0	134265.420	2.0
352.3980	66.01	.39	4274.849	0.0	32651.855	0.0
352.3997	23.00	-4.54	0.000	1.5	28368.760	1.5
352.4018	22.01	-.80	40581.800	2.5	68950.390	3.5
352.4043	26.00	-1.87	20874.482	3.0	49242.872	3.0
352.4067	26.00	-1.24	20874.482	3.0	49242.680	2.0
352.4070	58.01	-.63	5887.999	0.0	34264.280	0.0
352.4168	26.00	-2.42	26623.726	2.0	54991.110	1.0
352.4189	28.00	-.66	30163.140	2.0	58530.350	3.0
352.4200	64.01	-.59	241.973	0.0	28617.207	0.0
352.4230	42.00	-.86	11372.710	0.0	39747.703	0.0
352.4231	29.00	-.31	43716.376	0.0	72091.361	0.0
352.4242	26.00	-3.57	25899.974	4.0	54266.760	5.0
352.4242	26.00	-1.37	18378.187	2.0	46744.975	3.0
352.4257	9.02	-3.88	416185.420	2.5	444552.080	3.5
352.4282	26.02	-1.33	201164.210	2.0	229530.670	1.0
352.4327	23.03	-1.66	257690.800	3.0	286056.900	3.0
352.4333	9.01	-2.81	254546.490	2.0	282912.540	1.0
352.4502	27.01	-3.69	40694.900	4.0	69059.590	3.0
352.4514	24.01	-3.95	38362.560	1.5	66727.160	2.5
352.4515	26.00	-3.46	22249.430	3.0	50614.020	4.0
352.4535	28.00	.02	204.786	3.0	28569.210	2.0
352.4610	66.01	-1.04	4274.849	0.0	32646.782	0.0
352.4650	24.02	-1.86	71736.000	5.0	100099.500	4.0
352.4650	42.00	.83	25649.091	0.0	54020.702	0.0
352.4675	26.00	-3.58	17550.180	3.0	45913.480	3.0
352.4707	23.01	-1.00	8841.970	3.0	37205.010	3.0
352.4711	26.00	-4.04	22838.320	2.0	51201.330	2.0
352.4722	28.01	-2.98	100490.950	1.5	128853.870	2.5
352.4791	28.00	-.98	30163.140	2.0	58525.507	1.0
352.4822	18.02	-3.96	243145.760	2.0	271507.880	2.0
352.4854	22.01	-1.52	25193.040	2.5	53554.900	2.5
352.4869	13.02	-1.92	188877.570	2.5	217239.310	2.5
352.4869	13.02	-.62	188877.570	2.5	217239.310	3.5
352.4886	26.01	-2.59	72130.440	4.5	100492.040	3.5
352.4950	13.02	-.77	188878.220	1.5	217239.310	2.5
352.4980	42.00	.34	18147.942	0.0	46516.897	0.0
352.4981	25.00	-3.21	37586.030	1.5	65946.870	2.5
352.5014	26.02	-1.78	201170.100	0.0	229530.670	1.0
352.5049	25.01	-2.75	51553.060	5.0	79913.350	4.0
352.5082	27.00	-3.59	16195.680	.5	44555.710	1.5
352.5150	64.00	-.67	967.890	0.0	29335.477	0.0
352.5156	22.00	-2.01	15108.121	3.0	43467.550	2.0
352.5186	26.02	-2.61	105906.230	2.0	134265.420	2.0
352.5188	25.00	-1.81	37789.930	2.5	66149.100	3.5
352.5218	28.01	-4.80	106283.160	2.5	134642.090	3.5
352.5230	41.00	.08	12905.203	0.0	41272.146	0.0
352.5238	25.00	-4.25	35165.050	1.5	63523.820	2.5
352.5324	26.01	-3.90	38164.240	2.5	66522.320	2.5
352.5341	28.01	-4.08	106620.530	3.5	134978.470	2.5
352.5469	10.01	-2.77	290583.170	1.5	318940.080	1.5
352.5510	62.01	-1.62	2661.698	0.0	31026.388	0.0
352.5529	8.01	-3.05	232602.570	.5	260959.000	1.5
352.5550	29.01	-2.74	118071.340	1.0	146427.600	1.0
352.5648	18.02	-1.47	214568.490	0.0	242923.960	1.0
352.5740	9.01	-2.92	254541.540	1.0	282896.270	0.0
352.5769	24.02	-3.74	131448.800	5.0	159803.300	4.0
352.5789	8.01	-4.71	212161.940	1.5	240516.280	1.5
352.5810	40.01	-.45	2823.013	0.0	31185.290	0.0
352.5821	25.00	-3.84	35041.370	3.5	63395.450	3.5
352.5840	24.00	-.96	21856.940	3.0	50210.670	4.0
352.5872	27.00	-2.01	15184.040	2.5	43537.710	1.5
352.5893	23.03	-.60	255747.600	3.0	284101.100	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
352.5927	29.01	-1.98	118142.970	3.0	146496.200	3.0
352.5996	26.00	-3.38	20874.482	3.0	49227.160	3.0
352.5998	26.02	-1.97	201178.010	1.0	229530.670	1.0
352.6039	27.00	-2.28	26597.640	1.5	54949.970	1.5
352.6040	76.00	-.82	10969.423	0.0	39329.850	0.0
352.6042	26.00	-2.08	704.003	2.0	29056.312	3.0
352.6082	26.00	-2.80	29356.780	2.0	57708.760	2.0
352.6102	10.01	-3.27	279422.890	.5	307774.710	1.5
352.6117	18.01	-4.36	132737.610	.5	161089.310	.5
352.6130	17.01	-.56	146469.000	3.0	174820.600	2.0
352.6163	28.01	-2.54	100475.820	3.5	128827.150	3.5
352.6168	26.00	-1.76	7728.058	3.0	36079.353	3.0
352.6215	26.00	-4.31	26140.164	3.0	54491.080	3.0
352.6231	26.00	-3.00	23110.925	3.0	51461.707	4.0
352.6267	23.03	-1.30	226796.300	2.0	255146.800	2.0
352.6319	25.00	-1.42	34938.700	4.5	63288.780	5.5
352.6329	12.02	-1.19	562634.200	1.0	590984.200	0.0
352.6378	26.00	-.07	23110.925	3.0	51460.530	3.0
352.6421	27.00	-2.05	26597.640	1.5	54946.900	2.5
352.6425	28.01	-2.78	29070.930	1.5	57420.160	2.5
352.6466	24.00	-2.55	31009.000	3.0	59357.900	2.0
352.6470	26.00	-.69	18378.187	2.0	46727.055	2.0
352.6494	24.00	-2.10	28637.000	3.0	56985.670	3.0
352.6507	25.00	-1.94	37420.240	5.5	65768.810	4.5
352.6528	25.02	-2.64	109780.400	2.5	138128.800	1.5
352.6530	28.00	-.74	29481.020	4.0	57829.405	5.0
352.6531	22.00	-6.63	6598.749	2.0	34947.120	1.0
352.6615	25.00	-2.13	38008.700	5.5	66356.400	4.5
352.6640	90.00	-1.45	0.000	0.0	28355.602	0.0
352.6657	23.00	-4.18	8578.520	2.5	36925.880	3.5
352.6667	26.00	-.16	23192.486	2.0	51539.770	2.0
352.6681	26.00	-2.24	24335.764	2.0	52682.930	2.0
352.6699	24.01	-4.87	36101.820	3.5	64448.840	2.5
352.6714	24.02	-4.53	66027.800	4.0	94374.700	4.0
352.6723	23.00	-4.91	2424.890	4.5	30771.720	4.5
352.6752	15.01	-1.62	104051.100	3.0	132397.700	2.0
352.6769	26.00	-.61	22845.856	5.0	51192.320	4.0
352.6772	24.00	-1.70	25359.620	4.0	53706.060	5.0
352.6844	27.00	-.57	0.000	4.5	28345.860	4.5
352.6850	74.00	-.51	13227.833	0.0	41581.747	0.0
352.6905	24.01	-4.86	54418.080	.5	82763.450	1.5
352.6907	26.02	-4.56	201164.210	2.0	229509.560	3.0
352.6956	26.00	-.72	29469.010	2.0	57813.970	3.0
352.7055	26.00	-4.65	24338.766	3.0	52682.930	2.0
352.7060	73.00	-1.07	11130.738	0.0	39482.963	0.0
352.7068	24.00	-.84	32097.360	6.0	60441.420	6.0
352.7071	18.01	-2.76	142186.270	4.5	170530.310	3.5
352.7174	26.02	-1.05	201166.350	3.0	229509.560	3.0
352.7200	15.01	-.21	104054.700	1.0	132397.700	2.0
352.7207	24.01	-4.53	77078.960	5.5	105421.900	5.5
352.7208	22.00	-3.51	18695.230	4.0	47038.160	3.0
352.7261	28.01	-3.63	100389.520	2.5	128732.030	1.5
352.7342	22.01	-1.59	40425.800	1.5	68767.660	1.5
352.7482	29.00	-.68	43716.376	0.0	72065.210	0.0
352.7505	24.00	-4.47	35501.260	3.0	63841.810	4.0
352.7705	25.00	-3.34	38669.600	3.5	67008.540	2.5
352.7739	26.02	-3.06	89907.850	4.0	118246.520	3.0
352.7747	23.00	-2.10	8476.200	1.5	36814.800	1.5
352.7787	26.00	-.05	22996.661	4.0	51334.940	4.0
352.7815	25.00	-4.16	34423.270	3.5	62761.330	2.5
352.7850	58.01	-1.22	0.000	0.0	28345.876	0.0
352.7867	23.01	-1.91	20242.320	4.0	48579.960	3.0
352.7893	26.00	-1.91	22249.430	3.0	50586.857	3.0
352.7918	26.00	-4.85	25899.974	4.0	54237.200	4.0
352.7945	27.00	-1.88	20500.710	1.5	48837.720	.5
352.7976	28.00	-2.38	1332.153	3.0	29668.918	3.0
352.8013	23.00	-4.50	13801.530	1.5	42138.000	2.5
352.8020	45.00	.02	1451.835	0.0	29796.346	0.0
352.8032	28.01	-4.33	77332.470	2.5	105668.780	2.5
352.8039	26.02	-2.55	105929.160	3.0	134265.420	2.0
352.8044	24.00	-1.79	21847.880	2.0	50184.100	2.0
352.8045	28.01	-4.34	111120.540	1.5	139456.750	1.5
352.8050	58.01	-.77	5726.684	0.0	34070.953	0.0
352.8232	24.01	-3.09	38315.000	2.5	66649.710	1.5
352.8237	26.00	-4.41	19788.248	4.0	48122.913	3.0
352.8309	25.00	-2.71	38120.180	4.5	66454.270	3.5
352.8315	26.00	-4.44	12560.933	3.0	40894.972	2.0
352.8318	28.01	-4.22	105588.890	4.5	133922.910	4.5
352.8323	28.01	-4.39	70706.770	1.5	99040.750	1.5
352.8415	28.00	-4.19	30192.268	0.0	58525.507	1.0
352.8419	19.01	-1.27	186685.600	2.0	215018.800	1.0
352.8425	25.00	-3.89	35041.370	3.5	63374.530	4.5
352.8540	64.01	-.50	3952.218	0.0	32292.551	0.0
352.8600	76.00	-1.17	0.000	0.0	28339.851	0.0
352.8610	73.00	-.71	12743.888	0.0	41083.659	0.0
352.8617	28.00	-.15	33500.854	3.0	61832.470	4.0
352.8659	28.01	-2.64	100490.950	1.5	128822.230	1.5
352.8680	44.00	-1.27	2661.698	0.0	31000.907	0.0
352.8697	28.00	-3.32	27943.543	1.0	56274.516	2.0
352.8785	24.00	-1.20	32097.360	6.0	60427.630	5.0
352.8872	24.00	-1.15	31028.330	2.0	59357.900	2.0
352.8884	28.00	-.95	29481.020	4.0	57810.494	4.0
352.8937	26.00	-4.61	6928.266	5.0	35257.309	4.0
352.9025	27.00	-.77	1406.840	2.5	29735.180	3.5
352.9040	58.01	-.96	5646.026	0.0	33982.344	0.0
352.9047	27.00	-1.67	20500.710	1.5	48828.870	2.5
352.9047	25.02	-4.51	148355.600	3.5	176683.760	2.5
352.9141	28.01	-2.77	100475.820	3.5	128803.230	2.5
352.9172	24.00	-2.66	21856.940	3.0	50184.100	2.0
352.9203	25.00	-3.40	34343.900	4.5	62670.810	4.5
352.9210	75.00	-.88	16534.792	0.0	44869.745	0.0
352.9317	30.02	-.66	233610.400	2.0	261936.400	1.0
352.9402	8.01	-3.12	233544.090	1.5	261869.400	2.5
352.9430	81.00	.05	7743.122	0.0	36076.309	0.0
352.9470	23.00	-4.05	137.380	2.5	28462.150	2.5
352.9502	25.01	-3.37	49517.580	5.0	77842.090	6.0
352.9525	26.00	-2.05	24574.655	4.0	52898.980	5.0
352.9533	25.00	-4.10	34463.370	1.5	62787.630	1.5
352.9537	23.00	-6.76	2311.370	3.5	30635.600	2.5
352.9609	9.02	-4.98	440359.260	3.5	468682.910	3.5
352.9620	28.00	-2.26	15609.861	2.0	43933.428	2.0
352.9658	16.01	-2.33	127824.930	.5	156148.190	.5
352.9667	24.01	-2.41	35707.660	5.5	64030.850	6.5
352.9728	23.00	-.49	9636.960	1.5	37959.660	2.5
352.9753	24.00	-2.04	20517.400	2.0	48839.900	1.0
352.9806	27.00	-.17	4142.660	3.5	32464.730	4.5
352.9811	26.00	-.34	23244.826	1.0	51566.860	1.0
352.9844	22.00	-6.38	7255.369	2.0	35577.140	2.0
352.9927	9.02	-4.26	416168.300	1.5	444489.400	2.5
353.0020	58.01	-.79	2339.068	0.0	30667.519	0.0
353.0027	17.02	.48	188390.100	2.5	216710.400	3.5
353.0039	24.00	-1.67	25206.020	3.0	53526.220	4.0
353.0060	76.00	-.66	10082.190	0.0	38410.320	0.0
353.0083	25.01	-1.44	86057.400	4.0	114377.250	4.0
353.0220	40.00	-.77	5000.766	0.0	33327.612	0.0
353.0279	24.00	-1.58	27597.220	3.0	55915.500	4.0
353.0299	25.01	-3.24	53781.700	3.0	82099.820	4.0
353.0314	10.03	-2.16	642934.000	3.5	671252.000	3.5
353.0326	15.01	-.39	104054.700	1.0	132372.600	1.0
353.0351	25.01	-4.04	54938.100	1.0	83255.800	2.0
353.0381	26.00	-.29	22650.415	6.0	50967.873	6.0
353.0383	29.00	-2.64	13227.833	0.0	41553.372	0.0
353.0446	23.01	-2.12	18269.490	1.0	46586.430	0.0
353.0547	27.00	-.98	18775.010	.5	47091.140	.5
353.0576	22.00	-3.03	386.874	4.0	28702.768	3.0
353.0582	25.02	-4.86	121197.050	2.5	149512.900	1.5
353.0585	28.00	-.68	28542.113	5.0	56857.933	4.0
353.0600	62.01	-1.20	1451.835	0.0	29775.633	0.0
353.0663	8.02	-.55	350122.900	1.0	378436.100	0.0
353.0738	19.01	-.44	166461.500	1.0	194776.100	0.0
353.0743	25.01	-3.76	43696.190	3.0	72010.750	4.0
353.0766	23.01	-.56	8640.210	2.0	36954.580	1.0
353.0849	10.01	-4.61	251011.180	2.5	279324.890	1.5
353.0850	40.01	.12	14115.066	0.0	42436.858	0.0
353.0852	23.00	-4.94	0.000	1.5	28313.680	.5
353.0870	72.00	.34	19196.490	0.0	47518.122	0.0
353.0913	28.00	-.89	30912.838	1.0	59226.030	1.0
353.0950	58.01	-.78	4678.136	0.0	32999.126	0.0
353.0961	26.00	-2.25	20037.815	0.0	48350.620	1.0
353.0987	23.03	-.91	255146.800	2.0	283459.400	3.0
353.1099	25.00	-2.84	38669.600	3.5	66981.300	3.5
353.1110	92.01	-1.23	1693.808	0.0	30013.515	0.0
353.1142	25.01	-2.82	53805.800	4.0	82117.160	5.0
353.1150	63.01	.40	26052.379	0.0	54371.765	0.0
353.1162	30.02	.39	233610.400	2.0	261921.600	2.0
353.1183	18.01	-3.89	132737.610	.5	161048.640	1.5
353.1223	28.01	-3.20	105499.050	3.5	133809.760	3.5
353.1230	72.00	-1.33	5565.369	0.0	33884.113	0.0
353.1390	44.00	-.68	8952.985	0.0	37270.446	0.0
353.1430	24.00	-.60	31048.850	1.0	59357.900	2.0
353.1439	26.00	-3.24	19621.004	5.0	47929.981	4.0
353.1440	90.00	-.55	4920.109	0.0	33237.169	0.0
353.1465	28.01	-2.65	100490.950	1.5	128799.720	.5
353.1486	23.01	-2.14	8841.970	3.0	37150.570	4.0
353.1487	28.00	-1.05	29481.020	4.0	57789.611	4.0
353.1567	28.01	-2.59	71770.830	2.5	100078.780	1.5
353.1580	73.00	-.86	9194.957	0.0	37510.895	0.0
353.1583	26.01	-4.48	38214.500	1.5	66522.320	2.5
353.1590	58.01	-.78	4678.136	0.0	32993.994	0.0
353.1642	27.00	-4.23	26597.640	1.5	54904.990	2.5
353.1664	23.01	-6.22	19112.930	4.0	47420.100	4.0
353.1700	66.01	.55	0.000	0.0	28314.976	0.0
353.1743	25.00	-1.71	35041.370	3.5	63347.910	4.5
353.1914	25.01	-3.45	53017.160	1.0	81322.330	1.0
353.1961	25.00	-3.53	34463.370	1.5	62768.160	.5
353.1971	24.00	-6.31	7593.160	2.0	35897.870	2.0
353.1979	25.01	-4.70	75563.490	0.0	103868.140	1.0
353.2062	9.02	-4.33	416185.420	2.5	444489.400	2.5
353.2124	24.00	-1.65	28682.180	2.0	56985.670	3.0
353.2210	73.00	-1.25	10888.765	0.0	39199.653	0.0
353.2216	25.00	-1.33	17451.520	2.5	45754.270	3.5
353.2230	63.01	.24	27100.927	0.0	55411.654	0.0
353.2238	18.01	-4.36	158167.710	1.5	186470.280	1.5
353.2247	23.03	-1.15	226521.600	0.0	254824.100	1.0
353.2276	26.02	-.65	201207.290	4.0	229509.560	3.0
353.2286	23.01	-.91	26839.820	3.0	55142.010	3.0
353.2317	9.02	-4.66	416168.300	1.5	444470.240	1.5
353.2343	25.01	-4.41	79800.520	4.0	108102.250	3.0
353.2381	25.01	-3.54	65567.070	2.0	93868.500	1.0
353.2454	27.00	-4.89	23855.620	4.5	52156.460	4.5
353.2610	58.01	-.47	7178.519	0.0	35486.201	0.0
353.2646	17.01	-3.15	121499.000	2.0	149798.300	2.0
353.2678	26.01	-3.16	36126.410	1.5	64425.460	2.5
353.2686	26.01	-3.46	31364.470	1.5	59663.450	1.5
353.2763	25.00	-2.75	38120.180	4.5	66418.550	5.5
353.2775	26.01	-2.62	58631.650	4.5	86929.920	3.5
353.2800	76.00	-1.40	4113.534	0.0	32419.693	0.0
353.2809	8.02	-.68	350122.900	1.0	378420.900	1.0
353.2810	44.00	.28	14599.011	0.0	42905.090	0.0
353.2814	25.00	-3.26	34463.370	1.5	62761.330	2.5
353.2859	26.00	-4.77	22996.661	4.0	51294.262	3.0
353.2880	58.01	-1.36	0.000	0.0	28305.518	0.0
353.2998	26.00	-.39	23270.374	0.0	51566.860	1.0
353.3043	11.01	-.31	264928.000	2.0	293224.120	1.0
353.3056	8.01	-2.36	232745.980	1.5	261042.000	2.5
353.3076	27.00	-.84	18389.570	1.5	46685.430	1.5
353.3118	24.00	-1.72	25089.200	2.0	53384.720	3.0
353.3123	25.00	-4.39	23719.520	1.5	52015.000	1.5
353.3132	28.01	-3.18	105439.850	1.5	133735.260	2.5
353.3171	15.01	-.56	104102.600	2.0	132397.700	2.0
353.3183	26.01	-4.45	31368.450	.5	59663.450	1.5
353.3190	26.00	-.12	23244.826	1.0	51539.770	2.0
353.3220	40.00	-.55	1209.863	0.0	29512.658	0.0
353.3221	24.00	-4.23	21810.840	1.0	50105.540	1.0
353.3247	8.01	-2.12	232747.510	2.5	261042.000	2.5
353.3258	19.02	-2.51	214232.300	.5	242526.700	.5
353.3306	25.01	-2.99	53805.800	4.0	82099.820	4.0
353.3355	27.00	-.91	1809.330	1.5	30102.960	2.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
353.3410	76.00	-.31	15082.956	0.0	43384.229	0.0
353.3552	28.01	-4.55	70748.700	.5	99040.750	1.5
353.3570	92.01	-1.13	887.233	0.0	29187.224	0.0
353.3601	25.01	-.93	86057.400	4.0	114349.060	5.0
353.3660	41.00	-1.42	80.658	0.0	28379.928	0.0
353.3674	23.00	.07	9824.580	2.5	38115.650	3.5
353.3684	15.01	-1.97	77711.000	2.0	106001.990	1.0
353.3702	28.01	-3.67	99040.750	1.5	127331.600	2.5
353.3719	27.00	-1.16	21920.090	4.5	50210.800	4.5
353.3746	29.00	-.62	43716.376	0.0	72014.958	0.0
353.3753	23.00	-.59	9544.540	.5	37834.980	1.5
353.3762	23.00	-2.69	11100.650	4.5	39391.020	4.5
353.3858	30.02	-3.23	235452.500	2.0	263742.100	2.0
353.3858	30.02	-4.39	235452.500	2.0	263742.100	2.0
353.3864	22.01	-1.54	16625.250	1.5	44914.800	1.5
353.3899	28.01	-4.54	102742.740	1.5	131032.010	2.5
353.3999	25.01	-2.17	86057.400	4.0	114345.870	3.0
353.4040	8.01	-3.55	232753.860	3.5	261042.000	2.5
353.4050	58.01	-.01	4113.534	0.0	32409.681	0.0
353.4120	41.00	-1.01	5887.999	0.0	34183.586	0.0
353.4136	25.00	-4.84	37586.030	1.5	65873.400	2.5
353.4151	23.01	-3.15	11908.270	2.0	40195.520	3.0
353.4156	23.00	-3.69	8476.200	1.5	36763.410	2.5
353.4164	24.01	-4.50	38362.560	1.5	66649.710	1.5
353.4183	17.02	-2.87	217850.200	2.5	246137.200	2.5
353.4278	24.01	-3.28	77078.960	5.5	105365.200	4.5
353.4330	92.00	-.65	0.000	0.0	28293.906	0.0
353.4358	8.02	-.45	350122.900	1.0	378408.500	2.0
353.4440	58.01	-.20	7420.492	0.0	35713.517	0.0
353.4523	26.00	-2.23	29356.780	2.0	57641.060	3.0
353.4527	26.00	-1.54	28819.966	5.0	57104.207	5.0
353.4598	24.00	-2.89	24833.860	3.0	53117.540	4.0
353.4631	25.00	-4.57	37737.220	3.5	66020.630	2.5
353.4658	10.01	-2.29	279137.620	3.5	307420.820	2.5
353.4675	26.00	-2.94	17550.180	3.0	45833.240	4.0
353.4685	22.01	-.64	40798.370	3.5	69081.350	4.5
353.4703	22.00	-2.84	14028.470	2.0	42311.310	3.0
353.4730	27.00	-2.37	26232.050	3.5	54514.670	3.5
353.4739	23.00	-1.85	8412.940	.5	36695.490	.5
353.4761	27.00	-1.82	18389.570	1.5	46671.940	2.5
353.4776	18.01	-4.97	170530.310	3.5	198812.550	2.5
353.4801	29.01	-3.23	117747.450	3.0	146029.500	4.0
353.4816	29.01	-3.11	88362.030	2.0	116643.960	3.0
353.4820	75.00	-.58	16534.792	0.0	44824.776	0.0
353.4908	26.00	-2.98	12560.933	3.0	40842.130	3.0
353.4908	12.02	-1.45	562939.500	2.0	591220.700	1.0
353.4925	26.00	-4.32	11976.239	4.0	40257.300	5.0
353.4960	66.01	-.05	806.575	0.0	29095.438	0.0
353.4972	12.01	-1.40	80619.500	.5	108900.190	1.5
353.4999	25.00	-2.55	35114.980	2.5	63395.450	3.5
353.5004	29.01	-1.31	118142.970	3.0	146423.400	4.0
353.5072	28.00	-2.30	28578.046	3.0	56857.933	4.0
353.5115	18.01	-2.97	183797.360	2.5	212076.900	2.5
353.5160	40.00	-.03	7985.094	0.0	36272.357	0.0
353.5180	23.01	-3.86	8640.210	2.0	36919.230	3.0
353.5188	9.01	-.50	211900.260	1.0	240179.220	0.0
353.5225	26.00	-3.90	19552.474	1.0	47831.132	2.0
353.5270	25.00	-.85	37630.620	4.5	65908.920	4.5
353.5300	41.00	-.14	0.000	0.0	28286.143	0.0
353.5318	18.01	-.30	155708.020	.5	183985.940	1.5
353.5370	44.00	-1.76	1129.205	0.0	29414.788	0.0
353.5411	22.01	.08	16625.250	1.5	44902.420	2.5
353.5481	26.02	-3.58	201293.750	2.0	229570.360	2.0
353.5489	29.01	-1.51	117747.450	3.0	146024.000	4.0
353.5540	72.01	-.60	4839.451	0.0	33123.673	0.0
353.5550	74.00	-.52	13227.833	0.0	41511.975	0.0
353.5570	58.01	-1.01	2823.013	0.0	31106.995	0.0
353.5624	26.01	-2.86	31387.980	2.5	59663.450	1.5
353.5650	62.01	-1.03	3468.273	0.0	31751.616	0.0
353.5700	24.00	-1.76	33762.740	6.0	62037.600	5.0
353.5710	24.00	-2.85	24897.550	4.0	53172.330	5.0
353.5722	21.01	-.17	2540.970	2.0	30815.650	1.0
353.5752	18.01	-1.67	183797.360	2.5	212071.800	3.5
353.5785	24.01	-4.07	54418.080	.5	82692.260	.5
353.5801	29.01	-1.94	117747.450	3.0	146021.500	3.0
353.5805	28.01	-2.87	100592.980	3.5	128867.000	3.5
353.5830	44.00	-.68	9033.642	0.0	37315.545	0.0
353.5933	27.01	-2.06	24411.500	0.0	52684.500	1.0
353.5967	29.01	-2.23	118142.970	3.0	146415.700	2.0
353.6009	22.00	-5.95	7255.369	2.0	35527.760	1.0
353.6030	23.00	-3.83	323.420	3.5	28595.640	3.5
353.6053	26.00	-4.85	26339.682	2.0	54611.720	2.0
353.6300	73.00	-1.16	9194.957	0.0	37473.101	0.0
353.6308	15.01	-1.40	104102.600	2.0	132372.600	1.0
353.6369	28.01	-2.40	100592.980	3.5	128862.490	4.5
353.6371	29.01	-3.51	120092.200	2.0	148361.700	1.0
353.6377	23.00	-6.62	2424.890	4.5	30694.340	3.5
353.6408	26.00	-2.59	29371.860	3.0	57641.060	3.0
353.6413	24.00	-1.85	25010.640	1.0	53279.800	2.0
353.6452	25.00	-3.50	34845.260	.5	63114.110	1.5
353.6511	26.00	-4.71	26479.366	1.0	54747.740	1.0
353.6542	24.00	-3.58	25359.620	4.0	53627.750	5.0
353.6553	26.00	.09	23192.486	2.0	51460.530	3.0
353.6580	69.01	-1.40	0.000	0.0	28275.905	0.0
353.6620	72.00	-1.14	0.000	0.0	28275.585	0.0
353.6633	8.01	-3.23	233430.100	.5	261697.500	1.5
353.6700	58.01	-.01	10162.848	0.0	38437.794	0.0
353.6705	28.00	-3.21	29500.690	1.0	57767.520	1.0
353.6710	24.00	-1.13	20519.600	6.0	48786.390	5.0
353.6771	30.02	-.18	236560.000	0.0	264826.300	1.0
353.6796	14.02	-3.83	206176.080	1.0	234442.180	2.0
353.6819	28.00	-1.70	29320.782	3.0	57586.700	2.0
353.6859	30.02	-.06	237047.800	2.0	265313.400	2.0
353.6868	9.01	-.15	211887.190	2.0	240152.710	1.0
353.6940	40.01	-1.05	2823.013	0.0	31096.040	0.0
353.7002	10.01	-2.19	280473.580	1.5	308738.030	1.5
353.7090	24.01	-4.49	54499.700	1.5	82763.450	1.5
353.7114	26.01	-4.44	58666.360	3.5	86929.920	3.5
353.7141	22.01	-1.48	40581.800	2.5	68845.140	2.5
353.7150	90.01	-.75	9114.300	0.0	37385.648	0.0
353.7221	24.00	-3.68	20523.690	4.0	48786.390	5.0
353.7237	28.00	-1.06	29481.020	4.0	57743.596	3.0
353.7253	24.00	-2.23	20523.940	5.0	48786.390	5.0
353.7344	28.01	-3.18	72985.650	1.5	101247.370	2.5
353.7408	26.00	-3.69	25899.974	4.0	54161.182	3.0
353.7422	28.01	-4.53	105668.780	2.5	133929.880	3.5
353.7440	58.01	-.57	5646.026	0.0	33915.057	0.0
353.7443	28.01	-2.65	100592.980	3.5	128853.910	4.5
353.7448	28.01	-3.61	100592.980	3.5	128853.870	2.5
353.7450	74.00	-.31	15002.299	0.0	43271.250	0.0
353.7460	75.00	-.78	11534.025	0.0	39802.896	0.0
353.7480	41.00	-.30	322.630	0.0	28591.341	0.0
353.7494	26.00	-2.17	20874.482	3.0	49135.003	3.0
353.7496	28.01	-3.05	72985.650	1.5	101246.160	.5
353.7584	25.01	-3.83	55115.800	2.0	83375.600	3.0
353.7613	26.01	-3.89	44929.590	2.5	73189.160	1.5
353.7617	28.00	-.38	28542.113	5.0	56801.654	5.0
353.7635	23.03	-.83	255463.300	2.0	283722.700	1.0
353.7652	26.00	-4.52	23110.925	3.0	51370.184	2.0
353.7706	27.00	-3.18	16195.680	.5	44454.510	.5
353.7717	25.01	-4.72	43131.400	2.0	71390.140	3.0
353.7726	26.00	-1.35	21038.987	2.0	49297.660	1.0
353.7737	28.01	-2.44	92792.080	3.5	121050.660	2.5
353.7773	27.00	-4.48	23855.620	4.5	52113.910	5.5
353.7777	20.02	-.74	243930.440	1.0	272188.700	1.0
353.7852	24.00	-2.71	21847.880	2.0	50105.540	1.0
353.7872	24.02	-4.27	131118.100	3.0	159375.600	3.0
353.7887	26.00	-2.78	22845.856	5.0	51103.237	5.0
353.7950	44.00	-1.05	2016.438	0.0	30281.394	0.0
353.7974	25.00	-.82	37630.620	4.5	65887.310	5.5
353.7976	10.01	-.70	277325.600	1.5	305582.270	.5
353.7994	24.01	-3.93	54784.670	3.5	83041.200	3.5
353.8080	63.01	.34	26052.379	0.0	54310.296	0.0
353.8138	26.02	-1.23	201166.350	3.0	229421.730	4.0
353.8140	45.00	-.48	5646.026	0.0	33909.464	0.0
353.8230	92.00	-.99	564.603	0.0	28827.322	0.0
353.8238	23.01	-1.56	9097.810	4.0	37352.390	5.0
353.8246	26.00	-2.43	22946.810	1.0	51201.330	2.0
353.8277	10.01	-4.21	224699.270	.5	252953.540	1.5
353.8281	22.01	-3.96	40074.710	3.5	68328.950	4.5
353.8291	24.00	-2.03	21847.880	2.0	50102.040	3.0
353.8306	26.00	-1.48	28604.610	2.0	56858.650	2.0
353.8309	26.01	-4.32	70314.740	4.5	98568.750	3.5
353.8385	26.01	-3.45	72238.630	2.5	100492.040	3.5
353.8392	24.01	-3.17	38396.360	.5	66649.710	1.5
353.8421	28.00	-2.00	33590.159	4.0	61843.280	5.0
353.8435	27.00	-2.08	20500.710	1.5	48753.720	1.5
353.8500	66.01	-.15	0.000	0.0	28260.562	0.0
353.8505	9.01	-.63	211900.260	1.0	240152.710	1.0
353.8521	14.02	-4.53	206176.080	1.0	234428.400	1.0
353.8557	26.00	-3.16	20037.815	0.0	48289.852	1.0
353.8733	28.01	-2.08	100619.260	4.5	128869.890	5.5
353.8786	26.00	-1.68	28819.966	5.0	57070.171	6.0
353.8790	58.01	-.69	6452.602	0.0	34710.848	0.0
353.8791	12.01	-2.10	80650.020	1.5	108900.190	1.5
353.8811	12.01	-1.14	80650.020	1.5	108900.030	2.5
353.8862	25.00	-3.49	23296.670	3.5	51546.270	4.5
353.8871	25.00	-.83	33825.490	2.5	62075.020	2.5
353.8978	24.01	-1.95	40228.440	5.5	68477.110	4.5
353.9010	40.01	-.17	13308.491	0.0	41564.981	0.0
353.9036	9.02	-4.97	441315.800	.5	469564.010	.5
353.9090	28.01	-4.09	101740.270	3.5	129988.050	2.5
353.9090	58.01	-.11	2500.383	0.0	30756.234	0.0
353.9095	28.01	-2.57	100619.260	4.5	128867.000	3.5
353.9120	25.00	-4.47	34423.270	3.5	62670.810	4.5
353.9130	25.01	-2.23	51553.060	5.0	79800.520	4.0
353.9136	25.00	-3.29	35041.370	3.5	63288.780	3.5
353.9150	8.01	-2.70	232711.700	.5	260959.000	1.5
353.9216	24.00	-4.07	21810.840	1.0	50057.610	2.0
353.9320	90.01	-1.10	4436.164	0.0	32690.179	0.0
353.9330	75.00	-.12	19357.805	0.0	47611.740	0.0
353.9347	8.01	-4.07	232796.270	2.5	261042.000	2.5
353.9348	25.00	-2.12	37630.620	4.5	65876.340	3.5
353.9370	44.00	-.67	2661.698	0.0	30915.314	0.0
353.9426	24.00	-1.38	21856.940	3.0	50102.040	3.0
353.9436	27.00	-3.04	26232.050	3.5	54477.070	3.5
353.9463	30.02	-.19	234866.900	1.0	263111.700	0.0
353.9521	23.00	-4.34	8578.520	2.5	36822.860	3.5
353.9540	24.00	-2.12	24971.210	0.0	53215.400	1.0
353.9590	90.01	-1.35	0.000	0.0	28251.860	0.0
353.9650	41.00	-.34	8952.985	0.0	37204.366	0.0
353.9660	28.01	-1.83	100619.260	4.5	128862.490	4.5
353.9775	28.00	-1.47	33590.159	4.0	61832.470	4.0
353.9855	27.00	-3.39	15184.040	2.5	43425.710	2.5
353.9884	26.00	-1.15	29732.721	1.0	57974.160	2.0
353.9896	10.01	-.81	277325.600	1.5	305566.940	1.5
353.9909	24.00	-2.32	27703.840	4.0	55945.080	5.0
353.9926	23.00	-4.62	11100.650	4.5	39341.760	3.5
353.9940	75.00	-.31	22019.503	0.0	50268.569	0.0
354.0011	26.01	-2.26	47674.780	1.5	75915.210	2.5
354.0060	24.00	-4.05	24833.860	3.0	53073.900	3.0
354.0156	26.00	-4.27	26140.164	3.0	54379.440	3.0
354.0174	29.01	-3.80	116643.960	3.0	144883.090	2.0
354.0191	14.02	-4.53	206176.080	1.0	234415.070	0.0
354.0239	24.01	-3.05	35610.500	4.5	63849.110	5.5
354.0321	26.00	-4.35	17726.985	2.0	45964.944	2.0
354.0322	29.01	-2.83	117747.450	3.0	145985.400	2.0
354.0342	28.00	-2.22	30392.052	1.0	58629.840	2.0
354.0398	27.00	-4.74	24733.280	2.5	52970.620	2.5
354.0446	23.01	-3.43	20343.000	2.0	48579.960	3.0
354.0451	26.02	-2.74	201293.750	2.0	229530.670	1.0
354.0515	25.02	-2.06	86051.500	2.5	114287.910	2.5
354.0531	23.00	-1.99	8578.520	2.5	36614.800	1.5
354.0539	25.00	-3.34	38120.180	4.5	66356.400	4.5
354.0593	26.01	-4.88	49506.990	1.5	77742.780	2.5
354.0622	26.00	-3.76	26140.164	3.0	54375.719	2.0
354.0711	26.00	-2.96	7376.762	4.0	35611.608	3.0
354.0736	28.01	-2.75	100619.260	4.5	128853.910	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
354.0768	26.00	-3.09	20874.482	3.0	49108.876	4.0
354.0790	28.01	-3.57	105668.780	2.5	133903.000	1.5
354.0796	28.01	-2.29	100592.980	3.5	128827.150	3.5
354.0825	25.00	-4.17	23296.670	3.5	51530.610	3.5
354.0876	9.01	-4.99	254541.460	3.0	282774.990	2.0
354.0960	41.01	-.10	8227.067	0.0	36467.996	0.0
354.1076	26.00	.41	22996.661	4.0	51228.595	5.0
354.1146	23.00	-4.26	137.380	2.5	28368.760	1.5
354.1200	29.01	-3.91	117747.450	3.0	145978.400	3.0
354.1208	26.00	-5.66	11976.239	4.0	40207.120	3.0
354.1231	25.00	-3.21	37789.930	2.5	66020.630	2.5
354.1336	23.01	-1.08	20980.920	2.0	49210.780	3.0
354.1369	22.03	.46	230597.600	.5	258827.200	1.5
354.1496	24.00	-.86	27223.050	2.0	55451.640	3.0
354.1518	26.01	-2.83	44915.070	3.5	73143.480	3.5
354.1605	27.00	-2.55	22475.360	4.5	50703.080	5.5
354.1620	90.01	-.99	8388.382	0.0	36624.048	0.0
354.1630	44.00	-.81	6452.602	0.0	34688.188	0.0
354.1660	58.01	-1.21	3629.588	0.0	31864.935	0.0
354.1768	9.01	.12	211866.130	3.0	240092.550	2.0
354.1880	73.01	-1.14	967.890	0.0	29201.483	0.0
354.1900	41.00	.17	13066.518	0.0	41299.952	0.0
354.1910	45.00	-.32	10888.765	0.0	39122.119	0.0
354.1910	76.00	-.72	13953.751	0.0	42187.105	0.0
354.1930	26.01	-3.21	72524.620	1.5	100749.750	2.5
354.1930	22.00	-3.55	13981.750	1.0	42206.880	2.0
354.1975	26.01	-4.59	33501.320	3.5	61726.090	3.5
354.1999	23.00	-3.00	8476.200	1.5	36700.780	2.5
354.2020	28.00	-.17	28542.113	5.0	56766.523	4.0
354.2059	17.02	-4.02	217913.100	1.5	246137.200	2.5
354.2070	26.00	.26	23110.925	3.0	51334.940	4.0
354.2150	63.01	-.94	9840.217	0.0	38071.658	0.0
354.2170	42.00	.46	18147.942	0.0	46379.224	0.0
354.2241	10.01	-.31	277344.290	2.5	305566.940	1.5
354.2246	26.00	-1.22	18378.187	2.0	46600.800	1.0
354.2273	26.00	-4.35	22996.661	4.0	51219.059	3.0
354.2460	62.01	-1.48	3871.561	0.0	32100.532	0.0
354.2481	23.01	-4.59	20980.920	2.0	49201.660	2.0
354.2481	8.01	-2.15	232959.260	3.5	261180.000	3.5
354.2501	27.00	-2.04	25937.590	4.5	54158.170	4.5
354.2553	26.00	-.64	23110.925	3.0	51331.090	2.0
354.2560	41.00	-1.40	2742.356	0.0	30970.530	0.0
354.2561	27.00	-2.58	25568.680	5.5	53788.780	4.5
354.2570	92.00	-.13	4194.191	0.0	32422.285	0.0
354.2575	24.00	-3.61	24897.550	4.0	53117.540	4.0
354.2608	25.01	-4.07	53017.160	1.0	81236.890	1.0
354.2620	40.01	1.08	14115.066	0.0	42342.762	0.0
354.2621	27.00	-3.63	26063.110	1.5	54282.730	2.5
354.2663	23.00	-3.04	8476.200	1.5	36695.490	.5
354.2678	28.01	-3.55	106022.790	.5	134241.960	.5
354.2710	76.00	-.18	13953.751	0.0	42180.730	0.0
354.2770	64.01	-.24	5242.739	0.0	33469.240	0.0
354.2814	24.01	-3.79	38509.070	3.5	66727.160	2.5
354.2844	28.01	-1.49	100619.260	4.5	128837.110	5.5
354.2845	10.01	-.15	252953.540	1.5	281171.380	2.5
354.2910	7.00	-2.59	83284.040	.5	111501.368	1.5
354.2967	27.00	-1.40	3482.820	4.5	31699.690	4.5
354.2980	41.00	-1.34	1129.205	0.0	29354.033	0.0
354.3085	26.00	-3.58	19390.165	6.0	47606.092	5.0
354.3100	26.02	-1.54	201293.750	2.0	229509.560	3.0
354.3105	25.01	-3.91	53597.130	2.0	81812.900	2.0
354.3147	18.01	-3.99	173393.380	2.5	201608.820	3.5
354.3160	92.01	-1.01	5162.081	0.0	33385.475	0.0
354.3188	23.00	-3.99	553.020	4.5	28768.130	4.5
354.3203	28.01	-3.40	105838.060	3.5	134053.050	2.5
354.3254	27.00	-.80	15184.040	2.5	43398.620	3.5
354.3272	26.02	-.77	201207.290	4.0	229421.730	4.0
354.3280	58.01	-.19	9517.587	0.0	37740.025	0.0
354.3291	25.00	-3.19	38120.180	4.5	66334.470	3.5
354.3341	26.01	-2.62	44929.590	2.5	73143.480	3.5
354.3382	27.00	-2.10	26232.050	3.5	54445.610	2.5
354.3387	26.00	-2.74	19621.004	5.0	47834.529	5.0
354.3427	9.03	-2.11	423606.400	1.0	451819.600	1.0
354.3436	26.01	-4.83	38164.240	2.5	66377.370	3.5
354.3450	8.01	-2.73	232745.980	1.5	260959.000	1.5
354.3490	23.00	-.64	9544.540	.5	37757.240	.5
354.3520	58.01	-.94	5887.999	0.0	34108.525	0.0
354.3560	25.01	-3.06	53781.700	3.0	81993.850	4.0
354.3621	24.00	-3.15	27703.840	4.0	55915.500	4.0
354.3633	14.02	-4.23	206176.080	1.0	234387.640	1.0
354.3642	8.01	-2.82	232747.510	2.5	260959.000	1.5
354.3668	26.00	-.69	27543.000	1.0	55754.290	2.0
354.3789	10.01	-1.55	254165.010	1.5	282375.330	1.5
354.3798	28.01	-2.51	100592.980	3.5	128803.230	2.5
354.3810	23.00	-3.36	8715.720	3.5	36925.880	3.5
354.3864	24.00	-2.48	21847.880	2.0	50057.610	2.0
354.3874	25.00	-4.19	37737.220	3.5	65946.870	2.5
354.3930	25.00	-3.52	27248.000	1.5	55457.200	.5
354.3950	45.00	-.36	5565.369	0.0	33782.471	0.0
354.4012	25.00	-2.31	33825.490	2.5	62034.040	3.5
354.4020	41.00	-.75	0.000	0.0	28216.545	0.0
354.4020	90.00	.03	8711.012	0.0	36927.557	0.0
354.4031	23.00	-3.06	13801.530	1.5	42009.930	2.5
354.4037	10.01	-4.65	280768.520	.5	308976.870	.5
354.4043	30.02	-1.03	237047.800	2.0	265256.100	3.0
354.4086	24.00	-3.61	21810.840	1.0	50018.800	1.0
354.4095	28.01	-4.09	100619.260	4.5	128827.150	3.5
354.4146	10.01	-4.35	251011.180	2.5	279218.660	2.5
354.4206	23.03	-1.33	226617.100	1.0	254824.100	1.0
354.4261	28.01	-2.61	105861.190	2.5	134067.760	1.5
354.4264	18.01	-2.78	155708.020	.5	183914.560	.5
354.4379	22.00	-4.54	14105.680	3.0	42311.310	3.0
354.4412	9.01	-.63	211887.190	2.0	240092.550	2.0
354.4430	28.00	-.89	30912.838	1.0	59118.060	2.0
354.4488	24.00	-3.05	25010.640	1.0	53215.400	1.0
354.4493	26.02	-3.41	123552.950	1.0	151757.670	2.0
354.4539	16.01	-4.33	127824.930	.5	156029.280	1.5
354.4598	26.00	-3.53	21038.987	2.0	49242.872	3.0
354.4622	26.00	-1.95	21038.987	2.0	49242.680	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
354.4626	24.00	-4.56	24833.860	3.0	53037.520	2.0
354.4634	25.00	-3.48	27201.540	2.5	55405.140	2.5
354.4650	41.00	-.32	5887.999	0.0	34099.529	0.0
354.4703	25.01	-3.69	49882.150	4.0	78085.200	5.0
354.4730	22.00	-2.58	20006.032	2.0	48208.870	3.0
354.4740	22.00	-2.81	20126.055	3.0	48328.810	4.0
354.4752	26.02	-2.93	90483.590	3.0	118686.250	4.0
354.4815	10.01	-2.94	279218.660	2.5	307420.820	2.5
354.4953	28.01	-3.91	87538.090	3.5	115739.150	4.5
354.4963	29.00	-1.12	43716.376	0.0	71925.415	0.0
354.5002	24.00	-3.09	21856.940	3.0	50057.610	2.0
354.5011	27.01	-2.59	17771.500	3.0	45972.100	3.0
354.5035	28.01	-3.63	106007.890	2.5	134208.300	2.5
354.5059	23.01	-2.39	22273.540	1.0	50473.760	1.0
354.5142	28.01	-3.73	102742.740	1.5	130942.300	1.5
354.5161	28.00	-2.10	15734.018	1.0	43933.428	2.0
354.5172	24.00	-1.91	26787.500	3.0	54986.820	3.0
354.5194	23.01	-.37	8841.970	3.0	37041.110	2.0
354.5230	74.00	-1.56	0.000	0.0	28206.915	0.0
354.5335	23.00	-.55	9636.960	1.5	37834.980	1.5
354.5392	23.00	-2.64	13801.530	1.5	41999.100	1.5
354.5495	27.00	-3.33	25739.930	2.5	53936.680	2.5
354.5510	28.00	-1.72	29481.020	4.0	57677.649	5.0
354.5598	20.00	-1.52	20335.360	1.0	48531.290	2.0
354.5599	18.01	.35	159393.310	1.5	187589.230	2.5
354.5600	58.01	-.64	2823.013	0.0	31026.984	0.0
354.5632	26.00	-.50	22996.661	4.0	51192.320	4.0
354.5697	24.00	-3.02	25089.200	2.0	53284.340	3.0
354.5780	58.01	-.80	2339.068	0.0	30541.607	0.0
354.5800	64.01	.15	1129.205	0.0	29331.585	0.0
354.5825	26.00	-1.86	24574.655	4.0	52768.780	4.0
354.5843	10.00	-3.62	134818.640	0.0	163012.621	1.0
354.5843	18.01	.64	170400.940	2.5	198594.920	3.5
354.5873	23.01	-4.56	44098.460	3.0	72292.200	4.0
354.5912	28.01	-4.74	105668.780	2.5	133862.210	1.5
354.5992	23.03	-.54	255747.600	3.0	283940.400	2.0
354.6022	24.01	-3.61	54499.700	1.5	82692.260	.5
354.6056	9.01	-1.80	211900.260	1.0	240092.550	2.0
354.6110	28.01	-4.07	105861.190	2.5	134053.050	2.5
354.6124	25.01	-3.90	43131.400	2.0	71323.150	2.0
354.6133	24.01	-2.50	39684.000	3.5	67875.680	3.5
354.6190	58.01	-.63	1855.123	0.0	30054.402	0.0
354.6206	26.00	-2.45	19621.004	5.0	47812.104	4.0
354.6212	10.01	-.57	252798.480	.5	280989.530	1.5
354.6268	24.00	-2.35	25089.200	2.0	53279.800	2.0
354.6276	24.00	-1.61	26796.280	2.0	54986.820	3.0
354.6433	29.00	-1.53	44926.239	0.0	73123.585	0.0
354.6482	25.01	-3.75	79913.350	4.0	108102.250	3.0
354.6517	18.02	-2.03	211004.850	2.0	239193.480	1.0
354.6530	6.00	-2.98	69689.480	1.0	97878.000	2.0
354.6536	28.00	-3.09	28578.046	3.0	56766.523	4.0
354.6570	23.00	-3.82	13810.900	.5	41999.100	1.5
354.6574	26.00	-3.60	21038.987	2.0	49227.160	3.0
354.6589	25.01	-2.75	53805.800	4.0	81993.850	4.0
354.6667	27.00	-1.90	16470.600	1.5	44658.030	1.5
354.6680	92.01	-1.45	1693.808	0.0	29889.191	0.0
354.6704	27.00	-1.65	13795.520	2.5	41982.660	1.5
354.6704	24.00	-4.31	26787.500	3.0	54974.640	2.0
354.6744	25.01	-2.19	51553.060	5.0	79739.880	5.0
354.6752	28.01	-2.90	78955.450	1.5	107142.210	1.5
354.6752	18.01	-2.67	174820.930	.5	203007.690	1.5
354.6785	26.00	-3.49	17726.985	2.0	45913.480	3.0
354.6840	66.01	-.55	806.575	0.0	29000.686	0.0
354.6864	16.01	-1.66	130641.000	1.5	158826.870	2.5
354.6865	22.01	-2.74	40581.800	2.5	68767.660	1.5
354.6923	25.00	-3.00	38669.600	3.5	66855.000	4.5
354.6974	11.02	-2.08	443261.600	.5	471446.600	1.5
354.6987	23.00	-2.75	8578.520	2.5	36763.410	2.5
354.7000	58.01	-.60	4274.849	0.0	32467.688	0.0
354.7029	22.00	-1.32	12118.394	4.0	40302.950	3.0
354.7050	24.00	-2.95	25010.640	1.0	53195.030	2.0
354.7080	23.01	-2.44	19112.930	4.0	47297.080	5.0
354.7093	24.01	-2.11	39684.000	3.5	67868.050	2.5
354.7117	22.00	-2.85	7255.369	2.0	35439.228	1.0
354.7140	22.00	-3.75	11531.760	2.0	39715.437	3.0
354.7153	25.01	-4.12	53597.130	2.0	81780.700	3.0
354.7154	7.00	-2.29	83317.800	1.5	111501.368	1.5
354.7190	92.01	-1.24	1693.808	0.0	29885.137	0.0
354.7199	26.00	-1.10	26627.612	4.0	54810.820	4.0
354.7206	26.02	-3.57	114351.920	3.0	142535.070	2.0
354.7211	25.01	-2.92	44138.960	1.0	72322.070	0.0
354.7216	26.00	-.77	22650.415	6.0	50833.485	5.0
354.7331	23.00	-6.72	8715.720	3.5	36897.880	4.5
354.7340	90.00	-.71	3629.588	0.0	31819.725	0.0
354.7346	20.00	-2.25	20349.260	2.0	48531.290	2.0
354.7346	20.00	-1.35	20349.260	2.0	48531.290	3.0
354.7393	25.01	-3.36	44138.960	1.0	72320.620	1.0
354.7680	40.00	-.04	564.603	0.0	28752.038	0.0
354.7766	24.00	-1.90	25206.020	3.0	53384.720	3.0
354.7767	26.00	-1.76	28604.610	2.0	56783.306	3.0
354.7796	23.01	-2.35	36425.070	4.0	64603.530	3.0
354.7803	22.00	-3.87	14028.470	2.0	42206.880	2.0
354.7809	24.00	-3.33	26796.280	2.0	54974.640	2.0
354.7892	26.00	-3.59	23192.486	2.0	51370.184	2.0
354.7963	24.00	-1.54	24971.210	0.0	53148.350	1.0
354.8005	28.02	-4.76	82194.300	5.0	110371.100	4.0
354.8018	26.00	-1.50	24335.764	2.0	52512.460	1.0
354.8027	26.01	-2.44	44915.070	3.5	73091.700	4.5
354.8130	41.00	-1.25	1532.493	0.0	29716.353	0.0
354.8144	9.02	-4.53	441385.880	1.5	469561.580	1.5
354.8165	28.00	-2.51	2216.519	2.0	30392.052	1.0
354.8178	28.00	-1.80	1713.080	1.0	29888.505	2.0
354.8188	25.00	-2.40	27281.850	.5	55457.200	.5
354.8295	25.01	-3.73	55759.270	3.0	83933.770	3.0
354.8340	28.01	-2.97	105439.850	1.5	133613.990	1.5
354.8383	25.00	-2.73	35114.980	2.5	63288.780	3.5
354.8437	27.00	-1.36	13795.520	2.5	41968.890	2.5
354.8446	27.00	-1.63	18389.570	1.5	46562.870	1.5
354.8513	18.01	-.25	158167.710	1.5	186340.480	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
354.8520	24.00	-3.54	26801.930	1.0	54974.640	2.0
354.8547	26.01	-4.06	36252.960	2.5	64425.460	2.5
354.8570	28.01	-4.84	67880.160	2.5	96052.480	2.5
354.8612	16.01	-1.75	127976.210	1.5	156148.190	.5
354.8620	92.01	-1.24	5162.081	0.0	33342.050	0.0
354.8648	25.00	-.86	37737.220	3.5	65908.920	4.5
354.8718	24.00	-1.63	27703.840	4.0	55874.980	5.0
354.8740	29.01	-2.27	116643.960	3.0	144814.930	3.0
354.8746	24.00	-3.24	21847.880	2.0	50018.800	1.0
354.8840	58.01	-.32	9517.587	0.0	37695.809	0.0
354.8871	21.01	-4.02	10944.510	2.0	39114.440	1.0
354.8917	22.00	-2.68	19937.859	1.0	48107.420	2.0
354.8932	24.00	-3.20	25206.020	3.0	53375.460	4.0
354.9010	39.01	-.42	967.890	0.0	29144.762	0.0
354.9023	23.01	-2.48	20089.560	1.0	48258.280	0.0
354.9047	28.01	-3.75	109846.000	3.5	138014.530	2.5
354.9050	73.00	-1.61	3871.561	0.0	32048.115	0.0
354.9109	25.00	-2.87	38669.600	3.5	66837.640	2.5
354.9174	23.00	-2.94	8412.940	.5	36580.460	1.5
354.9197	6.00	-4.43	69710.660	2.0	97878.000	2.0
354.9200	92.00	-.19	3710.246	0.0	31885.609	0.0
354.9211	24.00	-1.27	25010.640	1.0	53177.670	2.0
354.9260	41.00	-.11	13308.491	0.0	41483.378	0.0
354.9261	22.01	-3.62	24961.340	1.5	53128.170	1.5
354.9290	24.00	-1.56	25359.620	4.0	53526.220	4.0
354.9291	26.00	-4.72	25899.974	4.0	54066.570	4.0
354.9293	28.01	-4.03	77332.470	2.5	105499.050	3.5
354.9360	64.01	.20	1855.123	0.0	30029.216	0.0
354.9510	40.01	-.14	9920.875	0.0	38093.778	0.0
354.9513	12.01	-1.68	80619.500	.5	108784.330	.5
354.9537	22.00	-3.89	13981.750	1.0	42146.390	1.0
354.9540	45.00	-.47	3226.301	0.0	31398.966	0.0
354.9555	24.02	-1.98	71676.200	4.0	99840.700	3.0
354.9600	90.00	-.09	8065.752	0.0	36237.940	0.0
354.9604	28.01	-4.64	93528.440	3.5	121692.550	4.5
354.9695	10.01	-3.07	276276.850	1.5	304440.240	.5
354.9706	17.01	-2.95	121635.000	3.0	149798.300	2.0
354.9740	40.00	-.04	7985.094	0.0	36156.171	0.0
354.9778	8.01	-4.17	232796.270	2.5	260959.000	1.5
354.9795	12.02	-4.59	534776.900	2.0	562939.500	2.0
354.9820	70.01	-.01	32908.268	0.0	61078.710	0.0
354.9861	26.00	-2.37	12968.552	2.0	41130.620	1.0
354.9890	75.00	-.89	11695.340	0.0	39865.227	0.0
354.9947	25.00	-2.47	34343.900	4.5	62505.290	3.5
355.0029	18.01	-1.85	158730.210	2.5	186890.950	2.5
355.0086	20.00	-3.79	20371.000	3.0	48531.290	2.0
355.0086	20.00	-2.25	20371.000	3.0	48531.290	3.0
355.0086	20.00	-1.19	20371.000	3.0	48531.290	4.0
355.0104	22.01	-4.35	24961.340	1.5	53121.480	.5
355.0162	27.00	-.39	25568.680	5.5	53728.360	6.5
355.0270	44.00	-1.55	2016.438	0.0	30183.310	0.0
355.0362	25.01	-3.93	55371.300	3.0	83529.400	4.0
355.0386	28.01	-4.40	66571.340	2.5	94729.250	2.5
355.0407	28.00	-2.34	31031.042	3.0	59188.780	3.0
355.0447	24.00	-1.29	25548.640	5.0	53706.060	5.0
355.0450	41.00	-.93	322.630	0.0	28488.074	0.0
355.0460	40.00	-.56	0.000	0.0	28165.364	0.0
355.0483	25.00	-3.06	27248.000	1.5	55405.140	2.5
355.0508	25.00	-3.90	37789.930	2.5	65946.870	2.5
355.0561	27.00	-1.62	25568.680	5.5	53725.200	4.5
355.0585	27.00	-1.62	1406.840	2.5	29563.170	1.5
355.0618	24.00	-1.07	25771.400	6.0	53927.470	6.0
355.0652	27.01	-8.00	19189.900	4.0	47345.700	5.0
355.0671	22.00	-1.74	20209.444	2.0	48365.090	3.0
355.0703	23.03	.08	257143.200	2.0	285298.600	1.0
355.0753	27.01	-2.50	24074.600	2.0	52229.600	2.0
355.0820	57.01	-2.31	0.000	0.0	28162.509	0.0
355.0820	92.01	-.98	0.000	0.0	28162.509	0.0
355.0836	22.00	-2.04	11531.760	2.0	39686.100	2.0
355.0954	8.01	-3.19	233544.090	1.5	261697.500	1.5
355.1077	25.00	-4.86	38351.780	.5	66504.210	1.5
355.1105	26.00	-.59	22996.661	4.0	51148.870	3.0
355.1128	22.01	-1.59	40798.370	3.5	68950.390	3.5
355.1131	24.02	-4.78	66222.700	5.0	94374.700	4.0
355.1207	26.00	-3.63	26339.682	2.0	54491.080	3.0
355.1257	15.01	-.80	102799.200	1.0	130950.200	2.0
355.1290	75.00	.11	22019.503	0.0	50178.285	0.0
355.1441	28.01	-2.51	66579.710	1.5	94729.250	2.5
355.1464	29.01	-1.70	117883.140	4.0	146032.500	5.0
355.1522	27.01	-4.55	40694.900	4.0	68843.800	4.0
355.1526	28.00	-2.33	1332.153	3.0	29481.020	4.0
355.1532	23.00	-2.31	13801.530	1.5	41950.350	2.5
355.1557	10.01	-1.77	252798.480	.5	280947.100	1.5
355.1566	25.01	-4.48	75719.590	1.0	103868.140	1.0
355.1586	28.01	-4.64	106007.890	2.5	134156.280	1.5
355.1635	12.02	-1.97	536152.000	1.0	564300.000	0.0
355.1660	58.01	-.78	3629.588	0.0	31785.436	0.0
355.1708	28.01	-4.18	99844.130	3.5	127991.560	3.5
355.1800	39.00	.38	14840.984	0.0	42995.722	0.0
355.1843	29.01	-2.07	117883.140	4.0	146029.500	4.0
355.1950	40.01	-.13	725.918	0.0	28879.467	0.0
355.1989	13.01	-2.84	121480.300	3.0	149625.500	2.0
355.1989	13.01	-1.67	121480.300	3.0	149625.500	3.0
355.1989	13.01	-.24	121480.300	3.0	149625.500	4.0
355.1999	16.01	-1.86	127976.210	1.5	156121.330	2.5
355.2064	13.01	-1.30	121480.900	2.0	149625.500	2.0
355.2064	13.01	-.76	121480.900	2.0	149625.500	3.0
355.2070	58.01	-1.14	3548.931	0.0	31701.529	0.0
355.2095	29.01	-3.48	118071.340	1.0	146215.700	1.0
355.2102	13.01	-.57	121481.200	1.0	149625.500	2.0
355.2108	26.00	-1.55	24772.019	1.0	52916.278	2.0
355.2238	28.01	-4.07	103653.030	3.5	131796.260	2.5
355.2300	62.01	-1.81	0.000	0.0	28150.776	0.0
355.2355	25.00	-2.06	34250.520	5.5	62392.820	4.5
355.2427	26.00	-3.93	19788.248	4.0	47929.981	4.0
355.2433	28.00	-3.40	28569.210	2.0	56710.689	2.0
355.2446	28.00	-1.50	29668.918	3.0	57810.494	4.0
355.2520	63.01	-.78	10566.135	0.0	38715.167	0.0
355.2522	28.01	-4.84	105668.780	2.5	133809.760	3.5
355.2537	29.01	-2.61	117883.140	4.0	146024.000	4.0
355.2645	25.01	-3.66	55115.800	2.0	83255.800	2.0
355.2658	26.01	-3.46	44915.070	3.5	73054.970	2.5
355.2662	26.01	-2.82	72352.170	3.5	100492.040	3.5
355.2690	39.00	-.83	0.000	0.0	28147.685	0.0
355.2700	72.01	-1.03	3629.588	0.0	31777.194	0.0
355.2717	27.00	-2.80	1809.330	1.5	29948.760	2.5
355.2730	58.01	-.62	2500.383	0.0	30647.751	0.0
355.2735	24.00	-1.05	25089.200	2.0	53228.490	3.0
355.2756	25.00	-.91	37737.220	3.5	65876.340	3.5
355.2806	23.00	-3.89	323.420	3.5	28462.150	2.5
355.2822	26.00	-1.35	23192.486	2.0	51331.090	2.0
355.2846	22.01	-2.94	4628.610	2.5	32767.020	3.5
355.2852	29.01	-3.26	117883.140	4.0	146021.500	3.0
355.2857	26.00	-1.10	25091.620	0.0	53229.940	1.0
355.2874	25.00	-1.46	37630.620	4.5	65768.810	4.5
355.2923	12.02	-1.16	536152.000	1.0	564289.800	1.0
355.2935	24.00	-1.49	25010.640	1.0	53148.350	1.0
355.2937	24.01	-3.29	54625.760	2.5	82763.450	1.5
355.2984	27.00	-.93	15774.040	1.5	43911.360	1.5
355.2986	17.01	-3.32	158723.700	1.0	186861.000	2.0
355.3052	7.00	-2.13	83364.590	2.5	111501.368	1.5
355.3080	46.00	.54	11614.683	0.0	39759.279	0.0
355.3118	10.01	-2.25	290803.820	.5	318940.080	1.5
355.3125	30.02	-.53	234384.000	3.0	262520.200	2.0
355.3128	25.00	-1.86	37737.220	3.5	65873.400	2.5
355.3168	27.00	-1.04	22475.360	4.5	50611.220	3.5
355.3200	23.00	-3.13	8476.200	1.5	36611.810	2.5
355.3243	28.00	-.38	29832.810	3.0	57968.080	3.0
355.3267	23.00	-.93	9824.580	2.5	37959.660	2.5
355.3293	25.01	-3.42	53597.130	2.0	81732.000	1.0
355.3340	17.02	-.83	188390.100	2.5	216524.600	2.5
355.3364	12.01	-1.38	80650.020	1.5	108784.330	.5
355.3380	90.01	-1.15	9598.245	0.0	37740.465	0.0
355.3404	27.00	-4.68	24326.110	3.5	52460.100	2.5
355.3420	73.00	-2.46	0.000	0.0	28141.903	0.0
355.3432	26.00	-4.67	22845.856	5.0	50979.627	4.0
355.3472	28.00	-.98	30392.052	1.0	58525.507	1.0
355.3477	28.00	-2.32	879.813	2.0	29013.228	2.0
355.3489	24.01	-4.12	39742.360	2.5	67875.680	3.5
355.3493	24.00	-3.71	24940.610	2.0	53073.900	3.0
355.3549	28.00	-2.41	28578.046	3.0	56710.889	2.0
355.3590	25.01	-4.22	43131.400	2.0	71263.920	1.0
355.3596	10.01	-4.95	319111.700	3.5	347244.170	4.5
355.3603	10.01	-4.83	319111.710	4.5	347244.130	5.5
355.3650	75.00	-.38	17180.052	0.0	45320.133	0.0
355.3720	64.01	-.36	10727.450	0.0	38866.977	0.0
355.3731	28.01	-4.85	94705.930	3.5	122837.330	4.5
355.3743	25.00	-4.07	30354.210	3.5	58485.520	4.5
355.3845	26.01	-4.80	70314.740	4.5	98445.240	4.5
355.3846	25.01	-2.61	53017.160	1.0	81147.650	2.0
355.3850	44.00	-.36	11695.340	0.0	39833.838	0.0
355.3859	22.00	-1.22	11531.760	2.0	39662.150	1.0
355.3891	26.01	-3.26	72619.610	2.5	100749.750	2.5
355.3946	17.01	-3.43	158768.600	2.0	186898.300	3.0
355.3961	24.00	-1.81	24833.860	3.0	52963.440	4.0
355.4000	72.00	-.06	14437.696	0.0	42575.006	0.0
355.4070	40.01	-.20	9436.930	0.0	37573.686	0.0
355.4120	26.00	-2.43	7728.058	3.0	35856.386	2.0
355.4136	24.00	-4.39	27816.880	5.0	55945.080	5.0
355.4143	24.01	-3.10	39742.360	2.5	67870.500	1.5
355.4150	62.01	-1.18	2661.698	0.0	30797.821	0.0
355.4200	42.00	.14	20164.380	0.0	48300.107	0.0
355.4210	74.00	-1.87	4758.794	0.0	32894.442	0.0
355.4246	22.01	-2.03	39476.870	2.5	67604.200	3.5
355.4288	10.03	-.24	643975.000	2.5	672102.000	1.5
355.4295	23.00	-1.84	13801.530	1.5	41928.470	.5
355.4303	18.00	-2.37	93143.800	2.0	121270.682	2.0
355.4318	28.01	-3.22	78955.450	1.5	107082.210	2.5
355.4359	10.01	-1.59	251011.180	2.5	279137.620	3.5
355.4383	28.01	-4.45	105588.890	4.5	133715.130	4.5
355.4389	24.00	-1.86	25089.200	2.0	53215.400	1.0
355.4400	2.00	-1.43	169087.000	0.0	197221.144	0.0
355.4430	71.01	.43	17180.052	0.0	45313.958	0.0
355.4435	26.00	-3.94	23711.443	4.0	51837.279	3.0
355.4453	24.01	-3.57	39742.360	2.5	67868.050	2.5
355.4492	26.01	-3.33	44929.590	2.5	73054.970	2.5
355.4495	26.00	-3.48	23244.826	1.0	51370.184	2.0
355.4516	22.00	-3.75	18525.070	2.0	46650.260	3.0
355.4520	41.00	-.79	2097.096	0.0	30230.290	0.0
355.4616	27.00	-1.15	26232.050	3.5	54356.450	4.5
355.4660	41.00	-.43	80.658	0.0	28212.744	0.0
355.4742	27.00	-4.15	24733.280	2.5	52856.680	3.5
355.4745	24.00	-2.83	31364.330	3.0	59487.710	4.0
355.4784	24.00	-3.30	28679.430	1.0	56802.500	0.0
355.4793	10.03	-3.41	642472.000	2.5	670595.000	2.5
355.4807	27.00	-3.96	13795.520	2.5	41916.410	3.5
355.4880	24.01	-3.48	52298.120	3.5	80420.430	2.5
355.4886	23.00	-2.18	8578.520	2.5	36700.780	2.5
355.4917	26.00	.55	22845.856	5.0	50967.873	6.0
355.4990	58.01	-.38	2500.383	0.0	30629.857	0.0
355.4998	22.01	-4.61	12676.990	4.5	40798.370	3.5
355.5020	90.00	-.67	2823.013	0.0	30952.250	0.0
355.5033	17.03	-.96	219454.000	1.0	247575.100	1.0
355.5047	22.00	-2.56	19937.859	1.0	48058.850	1.0
355.5079	26.01	-3.88	33466.500	4.5	61587.240	5.5
355.5085	28.00	-3.37	29668.918	3.0	57789.611	4.0
355.5089	25.00	-3.07	27248.000	1.5	55368.660	1.5
355.5096	17.01	-2.72	158723.700	1.0	186644.300	1.0
355.5137	23.00	-1.38	9636.960	1.5	37757.240	.5
355.5141	27.00	-1.53	26232.050	3.5	54352.300	3.5
355.5205	24.01	-8.41	20512.620	2.5	48632.360	3.5
355.5320	92.00	-.33	0.000	0.0	28120.663	0.0
355.5332	24.00	-2.19	20517.400	2.0	48636.140	3.0
355.5349	8.02	-.46	350302.300	2.0	378420.900	1.0
355.5400	30.02	-2.12	235623.900	3.0	263742.100	2.0
355.5400	30.02	-.96	235623.900	3.0	263742.100	2.0
355.5423	27.00	-2.14	22475.360	4.5	50593.380	4.5
355.5430	42.00	-.03	20164.380	0.0	48290.373	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
355.5435	22.00	-5.06	14028.470	2.0	42146.390	1.0
355.5466	26.00	-4.82	26224.961	3.0	54342.640	2.0
355.5479	23.00	-1.76	13810.900	.5	41928.470	.5
355.5507	26.00	-3.34	26140.164	3.0	54257.520	2.0
355.5519	25.02	-4.59	121117.140	3.5	149234.400	2.5
355.5559	24.00	-5.27	8095.210	3.0	36212.150	4.0
355.5560	28.00	-4.93	30922.763	5.0	59039.693	4.0
355.5605	25.01	-4.96	75719.590	1.0	103836.170	2.0
355.5654	25.01	-3.89	55759.270	3.0	83875.460	4.0
355.5731	23.00	-2.80	9636.960	1.5	37752.540	2.5
355.5737	28.01	-3.80	72375.420	1.5	100490.950	1.5
355.5777	24.00	-1.67	20520.920	3.0	48636.140	3.0
355.5823	27.00	-2.80	20500.710	1.5	48615.560	2.5
355.5844	25.01	-4.25	73385.150	1.0	101499.840	2.0
355.5906	25.01	-4.18	53698.700	2.0	81812.900	2.0
355.5918	27.01	-3.04	18338.500	1.0	46452.600	2.0
355.5927	24.01	-6.53	20518.330	3.5	48632.360	3.5
355.5970	76.00	-.73	12663.231	0.0	40784.953	0.0
355.5975	22.00	-4.98	16267.510	5.0	44381.160	4.0
355.5999	24.00	-.51	35884.400	5.0	63997.860	6.0
355.6001	25.00	-2.43	38669.600	3.5	66783.050	3.5
355.6003	18.00	-3.28	93143.800	2.0	121257.227	1.0
355.6032	15.01	-1.60	104051.100	3.0	132164.300	2.0
355.6038	24.00	-1.23	31009.000	3.0	59122.150	3.0
355.6111	27.00	-2.27	18389.570	1.5	46502.150	.5
355.6119	24.01	-7.27	20519.850	4.5	48632.360	3.5
355.6127	24.00	-1.41	20523.690	4.0	48636.140	3.0
355.6184	9.04	-.92	854971.000	2.5	883083.000	1.5
355.6196	17.01	-2.33	158786.400	3.0	186898.300	3.0
355.6197	30.02	-.98	234384.000	3.0	262495.900	4.0
355.6295	28.01	-3.85	92792.080	3.5	120903.200	3.5
355.6333	26.02	-4.43	198337.060	3.0	226447.880	2.0
355.6469	24.00	-1.70	31377.960	4.0	59487.710	4.0
355.6482	26.00	-3.25	26339.682	2.0	54449.330	1.0
355.6487	15.01	-.35	104054.700	1.0	132164.300	2.0
355.6600	40.01	.32	3710.246	0.0	31826.987	0.0
355.6630	44.00	-.48	11695.340	0.0	39811.844	0.0
355.6652	24.02	-4.01	131267.300	4.0	159375.600	3.0
355.6673	26.00	-3.18	23110.925	3.0	51219.059	3.0
355.6677	23.03	-2.59	257690.800	3.0	285798.900	2.0
355.6690	28.01	-1.27	103025.580	2.5	131133.580	2.5
355.6719	23.01	-2.98	20622.990	3.0	48730.760	4.0
355.6740	62.01	-1.39	2177.753	0.0	30293.387	0.0
355.6791	23.01	-.10	9097.810	4.0	37205.010	3.0
355.6799	23.00	-3.49	8715.720	3.5	36822.860	3.5
355.6812	28.00	-3.78	26665.903	3.0	54772.940	3.0
355.6817	30.02	-2.18	235452.500	2.0	263559.500	1.0
355.6817	30.02	-1.02	235452.500	2.0	263559.500	1.0
355.6848	24.00	-6.04	7927.470	2.0	36034.220	3.0
355.6865	29.01	-4.41	108335.430	2.0	136442.050	3.0
355.6867	26.01	-3.74	70986.690	6.5	99093.290	5.5
355.6870	26.00	-3.10	22996.661	4.0	51103.237	5.0
355.6905	18.01	-1.08	144709.910	.5	172816.210	.5
355.6918	8.02	.02	350302.300	2.0	378408.500	2.0
355.6920	25.01	-4.52	73395.120	3.0	101501.300	3.0
355.6955	26.02	-3.66	168780.100	5.0	196886.010	6.0
355.6965	24.00	-2.49	25089.200	2.0	53195.030	2.0
355.6996	23.01	-4.87	19191.500	6.0	47297.080	5.0
355.7028	25.01	-4.28	73395.970	2.0	101501.300	3.0
355.7050	64.01	.10	4758.794	0.0	32871.978	0.0
355.7163	23.00	-2.97	8476.200	1.5	36580.460	1.5
355.7170	77.00	-.02	16534.792	0.0	44647.027	0.0
355.7208	25.01	-4.56	73395.120	3.0	101499.030	4.0
355.7213	25.01	-4.56	73395.970	2.0	101499.840	2.0
355.7260	57.01	-1.97	1371.178	0.0	29482.702	0.0
355.7276	27.00	-1.61	22475.360	4.5	50578.730	3.5
355.7313	10.01	-1.74	279137.620	3.5	307240.700	3.5
355.7380	62.01	-1.63	322.630	0.0	28433.206	0.0
355.7470	90.01	-1.20	6129.972	0.0	34239.837	0.0
355.7511	26.01	-3.10	58666.360	3.5	86767.870	2.5
355.7527	22.00	-2.53	20006.032	2.0	48107.420	2.0
355.7542	28.01	-3.40	77736.790	4.5	105838.060	3.5
355.7543	26.01	-3.57	44915.070	3.5	73016.330	3.5
355.7551	22.00	-5.68	14105.680	3.0	42206.880	2.0
355.7666	25.00	-4.40	30419.610	2.5	58519.900	3.5
355.7781	28.01	-1.13	103025.580	2.5	131124.960	3.5
355.7800	69.01	-.64	8711.012	0.0	36818.269	0.0
355.7803	10.01	-1.07	224699.270	.5	252798.480	.5
355.7827	24.01	-3.16	35607.600	3.5	63706.620	4.5
355.7840	92.00	-.57	0.000	0.0	28106.941	0.0
355.7877	24.00	-4.35	27816.880	5.0	55915.500	4.0
355.7914	25.00	-3.80	35041.370	3.5	63139.700	2.5
355.7972	27.00	-1.76	16470.600	1.5	44568.470	2.5
355.7976	26.01	-3.02	72651.910	3.5	100749.750	2.5
355.7980	73.00	-.96	12179.286	0.0	40285.121	0.0
355.7994	28.01	-4.87	103653.030	3.5	131750.730	3.5
355.8078	26.00	-3.02	26140.164	3.0	54237.200	4.0
355.8094	24.00	-4.53	24940.610	2.0	53037.520	2.0
355.8100	42.00	.67	18228.600	0.0	46333.487	0.0
355.8129	24.01	-3.35	54784.670	3.5	82881.300	2.5
355.8190	64.01	.14	8469.040	0.0	36573.217	0.0
355.8194	24.01	-4.66	35610.500	4.5	63706.620	4.5
355.8207	26.00	-3.56	21038.987	2.0	49135.003	3.0
355.8218	10.01	-3.06	279324.890	1.5	307420.820	2.5
355.8280	28.00	-2.72	26665.903	3.0	54761.346	4.0
355.8303	29.01	-2.92	117883.140	4.0	145978.400	3.0
355.8361	24.01	-4.55	77270.400	4.5	105365.200	4.5
355.8411	25.02	-4.42	109841.120	3.5	137935.530	4.5
355.8413	26.00	-2.94	24118.815	4.0	52213.207	3.0
355.8423	24.00	-1.22	31393.400	5.0	59487.710	4.0
355.8470	64.01	-.41	4758.794	0.0	32860.759	0.0
355.8485	24.00	-1.34	31028.330	2.0	59122.150	3.0
355.8517	26.00	-1.19	7985.783	2.0	36079.353	3.0
355.8540	23.01	-4.01	11908.270	2.0	40001.660	2.0
355.8545	21.01	-.39	67.680	2.0	28161.030	3.0
355.8604	24.00	-.88	25206.020	3.0	53298.900	4.0
355.8666	17.01	-2.54	158788.600	2.0	186861.000	2.0
355.8710	58.01	-1.04	5646.026	0.0	33746.096	0.0
355.8739	28.01	-4.72	105838.060	3.5	133929.880	3.5
355.8755	27.00	-.76	25568.680	5.5	53660.370	5.5
355.8760	39.00	.53	15163.614	0.0	43263.289	0.0
355.8775	27.00	-2.42	4690.180	2.5	32781.710	2.5
355.8812	24.00	-2.11	27816.880	5.0	55908.120	6.0
355.8847	18.01	-1.99	183985.940	1.5	212076.900	2.5
355.8878	28.00	-4.17	29013.228	2.0	57103.946	3.0
355.8925	26.01	-5.00	48039.230	2.5	76129.580	1.5
355.8940	75.00	-1.07	11695.340	0.0	39793.594	0.0
355.8960	40.00	-.56	5000.766	0.0	33098.862	0.0
355.8990	77.00	-1.06	5726.684	0.0	33824.543	0.0
355.9120	41.00	-1.14	4920.109	0.0	33016.942	0.0
355.9138	24.00	-1.30	25089.200	2.0	53177.870	2.0
355.9172	23.03	-.46	256251.700	4.0	284340.100	4.0
355.9184	13.01	-1.54	121480.300	3.0	149568.600	3.0
355.9260	13.01	-.64	121480.900	2.0	149566.600	3.0
355.9282	28.01	-3.02	101754.800	2.5	129842.330	2.5
355.9343	24.00	-5.13	7810.820	1.0	35897.870	2.0
355.9347	28.00	-2.51	31031.042	3.0	59118.060	2.0
355.9373	25.00	-3.21	27281.850	.5	55368.660	1.5
355.9424	25.00	-1.81	37789.930	2.5	65876.340	3.5
355.9443	26.00	-.68	23244.826	1.0	51331.090	2.0
355.9450	90.01	-.69	6210.629	0.0	34304.857	0.0
355.9499	26.00	-.87	24772.019	1.0	52857.840	1.0
355.9507	18.01	.59	158730.210	2.5	186815.960	3.5
355.9589	27.00	-2.34	16470.600	1.5	44555.710	1.5
355.9615	9.03	-3.91	469644.200	2.0	497729.100	3.0
355.9622	28.01	-3.77	105838.060	3.5	133922.910	4.5
355.9780	24.00	-1.16	23163.270	0.0	51246.870	1.0
355.9790	76.00	-.23	8630.355	0.0	36721.900	0.0
355.9797	25.00	-.91	37789.930	2.5	65873.400	2.5
355.9838	10.01	-2.60	254292.190	.5	282375.330	1.5
355.9868	18.02	-2.82	243424.970	3.0	271507.880	2.0
355.9880	22.00	-2.81	20126.055	3.0	48208.870	3.0
355.9889	8.01	-3.01	232959.260	3.5	261042.000	2.5
355.9913	28.00	-1.71	28542.113	5.0	56624.668	6.0
355.9950	90.01	-.71	8549.697	0.0	36639.979	0.0
355.9970	15.01	-.35	104051.100	3.0	132133.200	3.0
355.9981	25.00	-3.78	34423.270	3.5	62505.290	3.5
355.9983	25.01	-3.10	53698.700	2.0	81780.700	3.0
356.0060	26.00	-.44	23110.925	3.0	51192.320	4.0
356.0126	10.01	-2.27	290371.950	2.5	318452.820	1.5
356.0169	25.01	-2.39	53805.800	4.0	81886.330	5.0
356.0228	26.02	-4.38	93388.750	4.0	121468.820	5.0
356.0277	28.00	-2.27	30912.838	1.0	58992.520	2.0
356.0286	26.01	-3.45	32909.870	5.5	60989.480	4.5
356.0291	28.00	-3.91	29888.505	2.0	57968.080	3.0
356.0296	27.00	-1.83	15184.040	2.5	43263.570	1.5
356.0330	70.01	-.24	21293.585	0.0	49380.869	0.0
356.0350	24.00	-2.58	25548.640	5.0	53627.750	5.0
356.0372	24.00	-4.38	25038.610	5.0	53117.540	4.0
356.0440	92.01	-1.68	1693.808	0.0	29780.224	0.0
356.0443	25.00	-4.42	27201.540	2.5	55279.910	1.5
356.0450	24.00	-2.41	25206.020	3.0	53284.340	3.0
356.0541	28.01	-1.57	103025.580	2.5	131103.180	2.5
356.0554	26.01	-5.45	16369.390	3.5	44446.890	3.5
356.0584	23.01	-1.30	8841.970	3.0	36919.230	3.0
356.0681	17.02	.32	188448.100	1.5	216524.600	2.5
356.0693	26.00	-4.41	26224.961	3.0	54301.360	4.0
356.0693	26.00	-1.98	26224.961	3.0	54301.360	4.0
356.0710	70.01	.26	34602.076	0.0	62686.363	0.0
356.0782	17.01	-3.20	158768.600	2.0	186844.300	1.0
356.0790	22.00	-2.04	11639.804	3.0	39715.437	3.0
356.0800	58.01	.49	5887.999	0.0	33971.576	0.0
356.0850	28.01	-1.96	106133.140	1.5	134208.300	2.5
356.0860	76.00	-.12	8630.355	0.0	36713.459	0.0
356.0890	27.00	-.90	5075.830	1.5	33150.680	1.5
356.0912	28.00	-1.13	29668.918	3.0	57743.596	3.0
356.0922	17.01	-3.20	158786.400	3.0	186861.000	2.0
356.0990	26.00	-4.70	26339.682	2.0	54413.740	3.0
356.1026	24.00	-1.73	25206.020	3.0	53279.800	2.0
356.1029	18.01	.76	170530.310	3.5	198604.060	4.5
356.1048	25.00	-4.15	38934.940	2.5	67008.540	2.5
356.1112	27.01	-1.54	21624.400	5.0	49697.500	4.0
356.1201	10.01	.01	252953.540	1.5	281025.940	2.5
356.1292	24.00	-4.92	33113.270	4.0	61184.950	5.0
356.1371	27.00	-4.46	20500.710	1.5	48571.770	.5
356.1373	24.00	-4.26	24940.610	2.0	53011.650	1.0
356.1540	58.01	-1.17	4113.534	0.0	32191.276	0.0
356.1590	22.01	-1.96	4628.610	2.5	32697.940	2.5
356.1660	72.01	-1.08	0.000	0.0	28076.796	0.0
356.1671	28.01	-3.56	105861.190	2.5	133929.880	3.5
356.1728	23.01	-5.78	19112.930	4.0	47181.170	3.0
356.1731	25.00	-2.23	38669.600	3.5	66737.820	3.5
356.1741	26.01	-1.48	75915.210	2.5	103983.350	3.5
356.1747	28.00	-3.08	0.000	4.0	28068.091	4.0
356.1906	22.01	-1.83	9363.710	.5	37430.550	.5
356.1946	28.00	-3.71	26665.903	3.0	54732.425	2.0
356.1952	28.01	-4.76	105868.780	2.5	133735.260	2.5
356.1980	28.01	-3.63	93390.060	2.5	121456.320	1.5
356.1987	28.01	-4.19	105868.780	2.5	133734.980	3.5
356.2027	24.00	-3.58	24897.550	4.0	52963.440	4.0
356.2090	58.01	-.86	4113.534	0.0	32186.940	0.0
356.2091	27.00	-1.47	18389.570	1.5	46454.950	1.5
356.2119	28.01	-4.96	99154.810	4.5	127219.970	3.5
356.2164	23.00	-3.03	8412.940	.5	36477.750	.5
356.2184	27.00	-2.94	26450.020	2.5	54514.670	3.5
356.2189	18.01	-.66	170530.310	3.5	198594.920	3.5
356.2209	24.00	-1.65	35862.820	4.0	63927.270	5.0
356.2255	25.00	-3.14	34423.270	3.5	62487.360	2.5
356.2287	24.00	.48	35934.020	6.0	63997.860	6.0
356.2340	76.00	-1.12	8630.355	0.0	36701.791	0.0
356.2381	25.00	-3.22	37586.030	1.5	65649.130	2.5
356.2437	29.01	-2.30	117883.140	4.0	145945.800	5.0
356.2462	24.00	-2.02	33060.740	3.0	61123.200	4.0
356.2473	25.01	-3.55	53597.130	2.0	81659.500	3.0
356.2508	30.02	.26	234384.000	3.0	262446.100	3.0
356.2546	24.00	-4.97	31355.210	2.0	59417.010	3.0
356.2559	15.01	-.62	104102.600	2.0	132164.300	2.0
356.2596	26.00	-2.37	20641.110	4.0	48702.518	4.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
356.2712	26.02	-3.34	123697.180	2.0	151757.670	2.0
356.2748	26.00	-4.66	27666.334	1.0	55726.540	0.0
356.2767	22.00	-4.26	20126.055	3.0	48186.110	4.0
356.2787	28.00	-2.37	30979.789	4.0	59039.693	4.0
356.2882	24.00	-2.22	25089.200	2.0	53148.350	1.0
356.2884	26.00	-4.95	23711.443	4.0	51770.577	3.0
356.2913	27.00	-1.36	15184.040	2.5	43242.950	2.5
356.2950	2.00	-2.51	169087.000	0.0	197153.630	0.0
356.2954	10.00	-2.75	134459.287	1.0	162517.672	1.0
356.3016	24.00	-3.16	27816.880	5.0	55874.980	5.0
356.3093	25.01	-3.11	39808.140	3.0	67865.630	4.0
356.3116	18.01	-4.48	174409.830	1.5	202467.140	1.5
356.3140	42.00	-.25	11775.998	0.0	39841.132	0.0
356.3140	66.01	-.37	806.575	0.0	28871.709	0.0
356.3150	25.01	-3.22	53805.800	4.0	81862.840	4.0
356.3165	29.01	-3.07	117928.480	1.0	145985.400	2.0
356.3188	24.00	-.91	35870.530	4.0	63927.270	5.0
356.3189	28.00	-1.55	30392.052	1.0	58448.790	0.0
356.3201	26.02	-4.75	202200.510	3.0	230257.150	2.0
356.3218	11.02	-4.74	440472.000	2.5	468528.500	1.5
356.3248	22.00	-2.71	18593.990	3.0	46650.260	3.0
356.3275	18.00	-3.02	94553.707	0.0	122609.760	1.0
356.3500	41.00	-.64	80.658	0.0	28142.956	0.0
356.3511	25.01	-2.45	86897.700	3.0	114951.900	2.0
356.3563	22.00	-4.16	20006.032	2.0	48059.820	3.0
356.3620	41.00	-.61	322.630	0.0	28383.983	0.0
356.3654	16.01	-3.16	127976.210	1.5	156029.280	1.5
356.3660	92.00	-.58	0.000	0.0	28061.038	0.0
356.3687	22.00	-3.26	20006.032	2.0	48058.850	1.0
356.3694	23.01	-2.98	9097.810	4.0	37150.570	4.0
356.3704	24.00	-2.07	31364.330	3.0	59417.010	3.0
356.3760	42.00	-.07	19841.750	0.0	47902.001	0.0
356.3792	14.00	-3.69	51612.012	0.0	79664.000	1.0
356.3820	58.01	-.76	4194.191	0.0	32253.970	0.0
356.3880	69.00	-.89	0.000	0.0	28059.306	0.0
356.3897	24.01	-1.73	39824.520	4.5	67875.680	3.5
356.3912	25.01	-4.22	43339.100	2.0	71390.140	3.0
356.3929	22.01	-4.24	34543.360	3.5	62594.270	4.5
356.3940	70.01	-.35	31375.775	0.0	59434.609	0.0
356.3958	27.00	-3.99	26232.050	3.5	54282.730	2.5
356.4019	28.01	-2.52	103025.580	2.5	131075.780	1.5
356.4050	64.01	-.83	4194.191	0.0	32252.159	0.0
356.4111	26.00	-2.95	12968.552	2.0	41018.029	2.0
356.4121	27.00	-1.36	25568.680	5.5	53618.080	6.5
356.4130	45.00	0.00	14276.381	0.0	42333.719	0.0
356.4147	27.00	-1.05	25739.930	2.5	53789.120	3.5
356.4182	25.00	-2.89	34343.900	4.5	62392.820	4.5
356.4238	23.01	-5.35	19132.690	2.0	47181.170	3.0
356.4283	18.00	-2.82	93143.800	2.0	121191.920	2.0
356.4289	24.00	-1.69	33113.270	4.0	61161.350	5.0
356.4310	72.00	-1.85	0.000	0.0	28055.921	0.0
356.4332	18.01	-1.55	155043.070	2.5	183090.610	1.5
356.4338	23.00	-2.43	8715.720	3.5	36763.410	2.5
356.4352	18.00	-2.73	94553.707	0.0	122601.290	1.0
356.4382	20.00	-2.46	20335.360	1.0	48382.700	2.0
356.4455	22.01	-2.90	40798.370	3.5	68845.140	2.5
356.4492	26.00	-3.04	26339.682	2.0	54386.160	1.0
356.4507	25.00	-4.17	38934.940	2.5	66981.300	3.5
356.4515	22.00	-1.00	11639.804	3.0	39686.100	2.0
356.4517	26.00	-2.56	19788.248	4.0	47834.529	5.0
356.4527	25.01	-1.61	86897.700	3.0	114943.900	3.0
356.4531	26.01	-2.04	33466.500	4.5	61512.670	4.5
356.4551	26.00	-2.33	19788.248	4.0	47834.260	3.0
356.4560	44.00	-.70	9033.642	0.0	37087.595	0.0
356.4634	27.00	-3.45	20500.710	1.5	48546.070	1.5
356.4666	28.00	-2.25	15609.861	2.0	43654.974	3.0
356.4672	9.01	-4.45	254541.450	2.0	282586.510	2.0
356.4674	9.01	-4.08	254541.460	3.0	282586.510	2.0
356.4677	26.01	-3.72	70523.730	3.5	98568.750	3.5
356.4699	26.02	-4.64	198337.060	3.0	226381.910	3.0
356.4730	75.00	-.88	15647.559	0.0	43700.174	0.0
356.4790	73.00	-1.13	10888.765	0.0	38940.908	0.0
356.4874	25.02	-2.70	86051.500	2.5	114094.970	1.5
356.4897	26.02	-3.79	198338.620	4.0	226381.910	3.0
356.4913	24.00	-2.70	28679.430	1.0	56722.600	1.0
356.4948	27.00	-.31	4690.180	2.5	32733.070	3.5
356.4951	24.00	-.01	35884.400	5.0	63927.270	5.0
356.4956	25.01	-4.91	59537.400	4.0	87580.230	4.0
356.4983	23.00	-3.69	553.020	4.5	28595.640	3.5
356.5030	18.01	-.41	158428.030	.5	186470.280	1.5
356.5050	92.00	-.48	4194.191	0.0	32244.288	0.0
356.5110	24.00	-3.24	33934.880	3.0	61976.500	4.0
356.5158	24.00	-3.39	20520.920	3.0	48562.160	4.0
356.5248	28.01	-3.86	109148.050	4.5	137188.580	4.5
356.5258	28.00	-1.76	22102.349	4.0	50142.800	3.0
356.5262	24.00	-2.36	28682.180	2.0	56722.600	1.0
356.5288	22.01	-1.68	12758.150	2.5	40798.370	3.5
356.5299	24.01	-2.01	38315.000	2.5	66355.130	1.5
356.5327	25.00	-2.42	35041.370	3.5	63081.280	2.5
356.5346	26.00	-3.08	26339.682	2.0	54379.440	3.0
356.5381	26.00	-.57	7728.058	3.0	35767.546	4.0
356.5433	25.01	-4.70	51553.060	5.0	79592.140	6.0
356.5436	24.00	-1.42	31377.960	4.0	59417.010	3.0
356.5440	27.00	-4.79	24733.280	2.5	52772.300	2.5
356.5510	24.00	-2.06	20523.690	4.0	48562.160	4.0
356.5517	26.00	-3.09	24574.655	4.0	52613.072	5.0
356.5542	24.00	-1.25	20523.940	5.0	48562.160	4.0
356.5547	24.00	-3.17	33040.100	2.0	61078.280	3.0
356.5561	28.01	-3.12	106620.530	3.5	134658.600	4.5
356.5577	26.00	-.87	23110.925	3.0	51148.870	3.0
356.5625	26.00	-4.99	17927.378	1.0	45964.944	2.0
356.5653	25.02	-4.30	121197.050	2.5	149234.400	2.5
356.5673	25.01	-3.58	53017.160	1.0	81054.350	2.0
356.5719	29.01	-2.71	122745.770	2.0	150782.600	2.0
356.5796	29.01	-2.75	110365.980	2.0	138402.200	3.0
356.5820	26.00	-2.10	26339.682	2.0	54375.719	2.0
356.5826	10.01	-.84	252953.540	1.5	280989.530	1.5
356.5939	23.03	-2.22	227712.500	4.0	255747.600	3.0
356.5978	22.01	-1.44	9395.760	1.5	37430.550	.5

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
356.5980	25.02	-2.96	84610.530	.5	112645.310	.5
356.6014	28.01	-2.49	107082.210	2.5	135116.720	2.5
356.6015	25.01	-1.02	86897.700	3.0	114932.200	4.0
356.6050	42.00	.63	20003.065	0.0	48045.297	0.0
356.6057	26.01	-2.33	38214.500	1.5	66248.670	.5
356.6085	28.00	-2.86	26665.903	3.0	54699.852	3.0
356.6094	24.00	-.73	25359.620	4.0	53393.500	5.0
356.6100	40.00	-.18	1209.863	0.0	29251.701	0.0
356.6131	29.00	-2.31	30569.200	0.0	58610.795	0.0
356.6139	28.01	-4.39	103653.030	3.5	131686.560	4.5
356.6140	20.00	-2.29	20349.260	2.0	48382.781	3.0
356.6145	26.01	-2.32	36252.960	2.5	64286.440	3.5
356.6145	26.00	-5.50	12560.933	3.0	40594.413	4.0
356.6150	20.00	-3.19	20349.260	2.0	48382.700	2.0
356.6168	23.01	-1.06	8640.210	2.0	36673.510	2.0
356.6168	25.01	-3.45	53698.700	2.0	81732.000	1.0
356.6169	23.00	-2.27	8578.520	2.5	36611.810	2.5
356.6248	25.01	-4.71	78475.430	7.0	106506.100	8.0
356.6310	26.00	-2.48	18378.187	2.0	46410.366	1.0
356.6310	24.01	-2.53	35569.020	2.5	63601.200	3.5
356.6320	25.01	-3.35	62564.700	1.0	90596.800	2.0
356.6326	27.00	-1.52	23152.570	3.5	51184.630	3.5
356.6345	25.00	-2.22	27248.000	1.5	55279.910	1.5
356.6366	28.00	-.15	3409.925	2.0	31441.665	2.0
356.6385	25.00	-1.95	37737.220	3.5	65768.810	4.5
356.6435	25.01	-3.12	53781.700	3.0	81812.900	2.0
356.6454	24.00	-2.76	26787.500	3.0	54818.550	2.0
356.6470	69.01	-1.21	161.315	0.0	28200.244	0.0
356.6512	15.01	.29	104102.600	2.0	132133.200	3.0
356.6581	26.00	-2.45	19390.165	6.0	47420.215	5.0
356.6600	92.00	.27	564.603	0.0	28602.510	0.0
356.6616	10.01	-2.05	280947.100	1.5	308976.870	.5
356.6720	73.00	-1.19	5968.656	0.0	34005.620	0.0
356.6725	25.00	-3.56	38120.180	4.5	66149.100	3.5
356.6832	24.00	-1.77	35813.730	3.0	63841.810	4.0
356.6867	23.03	-2.59	226796.300	2.0	254824.100	1.0
356.6882	9.01	-3.10	254541.410	4.0	282569.090	3.0
356.6888	9.01	-4.70	254541.450	2.0	282569.090	3.0
356.6889	9.01	-3.67	254541.460	3.0	282569.090	3.0
356.6931	15.01	-2.46	104051.100	3.0	132078.400	4.0
356.6941	29.01	-3.02	117928.480	1.0	145955.700	1.0
356.6963	27.00	-3.77	26450.020	2.5	54477.070	3.5
356.7008	27.00	-3.40	26232.050	3.5	54258.750	2.5
356.7011	27.01	-2.15	22009.230	4.0	50035.900	3.0
356.7024	26.00	-2.89	23192.486	2.0	51219.059	3.0
356.7060	90.01	-1.52	6613.917	0.0	34648.209	0.0
356.7120	64.01	-.28	10727.450	0.0	38761.270	0.0
356.7160	44.00	-.10	13873.093	0.0	41906.599	0.0
356.7166	16.01	-.66	130641.000	1.5	158666.450	1.5
356.7211	24.00	-1.69	25359.620	4.0	53384.720	3.0
356.7260	25.00	-2.75	35114.980	2.5	63139.700	2.5
356.7260	90.00	-1.10	0.000	0.0	28032.720	0.0
356.7275	25.01	-3.44	62572.200	2.0	90596.800	2.0
356.7353	25.00	-4.28	34463.370	1.5	62487.360	2.5
356.7360	72.00	-.80	6533.259	0.0	34565.193	0.0
356.7360	69.00	-.89	0.000	0.0	28031.934	0.0
356.7370	26.00	-2.14	19788.248	4.0	47812.104	4.0
356.7374	9.02	-4.16	440582.120	4.5	468605.940	4.5
356.7461	28.01	-4.04	106133.140	1.5	134156.280	1.5
356.7483	9.01	-3.24	254546.130	4.0	282569.090	3.0
356.7509	9.01	-4.30	254546.330	3.0	282569.090	3.0
356.7546	24.00	-1.21	25206.020	3.0	53228.490	3.0
356.7572	24.00	-1.83	26796.280	2.0	54816.550	2.0
356.7601	10.01	-2.50	279218.660	2.5	307240.700	3.5
356.7650	64.01	-1.11	3952.218	0.0	31981.873	0.0
356.7653	18.00	-2.08	93143.800	2.0	121165.431	3.0
356.7662	28.01	-3.07	106620.530	3.5	134642.090	3.5
356.7690	90.01	-.76	12824.546	0.0	40853.887	0.0
356.7706	21.01	-.48	0.000	1.0	28021.210	2.0
356.7725	18.01	-.97	172213.800	1.5	200234.860	2.5
356.7731	26.00	-2.15	26140.164	3.0	54161.182	3.0
356.7753	10.01	-4.79	277344.290	2.5	305365.130	3.5
356.7840	71.00	-.91	0.000	0.0	28028.163	0.0
356.7899	25.01	-2.10	86936.800	2.0	114956.500	1.0
356.7928	28.00	-.69	29084.478	4.0	57103.946	3.0
356.7957	26.02	-3.22	90423.680	2.0	118442.920	3.0
356.8000	77.00	-.96	12421.258	0.0	40448.164	0.0
356.8039	17.01	-.16	149798.300	2.0	177816.900	2.0
356.8040	74.00	-.28	15324.929	0.0	43351.521	0.0
356.8046	24.00	-.65	31987.060	4.0	60005.600	5.0
356.8085	28.01	-4.91	107082.210	2.5	135100.450	3.5
356.8130	58.01	-.06	9517.587	0.0	37543.472	0.0
356.8136	28.01	-4.78	103653.030	3.5	131670.870	2.5
356.8140	40.01	-.74	6371.944	0.0	34397.750	0.0
356.8166	28.02	-4.10	155841.700	4.0	183859.300	3.0
356.8174	24.00	-2.27	33060.740	3.0	61078.280	3.0
356.8230	75.00	.28	24600.544	0.0	52625.643	0.0
356.8270	62.01	.20	3871.561	0.0	31896.346	0.0
356.8291	24.00	-2.05	26801.930	1.0	54818.550	2.0
356.8383	12.02	-.53	534923.600	3.0	562939.500	2.0
356.8390	24.00	-2.42	25359.620	4.0	53375.460	4.0
356.8420	27.00	-2.40	15184.040	2.5	43199.650	2.5
356.8427	26.00	-.76	23192.486	2.0	51208.040	1.0
356.8485	25.01	-1.51	86936.800	2.0	114951.900	2.0
356.8500	10.01	.37	246394.130	2.5	274409.110	3.5
356.8510	41.01	-.92	7420.492	0.0	35443.392	0.0
356.8612	28.01	-2.94	72375.420	1.5	100369.520	2.5
356.8637	23.03	-.47	255445.500	3.0	283459.400	3.0
356.8696	29.01	-2.71	88362.030	2.0	116375.470	3.0
356.8720	41.00	-.85	4920.109	0.0	32941.360	0.0
356.8780	26.00	-3.74	17550.180	3.0	45562.959	3.0
356.8816	26.00	-.78	26224.961	3.0	54237.460	4.0
356.8860	25.01	-3.52	43311.000	1.0	71323.150	2.0
356.8876	26.01	-3.25	32875.630	6.5	60867.660	5.5
356.8880	40.00	-.41	5000.766	0.0	33020.761	0.0
356.8905	20.00	-2.13	20371.000	3.0	48382.801	4.0
356.8908	20.00	-3.19	20371.000	3.0	48382.781	3.0
356.8911	24.00	-3.73	21810.840	1.0	49822.590	2.0
356.8918	20.00	-4.73	20371.000	3.0	48382.700	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
356.8953	26.02	-4.06	158257.370	1.0	186268.790	2.0
356.8962	26.01	-3.25	33501.320	3.5	61512.670	4.5
356.8978	26.00	-2.44	21715.735	5.0	49726.964	4.0
356.8981	24.00	-3.93	25106.340	3.0	53117.540	4.0
356.9040	72.01	-.40	6291.287	0.0	34310.026	0.0
356.9050	18.01	-4.85	174409.830	1.5	202420.490	.5
356.9083	28.00	-1.23	30619.440	2.0	58629.840	2.0
356.9083	23.00	-1.61	9824.580	2.5	37834.980	1.5
356.9120	28.00	-1.44	30619.440	2.0	58629.550	3.0
356.9143	24.00	-1.88	33113.270	4.0	61123.200	4.0
356.9193	27.00	-3.00	16470.600	1.5	44480.140	2.5
356.9224	25.01	-4.52	62587.500	3.0	90596.800	2.0
356.9262	7.00	-2.63	83317.800	1.5	111326.798	2.5
356.9295	25.00	-1.51	23296.670	3.5	51305.410	2.5
356.9306	28.00	-1.53	31031.042	3.0	59039.693	4.0
356.9320	58.01	-.69	5565.369	0.0	33581.910	0.0
356.9337	24.00	-4.01	26796.280	2.0	54804.690	1.0
356.9369	24.00	-4.55	24056.110	5.0	52064.270	4.0
356.9370	27.00	.32	7442.410	3.5	35450.560	3.5
356.9403	26.01	-1.46	75600.930	3.5	103608.820	4.5
356.9458	27.00	-1.81	23152.570	3.5	51160.030	2.5
356.9470	41.00	-.93	2097.096	0.0	30112.460	0.0
356.9481	26.02	-3.48	123750.390	3.0	151757.670	2.0
356.9504	25.01	-1.30	86936.800	2.0	114943.900	3.0
356.9570	64.01	-1.10	4436.164	0.0	32450.743	0.0
356.9620	90.01	-1.59	6129.972	0.0	34144.158	0.0
356.9672	14.02	-1.02	214532.170	1.0	242537.950	0.0
356.9710	24.00	-3.09	31352.420	1.0	59357.900	2.0
356.9780	76.00	-.41	11292.053	0.0	39304.984	0.0
356.9820	90.00	-.70	3790.903	0.0	31803.520	0.0
356.9828	16.01	-1.20	128599.110	3.5	156603.670	3.5
356.9861	25.01	-3.31	55371.300	3.0	83375.600	3.0
356.9894	28.01	-4.11	105439.850	1.5	133443.890	2.5
356.9949	25.01	-2.49	39808.140	3.0	67811.750	3.0
356.9956	23.00	-5.08	8412.940	.5	36416.490	1.5
356.9957	18.01	-3.37	158167.710	1.5	186171.260	.5
356.9976	9.01	-2.03	254541.350	5.0	282544.750	4.0
356.9984	9.01	-2.89	254541.410	4.0	282544.750	4.0
356.9990	9.01	-4.07	254541.460	3.0	282544.750	4.0
357.0013	26.00	-1.13	19552.474	1.0	47555.584	1.0
357.0057	24.00	-3.53	26801.930	1.0	54804.690	1.0
357.0066	24.00	-2.81	31355.210	2.0	59357.900	2.0
357.0091	15.01	-2.08	102799.200	1.0	130801.700	1.0
357.0100	26.00	-.04	7376.762	4.0	35379.189	5.0
357.0112	28.01	-4.45	110573.360	2.5	138575.690	2.5
357.0151	28.00	-4.18	26665.903	3.0	54667.928	4.0
357.0162	23.00	-2.17	8578.520	2.5	36580.460	1.5
357.0180	45.00	-.64	3387.616	0.0	31397.408	0.0
357.0205	7.00	-2.83	83284.040	.5	111285.644	1.5
357.0211	23.00	-1.93	8476.200	1.5	36477.750	.5
357.0231	24.02	-4.62	66027.800	4.0	94029.200	3.0
357.0231	15.01	-.88	103630.600	2.0	131632.000	3.0
357.0238	26.00	.67	22650.415	6.0	50651.760	7.0
357.0260	75.00	-.22	17180.052	0.0	45189.217	0.0
357.0279	28.01	-3.05	105861.190	2.5	133862.210	1.5
357.0358	27.00	-4.81	23184.230	2.5	51184.630	3.5
357.0520	25.00	-2.35	35114.980	2.5	63114.110	1.5
357.0534	29.01	-3.72	117928.480	1.0	145927.500	2.0
357.0537	25.01	-3.53	53781.700	3.0	81780.700	3.0
357.0542	24.01	-3.31	35707.660	5.5	63706.620	4.5
357.0560	70.01	-.08	32908.268	0.0	60915.079	0.0
357.0590	44.00	.82	15405.586	0.0	43412.162	0.0
357.0613	24.01	-3.39	39877.280	3.5	67875.680	3.5
357.0617	25.01	-4.00	39813.380	2.0	67811.750	3.0
357.0636	21.01	-2.75	32349.980	3.0	60348.200	4.0
357.0650	42.00	.92	25487.776	0.0	53493.881	0.0
357.0656	25.00	-2.41	27281.850	.5	55279.910	1.5
357.0660	74.00	-1.59	3306.958	0.0	31312.985	0.0
357.0705	24.00	-3.43	20517.400	2.0	48515.080	3.0
357.0775	29.01	-3.97	122745.770	2.0	150742.900	3.0
357.0779	25.01	-1.98	86961.000	1.0	114958.100	0.0
357.0906	23.03	-2.05	255463.300	2.0	283459.400	3.0
357.0930	92.01	-1.66	4355.506	0.0	32359.415	0.0
357.0952	28.01	-2.02	93390.060	2.5	121385.600	1.5
357.0972	27.00	-2.08	26450.020	2.5	54445.610	2.5
357.0980	58.01	-1.37	2500.383	0.0	30503.900	0.0
357.0983	25.01	-1.62	86961.000	1.0	114956.500	1.0
357.1010	23.00	-2.60	8412.940	.5	36408.230	1.5
357.1054	24.00	-3.09	25177.390	4.0	53172.330	5.0
357.1098	26.01	-4.86	50142.930	2.5	78137.530	3.5
357.1123	24.00	-2.36	33935.650	2.0	61930.050	3.0
357.1154	24.00	-2.07	20520.920	3.0	48515.080	3.0
357.1160	46.00	-.09	10001.532	0.0	38003.638	0.0
357.1225	24.01	-4.10	35607.600	3.5	63601.200	3.5
357.1227	26.00	-2.52	11976.239	4.0	39969.830	3.0
357.1229	24.00	-2.38	31364.330	3.0	59357.900	2.0
357.1230	10.01	-.13	252953.540	1.5	280947.100	1.5
357.1248	23.00	-3.63	22121.170	4.5	50114.590	5.5
357.1270	24.00	-1.48	35934.020	6.0	63927.270	5.0
357.1357	24.01	-2.43	38362.560	1.5	66355.130	1.5
357.1430	39.00	.61	15566.901	0.0	43566.890	0.0
357.1507	24.00	-1.37	20523.690	4.0	48515.080	3.0
357.1570	25.01	-1.73	86961.000	1.0	114951.900	2.0
357.1570	90.01	-.89	10082.190	0.0	38081.081	0.0
357.1586	24.01	-2.50	39877.280	3.5	67868.050	2.5
357.1595	24.01	-2.92	35610.500	4.5	63601.200	3.5
357.1652	26.02	-3.93	109570.840	2.0	137561.100	1.0
357.1811	24.00	-2.53	25206.020	3.0	53195.030	2.0
357.1850	73.00	-.71	10566.135	0.0	38562.831	0.0
357.1860	28.00	-1.45	1332.153	3.0	29320.782	3.0
357.1930	64.01	-.81	0.000	0.0	27996.069	0.0
357.1949	18.01	-2.81	183675.570	3.5	211663.500	3.5
357.1960	24.00	-2.00	24897.550	4.0	52885.390	5.0
357.1967	28.01	-3.68	102742.740	1.5	130730.530	2.5
357.1987	26.00	-.20	22845.856	5.0	50833.485	5.0
357.1997	7.00	-3.59	83284.040	.5	111271.596	.5
357.2024	10.01	-2.42	280989.530	1.5	308976.870	.5
357.2088	22.00	-1.77	14105.680	3.0	42092.520	4.0
357.2100	25.00	-2.89	37630.620	4.5	65617.370	3.5
357.2290	18.00	-4.05	95399.870	1.0	123385.130	0.0
357.2312	26.00	-2.69	19621.004	5.0	47606.092	5.0
357.2315	23.00	-4.14	8476.200	1.5	36461.260	2.5
357.2315	23.00	-1.66	8715.720	3.5	36700.780	2.5
357.2328	26.02	-3.33	123552.950	1.0	151537.910	0.0
357.2370	25.00	-2.37	27201.540	2.5	55186.170	2.5
357.2378	10.01	-2.72	279324.890	1.5	307309.460	.5
357.2390	90.01	-.63	8388.382	0.0	36380.846	0.0
357.2392	26.00	-4.13	26140.164	3.0	54124.620	4.0
357.2444	25.01	-2.83	43339.100	2.0	71323.150	2.0
357.2462	27.00	-1.80	16470.600	1.5	44454.510	.5
357.2470	40.01	-.15	0.000	0.0	27991.838	0.0
357.2480	74.01	-.17	10485.478	0.0	38477.237	0.0
357.2485	26.02	-2.96	123552.950	1.0	151536.680	1.0
357.2525	27.00	-4.23	24733.280	2.5	52716.700	3.5
357.2527	21.01	.30	177.630	3.0	28161.030	3.0
357.2583	26.00	-3.06	22996.661	4.0	50979.627	4.0
357.2627	24.00	-2.67	27703.840	4.0	55686.460	5.0
357.2680	23.00	-3.93	2112.320	.5	30094.520	1.5
357.2712	26.02	-3.00	123552.950	1.0	151534.900	2.0
357.2740	82.00	.37	21293.585	0.0	49283.307	0.0
357.2781	25.00	-3.63	23549.200	2.5	51530.610	3.5
357.2787	22.00	-3.49	20126.055	3.0	48107.420	2.0
357.2971	26.01	-3.52	50157.610	4.5	78137.530	3.5
357.2979	26.01	-2.58	70314.740	4.5	98294.600	5.5
357.3080	40.01	-.83	2500.383	0.0	30487.442	0.0
357.3090	24.00	-2.16	35862.820	4.0	63841.810	4.0
357.3118	24.01	-6.66	20512.620	2.5	48491.390	2.5
357.3220	90.01	-.85	8549.697	0.0	36535.699	0.0
357.3254	22.00	-4.50	13981.750	1.0	41959.460	0.0
357.3257	28.00	-1.26	29832.810	3.0	57810.494	4.0
357.3270	24.00	-1.73	25548.640	5.0	53526.220	4.0
357.3392	26.00	-1.06	26623.726	2.0	54600.350	3.0
357.3393	27.00	-3.56	26450.020	2.5	54426.640	1.5
357.3420	24.00	-1.02	27176.220	1.0	55152.630	2.0
357.3440	73.01	.34	11695.340	0.0	39679.579	0.0
357.3498	27.00	-3.81	23184.230	2.5	51160.030	2.5
357.3563	23.01	-1.07	19132.690	2.0	47107.980	1.0
357.3600	23.03	-.60	256251.700	4.0	284226.700	3.0
357.3613	25.01	-3.33	53805.800	4.0	81780.700	3.0
357.3637	24.00	-.54	21847.880	2.0	49822.590	2.0
357.3645	25.00	-3.96	35165.050	1.5	63139.700	2.5
357.3662	28.01	-2.41	107142.210	1.5	135116.720	2.5
357.3664	26.02	-2.11	202282.650	2.0	230257.150	2.0
357.3664	17.02	-.90	216710.400	3.5	244684.900	3.5
357.3686	26.00	-4.15	25899.974	4.0	53874.300	5.0
357.3700	58.01	-.95	3548.931	0.0	31531.134	0.0
357.3720	77.00	-.33	7017.204	0.0	34999.251	0.0
357.3740	22.01	-1.42	4628.610	2.5	32602.510	1.5
357.3758	26.02	-4.65	109570.840	2.0	137544.600	2.0
357.3827	26.00	-1.09	19390.165	6.0	47363.390	6.0
357.3848	24.01	-5.44	20518.330	3.5	48491.390	2.5
357.3850	68.00	-.88	5081.424	0.0	33062.453	0.0
357.3862	26.02	-4.08	114339.950	4.0	142312.900	3.0
357.3880	42.00	.47	18389.915	0.0	46370.709	0.0
357.3889	26.00	.03	26627.612	4.0	54600.350	3.0
357.4002	24.00	-2.10	25206.020	3.0	53177.870	2.0
357.4022	28.01	-2.39	105838.060	3.5	133809.760	3.5
357.4075	24.00	.00	35870.530	4.0	63841.810	4.0
357.4080	76.00	-.44	14276.381	0.0	42255.609	0.0
357.4183	10.01	-.92	246394.130	2.5	274364.570	2.5
357.4188	24.00	-3.69	7927.470	2.0	35897.870	2.0
357.4226	9.00	-2.76	118936.797	1.5	146906.900	1.5
357.4234	10.01	-2.02	252798.480	.5	280768.520	.5
357.4243	26.00	-1.96	26479.366	1.0	54449.330	1.0
357.4296	25.00	-4.67	34423.270	3.5	62392.820	4.5
357.4302	10.01	-3.43	280768.520	.5	308738.030	1.5
357.4340	24.00	-.59	25548.640	5.0	53517.860	6.0
357.4342	23.01	-1.37	19132.690	2.0	47101.880	2.0
357.4348	9.00	-3.02	102405.710	2.5	130374.860	1.5
357.4358	26.00	-3.63	19621.004	5.0	47590.070	4.0
357.4383	23.00	-4.16	21963.500	3.5	49932.370	4.5
357.4391	9.00	-1.73	118936.797	1.5	146905.600	2.5
357.4401	28.00	-1.46	30619.440	2.0	58588.168	3.0
357.4430	57.00	-.32	0.000	0.0	27976.489	0.0
357.4480	28.01	-3.54	102742.740	1.5	130710.850	.5
357.4514	7.00	-3.32	83317.800	1.5	111285.644	1.5
357.4548	23.00	-3.82	2153.200	1.5	30120.780	2.5
357.4551	24.00	-3.76	25106.340	3.0	53073.900	3.0
357.4580	44.00	-.58	8469.040	0.0	36444.355	0.0
357.4609	27.01	-2.66	22414.500	3.0	50381.600	3.0
357.4611	10.01	.22	246397.490	1.5	274364.570	2.5
357.4668	22.00	-2.09	15877.180	2.0	43843.820	3.0
357.4695	25.00	-4.09	23549.200	2.5	51515.630	2.5
357.4712	25.00	-2.25	35114.980	2.5	63081.280	2.5
357.4740	64.01	.11	10001.532	0.0	37975.594	0.0
357.4760	92.00	-.67	0.000	0.0	27973.906	0.0
357.4767	23.00	-.96	14514.750	1.5	42480.620	.5
357.4795	24.00	.16	21856.940	3.0	49822.590	2.0
357.4800	26.02	-3.46	202282.650	2.0	230248.260	1.0
357.4822	28.01	-3.10	106007.890	2.5	133973.330	2.5
357.4877	24.00	-4.41	33113.270	4.0	61078.280	3.0
357.4932	24.00	-.13	21847.880	2.0	49812.460	3.0
357.4965	27.00	-.84	4690.180	2.5	32654.500	2.5
357.5106	26.00	-2.07	23244.826	1.0	51208.040	1.0
357.5130	41.00	-.29	11937.313	0.0	39908.324	0.0
357.5145	23.01	-1.90	20617.050	2.0	48579.960	3.0
357.5230	74.00	-.09	16857.422	0.0	44827.650	0.0
357.5234	7.00	-2.28	83364.590	2.5	111326.798	2.5
357.5236	27.00	-3.46	25739.930	2.5	53702.130	3.5
357.5236	26.00	-1.00	22845.856	5.0	50808.053	4.0
357.5236	22.00	-4.06	13981.750	1.0	41943.950	1.0
357.5266	26.01	-3.87	32875.630	6.5	60837.590	6.5
357.5287	27.01	-1.77	24267.800	1.0	52229.600	2.0
357.5290	58.01	-.69	8065.752	0.0	36035.511	0.0
357.5293	9.02	-3.81	441158.600	1.5	469120.350	1.5
357.5320	90.01	-.65	6613.917	0.0	34583.441	0.0
357.5328	28.00	-3.06	31031.042	3.0	58992.520	2.0
357.5348	25.00	-1.62	38669.600	3.5	66630.920	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
357.5355	27.00	-.81	816.000	3.5	28777.270	3.5
357.5364	26.00	-.56	24335.764	2.0	52296.960	2.0
357.5374	29.01	-3.97	117928.480	1.0	145889.600	0.0
357.5378	26.01	-2.71	36126.410	1.5	64087.500	2.5
357.5392	26.02	-4.00	114351.920	3.0	142312.900	3.0
357.5399	9.02	-2.60	441158.600	1.5	469119.520	2.5
357.5406	28.01	-3.39	71457.740	3.5	99418.610	3.5
357.5460	25.00	-3.61	33825.490	2.5	61785.940	3.5
357.5603	26.02	-2.26	90483.590	3.0	118442.920	3.0
357.5674	24.01	-3.40	38396.360	.5	66355.130	1.5
357.5726	25.01	-4.55	39808.140	3.0	67766.510	2.0
357.5748	26.00	-2.26	24338.766	3.0	52296.960	2.0
357.5790	40.00	-.27	564.603	0.0	28530.451	0.0
357.5837	30.02	-.83	237047.800	2.0	265005.300	2.0
357.5843	22.00	-7.60	6742.757	4.0	34700.212	5.0
357.5848	24.00	-1.40	35884.400	5.0	63841.810	4.0
357.5850	41.00	-.20	645.260	0.0	28610.639	0.0
357.5855	22.00	-2.06	14028.470	2.0	41985.830	3.0
357.5905	23.01	-3.72	20622.990	3.0	48579.960	3.0
357.5926	28.00	-.56	29832.810	3.0	57789.611	4.0
357.5980	26.00	-.52	23192.486	2.0	51148.870	3.0
357.5980	74.00	-.79	13711.778	0.0	41676.140	0.0
357.6041	17.01	-.68	149798.300	2.0	177754.200	1.0
357.6050	39.00	.83	16131.504	0.0	44095.319	0.0
357.6090	24.00	-.25	21856.940	3.0	49812.460	3.0
357.6153	22.00	-2.88	18695.230	4.0	46650.260	3.0
357.6172	24.00	-2.54	28637.000	3.0	56591.880	2.0
357.6203	27.00	-4.97	25739.930	2.5	53694.570	3.5
357.6230	58.01	-.84	1371.178	0.0	29333.585	0.0
357.6250	66.01	.41	4678.136	0.0	32640.387	0.0
357.6269	24.01	-2.33	42898.120	2.5	70852.240	3.5
357.6311	7.00	-2.90	83317.800	1.5	111271.596	.5
357.6345	21.01	.03	67.680	2.0	28021.210	2.0
357.6374	22.03	.72	230913.400	1.5	258866.700	2.5
357.6396	25.01	-2.75	39813.380	2.0	67766.510	2.0
357.6409	22.01	-3.86	12628.770	1.5	40581.800	2.5
357.6419	9.02	-3.07	441167.400	.5	469120.350	1.5
357.6423	25.01	-2.83	43311.000	1.0	71263.920	1.0
357.6506	27.00	-4.52	23207.760	1.5	51160.030	2.5
357.6560	90.01	-.05	15002.299	0.0	42962.126	0.0
357.6561	18.01	-4.97	173393.380	2.5	201345.220	1.5
357.6616	18.01	.59	157673.320	2.5	185624.730	3.5
357.6757	26.00	-1.17	26351.049	5.0	54301.360	4.0
357.6764	28.01	-1.77	24788.200	1.5	52738.450	2.5
357.6764	23.00	-5.32	13801.530	1.5	41751.780	.5
357.6764	23.00	-1.59	13801.530	1.5	41751.780	1.5
357.6770	64.01	-1.16	3952.218	0.0	31910.404	0.0
357.6850	40.01	.02	3226.301	0.0	31183.861	0.0
357.6890	66.01	-.02	4678.136	0.0	32635.384	0.0
357.6917	25.00	-1.81	35165.050	1.5	63114.110	1.5
357.6974	28.01	-4.50	102742.740	1.5	130691.350	1.5
357.6979	28.01	-2.03	105861.190	2.5	133809.760	3.5
357.7088	23.00	-4.90	21841.450	2.5	49789.170	3.5
357.7123	23.01	-2.87	34228.790	3.0	62176.240	4.0
357.7209	25.01	-4.95	43131.400	2.0	71078.180	1.0
357.7209	22.00	-5.48	13981.750	1.0	41928.528	2.0
357.7217	23.01	-1.82	19161.270	0.0	47107.980	1.0
357.7229	28.00	-2.38	2216.519	2.0	30163.140	2.0
357.7260	27.00	-2.37	14036.280	1.5	41982.660	1.5
357.7410	28.01	-3.43	105668.780	2.5	133613.990	1.5
357.7457	28.01	-4.57	105499.050	3.5	133443.890	2.5
357.7460	58.01	.15	3710.246	0.0	31663.039	0.0
357.7550	40.00	-.14	7985.094	0.0	35937.184	0.0
357.7643	23.01	-1.99	19112.930	4.0	47056.320	4.0
357.7673	27.00	-1.88	25568.680	5.5	53511.830	5.5
357.7675	24.00	-4.84	33113.270	4.0	61056.410	4.0
357.7686	27.00	-1.96	20500.710	1.5	48443.760	2.5
357.7720	41.00	.09	10162.848	0.0	38113.610	0.0
357.7773	25.00	-2.81	34845.260	.5	62787.630	1.5
357.7790	62.01	-1.48	0.000	0.0	27950.215	0.0
357.7834	8.01	-3.57	248009.100	1.5	275951.000	1.5
357.7847	23.01	-2.21	19166.190	1.0	47107.980	1.0
357.7868	25.00	-.33	17052.290	4.5	44993.920	3.5
357.7908	23.00	-4.77	2153.200	1.5	30094.520	1.5
357.7914	24.00	-3.32	20517.400	2.0	48458.670	2.0
357.7920	92.00	-.61	0.000	0.0	27949.200	0.0
357.7964	23.00	-2.44	13810.900	.5	41751.780	1.5
357.7964	23.00	-2.00	13810.900	.5	41751.780	.5
357.7978	10.01	-2.08	280797.260	2.5	308738.030	1.5
357.8000	27.01	-2.33	18031.500	2.0	45972.100	3.0
357.8039	23.00	-4.41	8476.200	1.5	36416.490	1.5
357.8057	24.00	-3.57	25177.390	4.0	53117.540	4.0
357.8069	27.00	-1.09	18389.570	1.5	46329.630	2.5
357.8084	25.01	-3.64	39826.570	1.0	67766.510	2.0
357.8169	24.00	-1.19	25359.620	4.0	53298.900	4.0
357.8203	24.00	-2.98	8095.210	3.0	36034.220	3.0
357.8210	23.01	-5.85	19112.930	4.0	47051.690	3.0
357.8230	40.01	-.11	9678.902	0.0	37625.680	0.0
357.8252	22.00	-.81	11776.806	4.0	39715.437	3.0
357.8281	12.02	-1.55	534197.700	1.0	562136.100	2.0
357.8311	25.00	-1.89	27248.000	1.5	55186.170	2.5
357.8347	29.01	-3.32	108014.660	3.0	135952.550	2.0
357.8360	64.01	-.54	4194.191	0.0	32139.954	0.0
357.8365	24.00	-2.92	20520.920	3.0	48458.670	2.0
357.8376	26.00	-.99	23270.374	0.0	51208.040	1.0
357.8412	26.00	-3.20	22249.430	3.0	50186.814	2.0
357.8525	28.01	-3.61	109846.000	3.5	137782.500	4.5
357.8530	22.00	-3.66	18593.990	3.0	46530.450	4.0
357.8629	23.01	-1.93	19166.190	1.0	47101.880	2.0
357.8663	26.00	-3.33	18378.187	2.0	46313.610	2.0
357.8684	24.00	-1.31	0.000	3.0	27935.260	4.0
357.8700	22.01	-3.94	25193.040	2.5	53128.170	1.5
357.8713	28.01	-2.54	93390.060	2.5	121325.090	2.5
357.8761	24.00	-1.92	25771.400	6.0	53706.060	5.0
357.8875	22.00	-3.96	20126.055	3.0	48059.820	3.0
357.8894	27.00	-1.68	14036.280	1.5	41969.900	.5
357.8961	26.00	-2.31	32873.623	4.0	60806.720	3.0
357.8973	19.02	-1.35	214232.300	.5	242165.300	1.5
357.9005	22.00	-4.79	19937.859	1.0	47870.610	2.0
357.9023	27.00	-1.56	14036.280	1.5	41968.890	2.5
357.9098	23.00	-1.98	8476.200	1.5	36408.230	1.5
357.9120	75.00	-.24	15647.559	0.0	43587.386	0.0
357.9207	24.00	-4.07	25106.340	3.0	53037.520	2.0
357.9231	26.00	-2.76	25899.974	4.0	53830.960	3.0
357.9242	18.01	-2.53	183675.570	3.5	211606.470	3.5
357.9261	22.00	-4.81	20006.032	2.0	47936.790	3.0
357.9287	28.01	-3.51	109846.000	3.5	137776.550	3.5
357.9350	90.01	-.63	8388.382	0.0	36326.415	0.0
357.9412	24.00	-1.58	27223.050	2.0	55152.630	2.0
357.9415	10.01	-1.69	321422.850	4.5	349352.400	4.5
357.9419	10.01	-2.61	321422.880	5.5	349352.400	4.5
357.9464	10.01	-1.31	321423.230	4.5	349352.400	4.5
357.9465	10.01	-2.74	321423.240	3.5	349352.400	4.5
357.9520	25.01	-4.68	54846.000	0.0	82774.730	1.0
357.9550	64.01	-.38	10324.163	0.0	38260.635	0.0
357.9560	10.01	-2.79	276511.820	.5	304440.240	.5
357.9619	23.00	-4.99	9824.580	2.5	37752.540	2.5
357.9655	25.00	-2.04	34463.370	1.5	62391.050	.5
357.9682	28.00	-3.69	14728.847	0.0	42656.317	1.0
357.9764	25.00	-2.67	34463.370	1.5	62390.200	1.5
357.9770	44.00	-1.83	2016.438	0.0	29951.194	0.0
357.9786	26.00	-3.43	26140.164	3.0	54066.821	2.0
357.9797	27.00	-3.11	16467.900	4.5	44394.470	3.5
357.9817	26.00	-5.19	12968.552	2.0	40894.972	2.0
357.9818	26.00	-2.55	26140.164	3.0	54066.570	4.0
357.9855	27.00	-2.61	26232.050	3.5	54158.170	4.5
357.9865	22.00	-1.99	15975.590	3.0	43901.630	4.0
357.9900	72.00	-.09	14357.039	0.0	42290.780	0.0
357.9901	28.01	-4.04	70635.460	2.5	98561.220	2.5
357.9902	24.00	-2.25	20519.600	6.0	48445.350	6.0
357.9998	18.00	-2.55	93143.800	2.0	121068.804	1.0
358.0020	24.00	-4.78	25038.610	5.0	52963.440	4.0
358.0022	25.01	-3.00	43339.100	2.0	71263.920	1.0
358.0029	22.00	-2.48	13981.750	1.0	41906.510	2.0
358.0035	24.00	-2.26	25359.620	4.0	53284.340	3.0
358.0083	10.01	-3.07	321428.060	3.5	349352.400	4.5
358.0097	24.00	-2.03	27816.880	5.0	55741.110	6.0
358.0150	75.01	1.20	17099.394	0.0	45031.185	0.0
358.0250	92.00	-.81	564.603	0.0	28495.613	0.0
358.0263	25.02	-4.04	86578.240	3.5	114501.180	4.5
358.0268	25.00	-3.02	34845.260	.5	62768.160	.5
358.0270	41.00	.36	967.890	0.0	28898.744	0.0
358.0286	26.02	-1.90	202334.390	1.0	230257.150	2.0
358.0395	28.01	-3.69	109038.840	1.5	136960.750	2.5
358.0446	26.01	-3.01	70523.730	3.5	98445.240	4.5
358.0459	24.00	-3.22	20523.940	5.0	48445.350	6.0
358.0465	10.01	-.08	321431.040	5.5	349352.400	4.5
358.0473	13.01	-3.03	95546.800	3.0	123468.100	3.0
358.0490	68.00	-.60	403.288	0.0	28332.426	0.0
358.0505	7.00	-2.82	83364.590	2.5	111285.644	1.5
358.0540	42.00	.70	28068.817	0.0	55997.565	0.0
358.0560	58.01	-1.16	1855.123	0.0	29783.715	0.0
358.0614	13.01	-2.13	95547.900	2.0	123468.100	3.0
358.0620	64.01	-.14	10808.108	0.0	38736.232	0.0
358.0653	30.02	.33	234576.000	4.0	262495.900	4.0
358.0710	21.01	-.21	29823.920	2.0	57743.370	3.0
358.0732	24.00	-4.14	24093.160	2.0	52012.440	2.0
358.0742	23.01	-4.31	19132.690	2.0	47051.890	3.0
358.0789	28.01	-4.92	106620.530	3.5	134539.370	2.5
358.0913	18.01	-1.41	183675.570	3.5	211593.440	4.5
358.0917	26.00	-1.99	26339.682	2.0	54257.520	2.0
358.0924	28.00	-1.62	29668.918	3.0	57586.700	2.0
358.0927	28.01	-3.77	70358.940	4.5	98276.700	4.5
358.0936	21.01	-.13	0.000	1.0	27917.690	1.0
358.0968	25.01	-4.35	75918.730	2.0	103836.170	2.0
358.0970	75.00	.08	16212.162	0.0	44137.557	0.0
358.1029	21.01	-2.11	32349.980	3.0	60266.950	3.0
358.1123	25.00	-2.51	35165.050	1.5	63081.280	2.5
358.1190	26.00	.51	6928.266	5.0	34843.980	6.0
358.1220	22.00	-7.00	14028.470	2.0	41943.950	1.0
358.1272	29.01	-2.46	122867.530	1.0	150782.600	2.0
358.1426	26.02	-2.40	202334.390	1.0	230248.260	1.0
358.1435	22.03	-.23	230913.400	1.5	258827.200	1.5
358.1448	24.02	-4.14	131118.100	3.0	159031.800	2.0
358.1543	23.00	-3.34	9544.540	.5	37457.500	1.5
358.1567	25.00	-3.07	34938.700	4.5	62851.470	3.5
358.1608	24.00	-2.75	28679.430	1.0	56591.880	2.0
358.1609	18.01	.09	158428.030	.5	186340.480	1.5
358.1650	26.00	-.83	21715.735	5.0	49627.861	4.0
358.1678	25.00	-3.00	37737.220	3.5	65649.130	2.5
358.1758	6.01	-1.66	181711.030	1.5	209622.320	2.5
358.1806	28.00	-2.59	30619.440	2.0	58530.350	3.0
358.1806	26.00	-.95	24772.019	1.0	52682.930	2.0
358.1822	28.00	-1.70	29832.810	3.0	57743.596	3.0
358.1854	18.01	-3.65	183675.570	3.5	211586.110	2.5
358.1869	27.00	-1.55	18775.010	.5	46685.430	1.5
358.1890	42.00	.87	16696.107	0.0	44614.329	0.0
358.1896	26.02	-1.12	202282.650	2.0	230192.860	3.0
358.1910	64.01	.39	8469.040	0.0	36387.106	0.0
358.1936	24.00	-4.92	24093.160	2.0	52003.060	1.0
358.1961	24.00	-2.57	28682.180	2.0	56591.880	2.0
358.2019	23.00	-4.66	2112.320	.5	30021.570	.5
358.2070	25.00	-2.19	38934.940	2.5	66843.790	1.5
358.2146	10.01	-3.34	280268.960	2.5	308177.220	1.5
358.2149	24.00	-1.14	32097.360	6.0	60005.600	5.0
358.2186	23.00	-2.54	11100.650	4.5	39008.600	5.5
358.2196	28.01	-3.96	109846.000	3.5	137753.870	4.5
358.2196	26.00	-2.10	26105.908	6.0	54013.780	5.0
358.2212	6.00	-4.35	60352.630	1.0	88260.370	2.0
358.2304	22.00	-3.29	0.000	2.0	27907.026	2.0
358.2345	28.01	-4.16	106620.530	3.5	134527.240	3.5
358.2354	18.01	.40	158167.710	1.5	186074.350	2.5
358.2360	41.00	-.82	5887.999	0.0	33802.558	0.0
358.2428	28.00	-2.44	30619.440	2.0	58525.507	1.0
358.2439	25.00	-1.63	27201.540	2.5	55107.520	3.5
358.2559	26.00	-2.66	19788.248	4.0	47693.289	3.0
358.2618	24.00	-2.46	8307.570	4.0	36212.150	4.0
358.2634	25.02	-2.81	85173.880	1.5	113078.340	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
358.2860	25.00	-2.45	38934.940	2.5	66837.640	2.5
358.2914	27.00	-1.93	26450.020	2.5	54352.300	3.5
358.2954	25.00	-2.51	33825.490	2.5	61727.460	2.5
358.3020	75.00	-.39	11695.340	0.0	39604.757	0.0
358.3028	25.01	-4.58	54938.100	1.0	82839.490	0.0
358.3088	26.00	-3.96	25899.974	4.0	53800.900	5.0
358.3100	45.00	-.29	1451.835	0.0	29360.629	0.0
358.3107	10.01	-4.27	251522.120	1.5	279422.890	.5
358.3123	23.00	-3.86	2220.130	2.5	30120.780	2.5
358.3136	27.00	-1.95	22475.360	4.5	50375.910	5.5
358.3178	25.00	-2.14	38008.700	5.5	65908.920	4.5
358.3199	22.00	-4.04	14028.470	2.0	41928.528	2.0
358.3227	24.00	-3.78	33060.740	3.0	60960.580	4.0
358.3280	72.00	-1.32	5565.369	0.0	33472.761	0.0
358.3353	26.00	-1.88	26550.466	0.0	54449.330	1.0
358.3374	27.01	-5.23	28111.900	2.0	56010.600	2.0
358.3390	62.01	-1.23	1451.835	0.0	29358.370	0.0
358.3530	45.00	-.81	10243.505	0.0	38148.950	0.0
358.3602	28.01	-4.07	105838.060	3.5	133734.980	3.5
358.3618	29.01	-2.60	119039.680	2.0	146936.480	2.0
358.3627	24.01	-4.27	55023.300	2.5	82920.030	1.5
358.3646	18.01	-4.69	172213.800	1.5	200110.380	.5
358.3650	64.00	-.85	161.315	0.0	28065.826	0.0
358.3655	24.00	-3.96	25177.390	4.0	53073.900	3.0
358.3659	20.02	-1.13	323003.560	1.0	350900.040	2.0
358.3660	58.01	-.21	9517.587	0.0	37422.020	0.0
358.3663	25.00	-1.81	23549.200	2.5	51445.650	1.5
358.3675	26.00	-1.68	26479.366	1.0	54375.719	2.0
358.3684	7.00	-2.30	83364.590	2.5	111260.673	3.5
358.3709	23.00	-1.76	8715.720	3.5	36611.810	2.5
358.3732	28.01	-4.63	68156.570	1.5	96052.480	2.5
358.3841	23.00	-3.20	22313.990	5.5	50209.050	6.5
358.3875	24.00	-2.47	33113.270	4.0	61008.070	5.0
358.3950	24.01	-2.61	38362.560	1.5	66256.770	.5
358.4134	28.00	-.69	30979.789	4.0	58872.570	4.0
358.4180	90.00	-.93	2823.013	0.0	30723.397	0.0
358.4210	73.00	-1.04	9194.957	0.0	37095.108	0.0
358.4231	22.00	-5.00	20126.055	3.0	48018.080	4.0
358.4260	62.01	-1.58	806.575	0.0	28706.337	0.0
358.4313	25.00	-1.66	34463.370	1.5	62354.760	1.5
358.4332	24.00	-.48	25771.400	6.0	53662.640	7.0
358.4332	23.00	-1.30	15078.250	.5	42969.490	1.5
358.4340	58.01	-.69	4839.451	0.0	32738.590	0.0
358.4441	24.01	-2.59	40415.340	.5	68305.730	1.5
358.4510	73.00	-.71	12743.888	0.0	40641.704	0.0
358.4520	39.01	-.54	806.575	0.0	28704.313	0.0
358.4591	28.00	-1.12	29084.478	4.0	56973.707	5.0
358.4602	9.02	-4.90	416168.300	1.5	444057.440	1.5
358.4620	8.01	-4.24	250251.000	.5	278140.000	1.5
358.4620	8.01	-3.96	250251.000	1.5	278140.000	2.5
358.4663	26.00	-2.07	21715.735	5.0	49604.402	5.0
358.4680	28.01	-4.37	98969.440	5.5	126857.970	5.5
358.4715	16.01	-1.67	128233.070	2.5	156121.330	2.5
358.4779	26.00	-1.63	23110.925	3.0	50998.686	2.0
358.4782	22.00	-4.34	0.000	2.0	27887.740	3.0
358.4790	27.00	-2.58	1406.840	2.5	29294.520	3.5
358.4800	27.02	-4.10	77121.100	4.5	105008.700	3.5
358.4846	26.00	-2.70	26224.961	3.0	54112.203	2.0
358.4880	92.00	.32	0.000	0.0	27894.937	0.0
358.4928	26.00	-3.98	24180.848	3.0	52067.450	2.0
358.4932	24.01	-6.56	20512.620	2.5	48399.190	1.5
358.4933	10.01	-2.34	279422.890	.5	307309.460	.5
358.4953	26.00	.18	26351.049	5.0	54237.460	4.0
358.4960	64.01	.22	1129.205	0.0	29023.519	0.0
358.4970	41.00	-.72	322.630	0.0	28216.866	0.0
358.4971	6.01	-.70	181736.050	2.5	209622.320	2.5
358.4978	7.00	-2.92	83317.800	1.5	111204.016	2.5
358.4979	24.00	-1.78	24833.860	3.0	52720.070	4.0
358.4989	26.02	-4.43	158417.310	2.0	186303.440	3.0
358.5071	25.00	-2.15	33825.490	2.5	61710.980	3.5
358.5080	66.01	-.31	0.000	0.0	27893.380	0.0
358.5141	23.01	-3.47	12545.150	4.0	40430.100	4.0
358.5155	27.00	-2.03	4142.660	3.5	32027.500	3.5
358.5191	26.00	-1.88	23783.617	5.0	51668.175	4.0
358.5198	25.01	-3.90	55371.300	3.0	83255.800	2.0
358.5240	10.01	-1.25	290371.950	2.5	318256.130	2.5
358.5255	26.00	-4.83	32873.623	4.0	60757.680	4.0
358.5313	24.01	-.97	21822.860	2.5	49706.470	2.5
358.5321	26.00	-.74	7728.058	3.0	35611.608	3.0
358.5425	23.00	-3.06	8578.520	2.5	36461.260	2.5
358.5425	23.00	-5.14	8578.520	2.5	36461.260	3.5
358.5470	70.01	0.00	21293.585	0.0	49183.931	0.0
358.5565	24.01	-1.36	21824.820	1.5	49706.470	2.5
358.5624	26.01	-1.41	58666.360	3.5	86547.550	2.5
358.5634	7.00	-3.71	83284.040	.5	111165.158	1.5
358.5637	26.00	-4.30	32873.623	4.0	60754.710	4.0
358.5707	26.00	-.99	7376.762	4.0	35257.309	4.0
358.5750	28.01	-4.14	106022.790	.5	133903.000	1.5
358.5758	22.00	-2.36	14105.680	3.0	41985.830	3.0
358.5758	25.00	-1.93	37737.220	3.5	65617.370	3.5
358.5760	90.01	-.60	9517.587	0.0	37405.678	0.0
358.5794	27.00	-2.27	16778.160	2.5	44658.030	1.5
358.5798	25.02	-4.34	109780.400	2.5	137660.240	3.5
358.5803	6.01	-1.43	181696.660	.5	209576.460	1.5
358.5852	28.01	-2.78	99340.550	3.5	127219.970	3.5
358.5904	28.00	-2.35	29888.505	2.0	57767.520	1.0
358.5929	24.00	-2.97	27223.050	2.0	55101.870	3.0
358.5956	25.00	-1.45	38008.700	5.5	65887.310	5.5
358.6008	26.00	-2.73	17550.180	3.0	45428.385	4.0
358.6029	22.00	-2.26	14028.470	2.0	41906.510	2.0
358.6060	27.00	-1.52	17233.680	3.5	45111.480	4.5
358.6106	26.00	-3.14	24335.764	2.0	52213.207	3.0
358.6110	66.01	-.55	4274.849	0.0	32160.218	0.0
358.6113	26.00	.29	26105.908	6.0	53983.300	5.0
358.6154	28.01	-3.84	105838.060	3.5	133715.130	4.5
358.6249	24.00	-1.86	25038.610	5.0	52914.940	6.0
358.6290	40.00	-.43	0.000	0.0	27883.969	0.0
358.6290	73.00	-1.34	5565.369	0.0	33449.338	0.0
358.6294	26.01	-3.45	48039.230	2.5	75915.210	2.5
358.6316	23.01	-3.14	26839.820	3.0	54715.630	2.0
358.6341	24.00	-2.42	26796.280	2.0	54671.900	1.0
358.6409	26.01	-3.07	72043.210	1.5	99918.300	1.5
358.6453	29.01	-4.54	120684.550	3.0	148559.300	2.0
358.6459	24.02	-4.69	65890.900	3.0	93765.600	2.0
358.6492	26.00	-4.38	24338.766	3.0	52213.207	3.0
358.6499	23.00	-4.24	2220.130	2.5	30094.520	1.5
358.6510	76.00	-.15	18793.202	0.0	46675.461	0.0
358.6535	25.00	-.48	17282.000	3.5	45156.110	2.5
358.6540	28.01	-3.04	105861.190	2.5	133735.260	2.5
358.6549	13.01	.67	95546.800	3.0	123420.800	4.0
358.6576	28.01	-2.24	105861.190	2.5	133734.980	3.5
358.6603	26.00	-4.40	12968.552	2.0	40842.130	3.0
358.6604	27.00	-4.54	26063.110	1.5	53936.680	2.5
358.6750	58.01	-.87	4194.191	0.0	32074.584	0.0
358.6751	26.01	-2.62	72619.610	2.5	100492.040	3.5
358.6773	22.00	-2.37	13981.750	1.0	41854.010	1.0
358.6804	9.02	-4.71	416185.420	2.5	444057.440	1.5
358.6829	21.01	-.48	29742.120	1.0	57613.940	2.0
358.6829	18.01	-3.10	183797.360	2.5	211669.180	2.5
358.6860	42.00	.27	25326.461	0.0	53205.999	0.0
358.6909	13.01	-.39	95546.800	3.0	123418.000	3.0
358.6986	26.00	-.77	7985.783	2.0	35856.386	2.0
358.7006	27.00	-1.42	18389.570	1.5	46260.020	1.5
358.7050	37.00	-2.02	0.000	0.0	27878.061	0.0
358.7051	30.02	-1.39	234576.000	4.0	262446.100	3.0
358.7051	13.01	.51	95547.900	2.0	123418.000	3.0
358.7057	18.01	-3.79	163299.470	2.5	191169.520	1.5
358.7068	24.00	-1.94	26801.930	1.0	54671.900	1.0
358.7109	10.01	-2.30	290583.170	1.5	318452.820	1.5
358.7118	24.00	-4.51	27816.880	5.0	55686.460	5.0
358.7138	22.01	-1.46	4897.600	3.5	32767.020	3.5
358.7179	13.01	-1.94	95546.800	3.0	123415.900	2.0
358.7186	27.00	.10	8460.810	2.5	36329.860	2.5
358.7187	26.00	-2.39	25899.974	4.0	53769.020	4.0
358.7190	64.01	-1.41	564.603	0.0	28441.576	0.0
358.7200	44.00	.65	16131.504	0.0	44006.400	0.0
358.7209	24.00	-2.14	25359.620	4.0	53228.490	3.0
358.7220	58.01	-.97	5887.999	0.0	33764.739	0.0
358.7231	26.00	-2.51	23110.925	3.0	50979.627	4.0
358.7274	23.00	-4.15	2153.200	1.5	30021.570	.5
358.7292	22.00	-2.97	15975.590	3.0	43843.820	3.0
358.7300	2.00	-1.23	169087.000	0.0	196963.119	0.0
358.7320	76.00	-.61	12905.203	0.0	40781.166	0.0
358.7321	13.01	-.39	95547.900	2.0	123415.900	2.0
358.7330	10.01	-3.26	280268.960	2.5	308136.890	1.5
358.7382	26.00	-1.62	19552.474	1.0	47420.000	2.0
358.7420	6.00	-3.73	60393.140	2.0	88260.370	2.0
358.7437	13.01	.34	95548.800	1.0	123415.900	2.0
358.7495	26.02	-2.61	90483.590	3.0	118350.240	4.0
358.7550	22.01	-2.73	34543.360	3.5	62409.580	3.5
358.7561	24.01	-4.61	53566.220	3.5	81432.360	3.5
358.7561	18.01	-2.38	183797.360	2.5	211663.500	3.5
358.7640	58.01	-.31	5887.999	0.0	33761.476	0.0
358.7652	22.00	-1.89	16106.080	4.0	43971.513	5.0
358.7652	6.01	-.62	181711.030	1.5	209576.460	1.5
358.7683	26.00	-1.31	22996.661	4.0	50861.850	3.0
358.7756	26.00	-2.57	26406.490	1.0	54271.110	1.0
358.7772	17.01	-.56	149952.400	1.0	177816.900	2.0
358.7780	92.00	-.55	4355.506	0.0	32227.895	0.0
358.7857	26.01	-3.62	38214.500	1.5	66078.340	2.5
358.7926	28.00	-2.48	204.786	3.0	28068.091	4.0
358.7950	26.01	-6.38	16369.390	3.5	44232.510	4.5
358.7980	40.01	-.53	2500.383	0.0	30371.218	0.0
358.8024	26.02	-3.79	97041.380	3.0	124903.920	2.0
358.8090	23.01	-4.33	36425.070	4.0	64287.100	5.0
358.8095	23.00	-4.97	22121.170	4.5	49983.160	5.5
358.8118	22.00	-5.74	8436.618	0.0	36298.430	1.0
358.8120	23.00	-5.35	9636.960	1.5	37498.760	2.5
358.8129	18.00	-3.94	95399.870	1.0	123261.593	2.0
358.8130	58.01	-.53	7017.204	0.0	34886.874	0.0
358.8134	23.01	-1.48	19166.190	1.0	47027.880	0.0
358.8210	64.00	-.97	0.000	0.0	27869.049	0.0
358.8214	28.01	-2.45	73893.730	1.5	101754.800	2.5
358.8220	90.01	-1.75	1774.465	0.0	29643.436	0.0
358.8228	26.00	-6.70	12560.933	3.0	40421.890	4.0
358.8260	28.01	-4.06	109846.000	3.5	137706.710	2.5
358.8288	28.01	-3.83	109038.840	1.5	136899.330	1.5
358.8299	24.01	-2.73	38396.360	.5	66256.770	.5
358.8320	40.01	-.84	3226.301	0.0	31094.496	0.0
358.8338	24.00	-3.73	32097.360	6.0	59957.460	7.0
358.8412	7.00	-4.05	83284.040	.5	111143.567	.5
358.8430	58.01	-.35	5404.054	0.0	33271.394	0.0
358.8442	18.01	.76	157233.930	3.5	185093.230	4.5
358.8451	26.01	-3.70	71964.810	2.5	99824.040	2.5
358.8454	25.00	-2.69	37789.930	2.5	65649.130	2.5
358.8474	25.02	-3.48	89204.690	4.5	117063.740	4.5
358.8497	6.00	-3.42	60333.430	0.0	88192.300	1.0
358.8517	26.00	-.04	23711.443	4.0	51570.160	3.0
358.8602	26.00	-3.26	22845.856	5.0	50703.912	5.0
358.8609	29.01	-2.02	118163.500	2.0	146021.500	3.0
358.8699	12.02	-1.03	534776.900	2.0	562634.200	1.0
358.8706	22.00	-6.26	6842.964	5.0	34700.212	5.0
358.8725	24.00	-2.34	25106.340	3.0	52963.440	4.0
358.8822	24.00	-1.86	25771.400	6.0	53627.750	5.0
358.8837	23.01	-2.56	34228.790	3.0	62085.020	2.0
358.8906	6.01	-.73	181696.660	.5	209552.360	.5
358.8916	26.00	-2.03	23192.486	2.0	51048.100	1.0
358.8950	42.00	.17	20245.038	0.0	48108.341	0.0
358.8980	18.00	-3.57	95399.870	1.0	123254.990	1.0
358.8984	28.00	-2.99	29888.505	2.0	57743.596	3.0
358.9066	28.01	-4.49	70706.770	1.5	98561.220	2.5
358.9070	24.00	-4.00	27597.220	3.0	55451.640	3.0
358.9104	28.00	-2.57	15609.861	2.0	43464.019	1.0
358.9106	26.00	-1.75	6928.266	5.0	34782.406	5.0
358.9110	41.00	-.51	645.260	0.0	28507.321	0.0
358.9150	90.01	-1.33	6613.917	0.0	34475.667	0.0
358.9163	25.01	-3.23	53805.800	4.0	81659.500	3.0
358.9220	44.00	.25	3064.986	0.0	30926.193	0.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
358.9222	25.01	-2.14	43536.900	4.0	71390.140	3.0
358.9231	23.00	-3.86	13801.530	1.5	41654.700	2.5
358.9251	25.00	-3.84	38669.600	3.5	66522.620	4.5
358.9270	63.00	-1.22	0.000	0.0	27860.818	0.0
358.9360	41.00	-.43	2742.356	0.0	30602.476	0.0
358.9360	90.01	-1.09	6613.917	0.0	34474.037	0.0
358.9408	30.02	-1.80	234384.000	3.0	262235.800	3.0
358.9421	23.03	-2.10	226617.100	1.0	254468.800	2.0
358.9423	20.00	-2.33	20335.360	1.0	48187.045	2.0
358.9443	27.00	-2.21	25937.590	4.5	53789.120	3.5
358.9449	26.02	-4.36	158417.310	2.0	186268.790	2.0
358.9449	26.00	-.87	21999.132	4.0	49850.610	3.0
358.9481	24.00	-2.03	31009.000	3.0	58860.230	2.0
358.9486	27.00	-2.96	25937.590	4.5	53788.780	4.5
358.9492	10.01	-1.88	279218.660	2.5	307069.810	1.5
358.9498	26.01	-1.27	58631.650	4.5	86482.750	3.5
358.9598	26.00	-1.67	24118.815	4.0	51969.140	3.0
358.9639	21.01	-.56	67.680	2.0	27917.690	1.0
358.9652	6.01	-.05	181772.410	3.5	209622.320	2.5
358.9660	92.00	-.72	564.603	0.0	28422.395	0.0
358.9690	39.00	.28	15163.614	0.0	43021.173	0.0
358.9718	23.03	-1.16	256251.700	4.0	284101.100	3.0
358.9740	26.02	-3.58	93392.450	3.0	121241.670	4.0
358.9750	90.00	-.19	7420.492	0.0	35277.585	0.0
358.9752	23.01	-.33	8640.210	2.0	36489.340	1.0
358.9756	27.01	-7.49	19189.900	4.0	47039.000	3.0
358.9790	92.01	-.99	5565.369	0.0	33422.152	0.0
358.9866	22.00	-2.43	8492.421	1.0	36340.670	2.0
358.9883	25.00	-3.43	38934.940	2.5	66783.050	3.5
358.9902	27.00	-2.66	26597.640	1.5	54445.610	2.5
358.9953	26.00	-2.46	25899.974	4.0	53747.547	3.0
358.9980	7.00	-3.61	83317.800	1.5	111165.158	1.5
358.9987	24.00	-.46	33113.270	4.0	60960.580	4.0
358.9989	23.00	-3.22	14514.750	1.5	42362.040	.5
359.0012	25.02	-2.98	86654.070	4.5	114501.180	4.5
359.0055	24.00	-3.40	25038.610	5.0	52885.390	5.0
359.0074	29.01	-2.38	119039.680	2.0	146886.310	1.0
359.0076	26.00	-1.91	23783.617	5.0	51630.230	5.0
359.0185	22.01	-2.51	34748.500	4.5	62594.270	4.5
359.0208	6.00	-3.07	60352.630	1.0	88198.220	2.0
359.0277	26.00	-4.00	24335.764	2.0	52180.820	1.0
359.0302	24.00	-1.24	25548.640	5.0	53393.500	5.0
359.0320	92.01	-.96	5162.081	0.0	33014.752	0.0
359.0379	24.00	-2.29	26801.930	1.0	54646.200	0.0
359.0444	18.01	-4.19	174409.830	1.5	202253.590	1.5
359.0449	10.01	-1.04	252953.540	1.5	280797.260	2.5
359.0461	9.02	-4.81	441276.720	2.5	469120.350	1.5
359.0465	14.02	.57	176487.190	1.0	204330.790	2.0
359.0467	21.01	-.53	177.630	3.0	28021.210	2.0
359.0470	64.01	-.33	4758.794	0.0	32610.301	0.0
359.0500	92.01	-1.46	887.233	0.0	28738.507	0.0
359.0550	28.01	-4.43	106007.890	2.5	133850.830	3.5
359.0600	58.01	-.09	5887.999	0.0	33738.498	0.0
359.0650	16.01	-2.73	127976.210	1.5	155818.370	2.5
359.0658	26.00	-3.71	29798.960	4.0	57641.060	3.0
359.0666	25.00	-1.54	37420.240	5.5	65262.280	4.5
359.0682	24.00	-1.96	21810.840	1.0	49652.760	2.0
359.0727	29.01	-4.53	120789.630	4.0	148631.200	3.0
359.0732	28.00	-3.00	31031.042	3.0	58872.570	4.0
359.0740	42.00	.45	20245.038	0.0	48094.451	0.0
359.0747	26.01	-3.50	72650.630	4.5	100492.040	3.5
359.0757	6.01	-.73	181711.030	1.5	209552.360	.5
359.0769	22.00	-2.72	13981.750	1.0	41822.990	0.0
359.0830	74.00	-.64	15002.299	0.0	42851.014	0.0
359.0876	6.01	-.33	181736.050	2.5	209576.460	1.5
359.0880	75.00	-.24	22261.476	0.0	50109.803	0.0
359.0905	28.01	-1.83	106133.140	1.5	133973.330	2.5
359.0912	26.01	-1.93	72651.910	3.5	100492.040	3.5
359.0972	6.00	-3.73	60352.630	1.0	88192.300	1.0
359.0992	26.00	-2.17	25899.974	4.0	53739.488	5.0
359.0994	26.02	-3.70	123697.180	2.0	151536.680	1.0
359.1000	15.01	-2.86	77711.000	2.0	105550.450	2.0
359.1003	7.00	-3.33	83364.590	2.5	111204.016	2.5
359.1004	28.01	-3.97	106022.790	.5	133862.210	1.5
359.1060	90.01	-1.10	8549.697	0.0	36396.628	0.0
359.1102	25.00	-4.26	25285.430	4.5	53124.090	3.5
359.1145	24.01	-4.38	55081.700	1.5	82920.030	1.5
359.1191	23.00	-3.20	8578.520	2.5	36416.490	1.5
359.1211	20.00	-2.16	20349.260	2.0	48187.075	3.0
359.1215	20.00	-3.06	20349.260	2.0	48187.045	2.0
359.1223	26.02	-3.05	123697.180	2.0	151534.900	2.0
359.1290	9.03	-3.93	469644.200	2.0	497481.400	1.0
359.1290	9.02	-4.52	441406.460	3.5	469243.660	4.5
359.1303	27.02	-4.87	78927.800	3.5	106764.900	4.5
359.1323	26.02	-2.76	123697.180	2.0	151534.130	3.0
359.1339	26.00	-.44	22996.661	4.0	50833.485	5.0
359.1400	25.00	-4.58	25287.740	3.5	53124.090	3.5
359.1412	28.01	-3.44	107142.210	1.5	134978.470	2.5
359.1440	64.01	-1.19	4194.191	0.0	32038.176	0.0
359.1449	26.00	-3.81	17726.985	2.0	45562.959	3.0
359.1457	27.00	-3.77	24326.110	3.5	52162.020	3.5
359.1460	90.00	-.74	3629.588	0.0	31473.418	0.0
359.1485	26.00	-2.97	26550.466	0.0	54386.160	1.0
359.1534	21.00	-4.40	11557.640	2.5	39392.950	3.5
359.1546	22.00	-3.35	18695.230	4.0	46530.450	4.0
359.1572	37.00	-2.55	0.000	0.0	27842.961	0.0
359.1582	28.01	-2.86	106022.790	.5	133857.730	.5
359.1634	26.01	-3.62	36252.960	2.5	64087.500	2.5
359.1720	40.00	-1.47	564.603	0.0	28406.417	0.0
359.1740	62.01	-1.88	806.575	0.0	28648.234	0.0
359.1740	92.00	-.52	564.603	0.0	28406.262	0.0
359.1747	27.00	-1.37	20500.710	1.5	48334.370	1.5
359.1798	10.01	-3.66	254165.010	1.5	281998.280	2.5
359.1799	25.00	-2.18	23719.520	1.5	51552.780	.5
359.1845	25.01	-3.22	55696.500	4.0	83529.400	4.0
359.1870	27.00	-4.01	26450.020	2.5	54282.730	2.5
359.1910	64.01	-.95	4758.794	0.0	32599.135	0.0
359.1974	24.00	-1.23	31028.330	2.0	58860.230	2.0
359.1989	28.01	-2.98	70635.460	2.5	98467.250	3.5
359.2000	26.00	-3.61	19621.004	5.0	47452.702	4.0
359.2013	8.01	-4.48	233430.100	.5	261261.700	1.5
359.2020	42.00	-.47	16615.449	0.0	44454.938	0.0
359.2021	23.01	-.27	8841.970	3.0	36673.510	2.0
359.2084	29.01	-3.82	120684.550	3.0	148515.600	4.0
359.2174	27.00	-3.54	24326.110	3.5	52156.460	4.5
359.2257	23.00	-2.11	8578.520	2.5	36408.230	1.5
359.2283	29.01	-1.98	110084.290	1.0	137913.800	1.0
359.2320	76.00	.24	23148.708	0.0	50985.872	0.0
359.2349	27.00	-4.47	26597.640	1.5	54426.640	1.5
359.2420	74.01	-.10	11211.395	0.0	39047.784	0.0
359.2456	25.00	-4.81	25281.040	2.5	53109.210	2.5
359.2473	26.00	-3.53	20874.482	3.0	48702.518	4.0
359.2550	25.00	-1.41	37789.930	2.5	65617.370	3.5
359.2600	62.01	.09	2984.328	0.0	30819.422	0.0
359.2630	24.00	-2.04	25548.640	5.0	53375.460	4.0
359.2664	26.00	-1.72	26140.164	3.0	53966.720	2.0
359.2710	64.01	.47	8791.670	0.0	36625.812	0.0
359.2766	7.00	-4.75	83317.800	1.5	111143.567	.5
359.2795	22.00	-2.85	14028.470	2.0	41854.010	1.0
359.2855	9.00	-2.00	119081.820	.5	146906.900	1.5
359.2896	26.00	-2.64	17726.985	2.0	45551.748	1.0
359.2920	39.00	-.15	0.000	0.0	27832.515	0.0
359.2970	92.00	-1.02	564.603	0.0	28396.731	0.0
359.3020	44.00	.24	2661.698	0.0	30493.438	0.0
359.3039	22.01	-1.65	12758.150	2.5	40581.800	2.5
359.3073	24.01	-4.21	21822.860	2.5	49646.250	3.5
359.3130	40.00	.35	16938.079	0.0	44768.967	0.0
359.3131	55.00	-6.88	0.000	0.0	27830.881	0.0
359.3141	23.00	-4.86	8715.720	3.5	36538.580	4.5
359.3143	22.00	-4.31	14105.680	3.0	41928.528	2.0
359.3144	26.02	-2.56	90423.680	2.0	118246.520	3.0
359.3174	24.00	-4.95	27382.180	2.0	55204.790	3.0
359.3185	24.00	-3.29	24897.550	4.0	52720.070	4.0
359.3200	92.00	-.27	4194.191	0.0	32024.537	0.0
359.3265	29.01	-2.56	118163.500	2.0	145985.400	2.0
359.3317	26.00	-1.65	26339.682	2.0	54161.182	3.0
359.3321	25.00	-4.98	25287.740	3.5	53109.210	2.5
359.3327	23.01	-.45	9097.810	4.0	36919.230	3.0
359.3400	18.00	-3.37	95399.870	1.0	123220.730	2.0
359.3440	64.01	-.81	4436.164	0.0	32264.651	0.0
359.3441	23.00	-3.53	9636.960	1.5	37457.500	1.5
359.3480	29.01	-3.56	108014.660	3.0	135834.900	4.0
359.3481	24.00	-1.49	0.000	3.0	27820.230	3.0
359.3527	10.00	-1.89	135888.717	1.0	163708.599	2.0
359.3560	28.01	-4.41	95017.710	4.5	122837.330	4.5
359.3598	7.01	-.75	168892.210	1.0	196711.540	2.0
359.3605	26.00	-4.11	27559.568	2.0	55378.842	2.0
359.3613	24.00	-1.29	31987.060	4.0	59806.270	5.0
359.3640	10.00	-2.26	135888.717	1.0	163707.721	1.0
359.3714	18.01	-2.35	172213.800	1.5	200032.230	1.5
359.3730	62.01	-1.45	4355.506	0.0	32181.748	0.0
359.3745	26.00	-4.74	26406.490	1.0	54224.680	1.0
359.3789	26.00	-2.33	19788.248	4.0	47606.092	5.0
359.3880	90.01	-.76	10485.478	0.0	38310.558	0.0
359.3936	24.00	-2.52	27176.220	1.0	54992.930	2.0
359.3957	26.00	-4.59	27559.568	2.0	55376.117	1.0
359.3970	41.00	-.73	322.630	0.0	28147.014	0.0
359.3977	26.01	-3.14	58666.360	3.5	86482.750	3.5
359.3997	26.02	-5.00	158562.700	4.0	186378.940	4.0
359.4012	20.00	-2.00	20371.000	3.0	48187.118	4.0
359.4018	20.00	-3.06	20371.000	3.0	48187.075	3.0
359.4021	20.00	-4.61	20371.000	3.0	48187.045	2.0
359.4023	29.00	-4.26	11211.395	0.0	39035.368	0.0
359.4103	9.00	-2.00	102405.710	2.5	130221.120	1.5
359.4125	21.01	-.82	29736.220	0.0	57551.460	1.0
359.4159	10.01	-.24	252953.540	1.5	280768.520	.5
359.4170	29.01	-2.21	118163.500	2.0	145978.400	3.0
359.4299	24.00	-3.21	20517.400	2.0	48331.300	1.0
359.4352	21.00	-4.20	11610.240	3.5	39423.730	4.5
359.4377	18.01	-3.62	142717.020	3.5	170530.310	3.5
359.4390	77.00	-.91	7017.204	0.0	34838.336	0.0
359.4459	26.02	-4.50	97041.380	3.0	124854.040	3.0
359.4528	22.00	-2.04	8602.340	2.0	36414.470	3.0
359.4537	25.02	-3.13	88880.080	2.5	116692.140	2.5
359.4610	58.01	-1.52	0.000	0.0	27819.430	0.0
359.4623	26.00	-1.07	22996.661	4.0	50808.053	4.0
359.4625	24.00	-1.91	31048.850	1.0	58860.230	2.0
359.4641	55.00	-7.03	0.000	0.0	27819.190	0.0
359.4648	23.00	-4.64	22121.170	4.5	49932.370	4.5
359.4790	25.00	-2.92	35041.370	3.5	62851.470	3.5
359.4817	24.00	-3.75	33060.740	3.0	60870.630	4.0
359.4864	27.00	-1.01	1406.840	2.5	29216.370	2.5
359.4865	27.00	-3.41	21215.900	.5	49025.420	1.5
359.4868	9.00	-3.67	102680.435	1.5	130489.930	.5
359.4879	23.00	-5.99	2311.370	3.5	30120.780	2.5
359.4888	21.01	-.90	29742.120	1.0	57551.460	1.0
359.4918	18.01	-1.97	183797.360	2.5	211606.470	3.5
359.4953	25.01	-3.06	43131.400	2.0	70940.240	2.0
359.4993	23.01	-5.71	12621.570	5.0	40430.100	4.0
359.5107	25.00	-.90	17451.520	2.5	45259.170	1.5
359.5127	18.01	-2.70	172816.210	.5	200623.700	.5
359.5160	6.00	-3.53	60352.630	1.0	88159.870	0.0
359.5160	75.00	-.23	21616.215	0.0	49431.389	0.0
359.5230	17.01	-3.85	119799.000	2.0	147605.700	3.0
359.5243	30.02	-3.70	237506.800	1.0	265313.400	2.0
359.5294	26.00	-1.34	23192.486	2.0	50998.686	2.0
359.5294	25.01	-3.62	73683.110	4.0	101489.310	5.0
359.5316	16.01	-2.57	115817.000	2.5	143623.030	1.5
359.5319	22.00	-2.96	8492.421	1.0	36298.430	1.0
359.5330	90.01	-.83	12340.601	0.0	40154.460	0.0
359.5382	25.00	-3.96	30354.210	3.5	58159.730	2.5
359.5439	6.00	-2.61	60393.140	2.0	88198.220	2.0
359.5457	28.00	-1.18	30163.140	2.0	57968.080	3.0
359.5465	24.00	-2.55	21847.880	2.0	49652.760	2.0
359.5550	42.00	.16	20164.380	0.0	47976.537	0.0
359.5568	27.00	-3.84	15184.040	2.5	42988.120	3.5
359.5589	28.01	-4.28	95017.710	4.5	122821.630	5.5
359.5602	25.00	-4.43	23296.670	3.5	51100.490	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
359.5622	23.00	-3.16	14514.750	1.5	42318.420	1.5
359.5630	26.00	-1.38	32873.623	4.0	60677.230	5.0
359.5638	26.02	-4.88	88663.870	4.0	116467.410	4.0
359.5640	73.00	-.69	10888.765	0.0	38700.226	0.0
359.5673	26.00	-1.61	23944.826	1.0	51048.100	1.0
359.5710	42.00	-.02	20487.010	0.0	48297.929	0.0
359.5724	25.00	-1.91	38934.940	2.5	66737.820	3.5
359.5738	10.01	-3.42	251522.120	1.5	279324.890	1.5
359.5752	24.00	-4.05	8095.210	3.0	35897.870	2.0
359.5794	24.00	-1.35	21847.880	2.0	49650.220	3.0
359.5795	25.01	-1.82	85895.270	2.0	113697.600	3.0
359.5861	26.00	-2.31	19788.248	4.0	47590.070	4.0
359.5863	17.01	-.89	149952.400	1.0	177754.200	1.0
359.5989	22.00	-3.21	14105.680	3.0	41906.510	2.0
359.6019	23.00	-4.44	22313.990	5.5	50114.590	5.5
359.6023	7.00	-4.71	83364.590	2.5	111165.158	1.5
359.6052	22.01	-.93	4897.600	3.5	32697.940	2.5
359.6110	83.00	.23	21535.558	0.0	49343.384	0.0
359.6120	58.01	-.27	8307.725	0.0	36115.473	0.0
359.6180	44.00	.13	2016.438	0.0	29823.722	0.0
359.6190	45.00	-.16	2581.041	0.0	30388.248	0.0
359.6193	25.02	-3.15	89052.440	3.5	116851.690	3.5
359.6198	26.00	-1.73	19621.004	5.0	47420.215	5.0
359.6205	6.00	-2.97	60393.140	2.0	88192.300	1.0
359.6239	17.01	-1.93	147053.700	2.0	174852.600	3.0
359.6340	71.00	-1.16	7420.492	0.0	35226.539	0.0
359.6341	16.01	-2.28	131028.760	1.5	158826.870	2.5
359.6355	27.01	-5.37	24886.500	2.0	52684.500	1.0
359.6390	75.00	-1.09	11695.340	0.0	39501.001	0.0
359.6426	29.01	-3.73	120684.550	3.0	148482.000	3.0
359.6460	25.01	-4.59	54938.100	1.0	82735.290	2.0
359.6480	22.01	-2.07	12628.770	1.5	40425.800	1.5
359.6505	27.00	-.78	18389.570	1.5	46186.410	1.5
359.6530	28.01	-2.06	93528.440	3.5	121325.090	2.5
359.6587	16.01	-1.24	128233.070	2.5	156029.280	1.5
359.6599	25.00	-4.12	23719.520	1.5	51515.630	2.5
359.6637	24.00	-3.60	21856.940	3.0	49652.760	2.0
359.6640	17.01	-3.18	119809.900	3.0	147605.700	3.0
359.6672	22.00	-2.81	16106.080	4.0	43901.630	4.0
359.6730	27.00	-4.34	24326.110	3.5	52121.210	4.5
359.6730	58.01	-1.15	4436.164	0.0	32239.196	0.0
359.6840	64.00	-.72	967.890	0.0	28770.672	0.0
359.6951	24.00	-1.39	27163.200	0.0	54956.590	1.0
359.6966	24.00	-1.63	21856.940	3.0	49650.220	3.0
359.7028	26.00	-2.03	26339.682	2.0	54132.480	1.0
359.7105	29.01	-3.46	118163.500	2.0	145955.700	1.0
359.7150	45.00	.02	3226.301	0.0	31026.087	0.0
359.7235	26.00	-3.37	29313.008	6.0	57104.207	5.0
359.7260	41.00	-.27	12179.286	0.0	39978.222	0.0
359.7270	10.01	-4.55	280947.100	1.5	308738.030	1.5
359.7288	24.00	-1.26	20519.600	6.0	48310.390	5.0
359.7350	27.00	-2.21	16778.160	2.5	44568.470	2.5
359.7388	21.01	-.91	29823.920	2.0	57613.940	2.0
359.7420	72.01	-.03	15163.614	0.0	42961.313	0.0
359.7455	27.02	-3.41	143677.100	3.5	171466.600	2.5
359.7455	27.02	-3.41	143677.100	3.5	171466.600	2.5
359.7494	13.01	-2.89	121480.300	3.0	149269.500	2.0
359.7494	13.01	-1.72	121480.300	3.0	149269.500	3.0
359.7494	13.01	-.29	121480.300	3.0	149269.500	4.0
359.7553	25.00	-2.00	38120.180	4.5	65908.920	4.5
359.7553	18.01	-3.52	183797.360	2.5	211586.110	2.5
359.7572	13.01	-1.35	121480.900	2.0	149269.500	2.0
359.7572	13.01	-.81	121480.900	2.0	149269.500	3.0
359.7584	28.01	-3.17	71770.830	2.5	99559.330	2.5
359.7611	13.01	-.62	121481.200	1.0	149269.500	2.0
359.7649	26.01	-2.54	36252.960	2.5	64040.960	3.5
359.7667	27.00	-.83	18775.010	.5	46562.870	1.5
359.7700	28.00	-1.23	1713.080	1.0	29500.690	1.0
359.7700	27.00	-1.65	25937.590	4.5	53725.200	4.5
359.7726	26.02	-2.83	123750.390	3.0	151537.800	4.0
359.7748	24.00	-.05	21810.840	1.0	49598.080	2.0
359.7790	24.00	-3.98	32097.360	6.0	59884.270	6.0
359.7818	24.00	-4.92	20523.690	4.0	48310.390	5.0
359.7850	24.00	-3.12	20523.940	5.0	48310.390	5.0
359.7902	24.00	-3.70	25177.390	4.0	52963.440	4.0
359.8080	25.00	-2.71	38669.600	3.5	66454.270	3.5
359.8089	28.01	-4.55	106283.160	2.5	134067.760	1.5
359.8101	26.02	-4.63	123750.390	3.0	151534.900	2.0
359.8110	76.00	-1.18	2661.698	0.0	30454.067	0.0
359.8120	28.00	-2.96	31441.665	2.0	59226.030	1.0
359.8120	90.00	-.92	0.000	0.0	27792.292	0.0
359.8190	22.00	-1.80	16267.510	5.0	44051.333	6.0
359.8200	58.01	-.87	2339.068	0.0	30130.742	0.0
359.8201	26.02	-3.57	123750.390	3.0	151534.130	3.0
359.8275	28.00	-2.97	29320.782	3.0	57103.946	3.0
359.8284	28.01	-1.55	70778.120	3.5	98561.220	2.5
359.8334	21.00	-5.13	11610.240	3.5	39392.950	3.5
359.8350	41.00	-1.78	0.000	0.0	27790.515	0.0
359.8364	25.00	-3.63	30354.210	3.5	58136.690	3.5
359.8435	24.00	-2.54	24282.340	4.0	52064.270	4.0
359.8578	26.01	-2.56	72043.210	1.5	99824.040	2.5
359.8637	24.00	-1.58	27176.220	1.0	54956.590	1.0
359.8704	26.00	-2.10	26224.961	3.0	54004.820	3.0
359.8714	22.00	-.70	7255.369	2.0	35035.147	2.0
359.8763	24.00	-2.33	33040.100	2.0	60819.500	3.0
359.8770	75.00	-.13	22987.393	0.0	50774.665	0.0
359.8880	30.02	-1.00	237047.800	2.0	264826.300	1.0
359.8880	42.00	.85	25407.119	0.0	53193.541	0.0
359.8924	26.00	-3.21	26479.366	1.0	54257.520	2.0
359.8928	24.00	-.59	21810.840	1.0	49588.970	1.0
359.8980	26.00	-1.83	23270.374	0.0	51048.100	1.0
359.9003	27.00	-4.54	16778.160	2.5	44555.710	1.5
359.9060	28.01	-3.38	99442.860	4.5	127219.970	3.5
359.9132	29.00	.40	43474.403	0.0	71258.880	0.0
359.9200	9.01	-2.30	258930.110	2.0	286706.140	1.0
359.9263	26.02	-2.23	198606.370	2.0	226381.910	3.0
359.9280	41.00	.31	13066.518	0.0	40849.852	0.0
359.9319	28.01	-4.06	105668.780	2.5	133443.890	2.5
359.9345	18.01	-4.58	183797.360	2.5	211572.270	1.5
359.9395	24.00	-.59	23512.000	1.0	51286.520	2.0
359.9533	28.00	-.67	29084.478	4.0	56857.933	4.0
359.9579	22.00	-1.35	19421.576	3.0	47194.680	4.0
359.9619	26.00	-2.50	28819.966	5.0	56592.760	4.0
359.9626	26.02	-3.68	88694.670	5.0	116467.410	4.0
359.9630	41.00	-1.11	1532.493	0.0	29313.126	0.0
359.9683	24.01	-4.50	55081.700	1.5	82854.000	.5
359.9687	28.01	-3.70	99559.330	2.5	127331.600	2.5
359.9693	18.00	-4.48	95399.870	1.0	123172.090	1.0
359.9760	44.00	.24	8711.012	0.0	36490.642	0.0
359.9811	10.02	-3.82	412293.590	0.0	440064.900	1.0
359.9870	72.00	.73	16696.107	0.0	44474.888	0.0
359.9900	40.01	.25	14599.011	0.0	42377.560	0.0
359.9970	58.01	-.82	4678.136	0.0	32456.145	0.0
359.9995	28.01	-4.80	106283.160	2.5	134053.050	2.5
359.9997	24.00	-2.76	27223.050	2.0	54992.930	2.0
360.0034	23.00	-.77	14548.830	2.5	42318.420	1.5
360.0102	24.00	-2.85	33906.650	1.0	61675.720	2.0
360.0125	27.00	-4.01	24326.110	3.5	52095.000	3.5
360.0169	29.01	-4.73	109275.900	3.0	137044.450	4.0
360.0169	10.00	-2.45	135888.717	1.0	163657.268	1.0
360.0209	27.00	-2.03	28777.270	3.5	56545.510	4.5
360.0222	18.01	-1.45	172213.800	1.5	199981.940	1.5
360.0280	42.00	-.30	16615.449	0.0	44391.066	0.0
360.0342	26.01	-4.72	38164.240	2.5	65931.460	3.5
360.0347	25.01	-2.71	43311.000	1.0	71078.180	1.0
360.0353	25.00	-2.48	38120.180	4.5	65887.310	5.5
360.0374	25.02	-4.29	86520.940	2.5	114287.910	2.5
360.0378	24.00	-4.09	31355.210	2.0	59122.150	3.0
360.0383	17.01	-.98	147053.700	2.0	174820.600	2.0
360.0403	29.01	-2.26	120875.850	2.0	148642.600	2.0
360.0471	26.00	-2.48	25091.620	0.0	52857.840	1.0
360.0504	29.01	-3.59	123016.630	3.0	150782.600	2.0
360.0539	8.01	-4.68	248185.300	2.5	275951.000	1.5
360.0539	8.01	-3.59	248185.300	2.5	275951.000	2.5
360.0540	58.01	-.35	6291.287	0.0	34064.899	0.0
360.0653	24.01	-2.76	39684.000	3.5	67448.820	4.5
360.0671	24.00	-3.81	20523.690	4.0	48288.370	4.0
360.0689	27.00	-3.79	25937.590	4.5	53702.130	3.5
360.0703	24.00	-2.06	20523.940	5.0	48288.370	4.0
360.0730	39.01	.02	1371.178	0.0	29143.324	0.0
360.0759	29.01	-2.37	118163.500	2.0	145927.500	2.0
360.0792	24.00	-2.57	21856.940	3.0	49620.690	4.0
360.0802	27.00	-4.16	15774.040	1.5	43537.710	1.5
360.0898	26.02	-1.56	90483.590	3.0	118246.520	3.0
360.0960	64.01	.16	8791.670	0.0	36562.042	0.0
360.0985	28.01	-2.58	77736.790	4.5	105499.050	3.5
360.1057	10.01	-1.45	279137.620	3.5	306899.330	2.5
360.1060	57.01	-1.85	2581.041	0.0	30350.642	0.0
360.1190	40.00	.31	1209.863	0.0	28978.462	0.0
360.1203	28.01	-4.36	110021.920	4.5	137782.500	4.5
360.1235	24.00	-2.82	24303.940	3.0	52064.270	4.0
360.1264	25.00	-.36	38008.700	5.5	65768.810	4.5
360.1291	12.02	-.86	535179.600	2.0	562939.500	2.0
360.1414	26.00	-2.22	18378.187	2.0	46137.140	3.0
360.1439	24.00	-.52	33060.740	3.0	60819.500	3.0
360.1463	6.00	-4.11	60333.430	0.0	88092.010	1.0
360.1510	18.01	-3.35	132481.140	2.5	160239.350	1.5
360.1527	25.02	-2.97	109841.120	3.5	137599.200	3.5
360.1561	24.00	-2.33	31364.330	3.0	59122.150	3.0
360.1621	24.00	-3.14	33113.270	4.0	60870.630	4.0
360.1629	13.02	0.00	115956.210	2.5	143713.500	1.5
360.1646	26.00	-3.58	29313.008	6.0	57070.171	6.0
360.1670	27.00	-3.02	25937.590	4.5	53694.570	3.5
360.1690	62.01	-1.21	1451.835	0.0	29216.579	0.0
360.1730	25.02	-1.71	89307.220	5.5	117063.740	4.5
360.1770	25.00	-1.99	23549.200	2.5	51305.410	2.5
360.1776	25.00	-1.09	38120.180	4.5	65876.340	3.5
360.1793	25.00	-3.32	30354.210	3.5	58110.240	4.5
360.1830	76.00	-.78	10082.190	0.0	37845.855	0.0
360.1881	29.01	-1.63	120875.850	2.0	148631.200	3.0
360.1920	39.01	-.27	806.575	0.0	28569.546	0.0
360.1926	13.02	-.95	115958.500	1.5	143713.500	1.5
360.1945	24.01	-3.20	45730.740	2.5	73485.600	3.5
360.2000	64.01	-.43	10001.532	0.0	37763.886	0.0
360.2032	29.00	.40	43474.403	0.0	71236.511	0.0
360.2071	28.00	-.76	29832.810	3.0	57586.700	2.0
360.2075	26.00	-1.70	23244.826	1.0	50998.686	2.0
360.2077	27.00	-1.14	1809.330	1.5	29563.170	1.5
360.2095	17.02	.47	174613.900	2.5	202367.600	3.5
360.2212	28.01	-3.98	105861.190	2.5	133613.990	1.5
360.2221	29.01	-2.12	117130.360	2.0	144883.090	2.0
360.2234	16.01	-2.50	115870.400	1.5	143623.030	1.5
360.2274	28.00	-2.64	1332.153	3.0	29084.478	4.0
360.2343	10.02	-3.69	412313.110	1.0	440064.900	1.0
360.2456	26.00	-1.16	23110.925	3.0	50861.850	3.0
360.2480	92.00	-.56	3710.246	0.0	31468.901	0.0
360.2480	73.00	-1.11	11130.738	0.0	38889.393	0.0
360.2525	26.00	-2.97	23110.925	3.0	50861.320	2.0
360.2542	24.00	-2.32	25548.640	5.0	53298.900	4.0
360.2542	26.00	-4.06	23711.443	4.0	51461.707	4.0
360.2550	24.00	-.52	21847.880	2.0	49598.080	2.0
360.2560	41.00	-.70	645.260	0.0	28403.299	0.0
360.2571	27.00	-1.04	23152.570	3.5	50902.610	4.5
360.2597	26.01	-3.62	32875.630	6.5	60625.470	5.5
360.2656	24.00	-4.76	24282.340	4.0	52031.720	3.0
360.2686	26.01	-1.95	72169.150	1.5	99918.300	1.5
360.2694	26.00	-4.62	23711.443	4.0	51460.530	3.0
360.2766	26.00	-2.44	22838.320	2.0	50586.857	3.0
360.2770	10.01	-2.10	280989.530	1.5	308738.030	1.5
360.2861	24.00	-2.68	27703.840	4.0	55451.640	3.0
360.2933	23.01	-1.27	19132.690	2.0	46879.940	2.0
360.2940	42.00	.58	20164.380	0.0	47919.491	0.0
360.2950	28.00	-1.96	31441.665	2.0	59188.780	3.0
360.3037	24.00	-1.44	25771.400	6.0	53517.850	6.0
360.3041	21.00	-5.03	11677.310	4.5	39423.730	4.5
360.3074	22.01	-1.60	40074.710	3.5	67820.870	4.5
360.3118	18.01	-4.63	172213.800	1.5	199959.620	2.5
360.3155	23.00	-3.42	8715.720	3.5	36461.260	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
360.3155	23.00	-3.45	8715.720	3.5	36461.260	3.5
360.3200	63.01	-.93	10243.505	0.0	37996.613	0.0
360.3207	26.00	.15	21715.735	5.0	49460.876	5.0
360.3210	90.01	-.49	9678.902	0.0	37431.933	0.0
360.3235	10.01	-1.95	279324.890	1.5	307069.810	1.5
360.3265	10.02	-4.26	412320.210	2.0	440064.900	1.0
360.3360	58.01	-.90	5081.424	0.0	32833.300	0.0
360.3360	92.00	-1.03	0.000	0.0	27751.876	0.0
360.3369	27.00	-4.62	24326.110	3.5	52070.000	2.5
360.3433	6.00	-4.48	60352.630	1.0	88096.030	2.0
360.3455	18.01	-1.67	158428.030	.5	186171.260	.5
360.3528	6.00	-3.11	60393.140	2.0	88135.810	3.0
360.3565	26.00	-2.18	19621.004	5.0	47363.390	6.0
360.3623	24.01	-1.70	21822.860	2.5	49564.800	1.5
360.3651	28.01	-4.93	88128.560	2.5	115870.280	2.5
360.3683	26.00	-2.30	20641.110	4.0	48382.585	5.0
360.3717	25.01	-4.99	38901.800	4.0	66643.010	4.0
360.3719	17.01	-.77	149952.400	1.0	177693.600	0.0
360.3726	24.00	-3.89	21856.940	3.0	49598.080	2.0
360.3733	24.00	-.30	21847.880	2.0	49588.970	1.0
360.3740	92.00	-.58	4194.191	0.0	31943.141	0.0
360.3760	27.00	-2.27	23184.230	2.5	50925.110	1.5
360.3765	24.00	-1.00	33934.880	3.0	61675.720	2.0
360.3780	9.01	.07	229550.110	2.0	257290.840	2.0
360.3803	24.01	-1.63	21824.250	.5	49564.800	1.5
360.3817	26.00	-.83	24772.019	1.0	52512.460	1.0
360.3850	22.00	-4.25	0.000	2.0	27740.190	2.0
360.3859	25.00	-3.58	30419.610	2.5	58159.730	2.5
360.3865	24.00	-2.25	33935.650	2.0	61675.720	2.0
360.3866	18.01	-4.33	158730.210	2.5	186470.280	1.5
360.3877	24.01	-2.04	21824.820	1.5	49564.800	1.5
360.3890	26.02	-1.54	90423.680	2.0	118163.560	2.0
360.3903	18.01	-1.80	155351.030	1.5	183090.810	1.5
360.3955	6.00	-3.93	60352.630	1.0	88092.010	1.0
360.3960	25.00	-2.73	37148.660	5.5	64888.000	4.5
360.3994	25.01	-3.39	43339.100	2.0	71078.180	1.0
360.3998	9.01	-.40	229551.790	1.0	257290.840	2.0
360.4070	42.00	.36	25810.406	0.0	53556.815	0.0
360.4080	41.00	-1.70	645.260	0.0	28391.592	0.0
360.4092	22.00	-3.06	8602.340	2.0	36340.670	2.0
360.4168	22.00	-4.41	16106.080	4.0	43843.820	3.0
360.4172	27.00	-2.32	23207.760	1.5	50945.470	.5
360.4186	29.01	-3.32	118163.500	2.0	145901.100	1.0
360.4200	58.01	-1.04	967.890	0.0	28713.298	0.0
360.4240	28.01	-4.67	68156.570	1.5	95893.760	1.5
360.4240	25.01	-1.67	85960.410	3.0	113697.600	3.0
360.4255	28.00	-1.07	29084.478	4.0	56821.553	3.0
360.4278	22.00	-2.63	170.132	3.0	27907.026	2.0
360.4280	62.01	-.21	3871.561	0.0	31616.353	0.0
360.4285	26.01	-3.38	44915.070	3.5	72651.910	3.5
360.4331	25.00	-2.80	35114.980	2.5	62851.470	3.5
360.4369	26.00	-4.65	23244.826	1.0	50981.020	0.0
360.4376	23.01	-2.00	20522.140	1.0	48258.280	0.0
360.4390	75.00	-.18	22261.476	0.0	50005.422	0.0
360.4402	9.00	-2.33	102405.710	2.5	130141.650	1.5
360.4451	26.01	-4.68	44915.070	3.5	72650.630	4.5
360.4467	27.00	-.95	22475.360	4.5	50210.800	4.5
360.4480	76.01	.62	11534.025	0.0	39277.278	0.0
360.4499	17.01	-.72	150019.000	0.0	177754.200	1.0
360.4541	24.00	-1.45	23512.000	1.0	51246.870	1.0
360.4588	24.00	-1.92	20517.400	2.0	48251.910	3.0
360.4649	22.00	-3.21	11531.760	2.0	39265.800	2.0
360.4652	25.00	-4.13	30425.710	1.5	58159.730	2.5
360.4666	25.00	-2.14	23818.870	.5	51552.780	.5
360.4680	90.00	-.61	5484.711	0.0	33226.425	0.0
360.4701	9.02	-4.28	441385.880	1.5	469119.520	2.5
360.4702	28.01	-4.64	105981.500	4.5	133715.130	4.5
360.4714	24.00	-2.86	27223.050	2.0	54956.590	1.0
360.4730	26.01	-2.91	73016.330	3.5	100749.750	2.5
360.4758	28.01	-3.28	94067.140	1.5	121800.340	1.5
360.4785	23.03	-1.92	227712.500	4.0	255445.500	3.0
360.4802	28.01	-4.11	110021.920	4.5	137754.780	5.5
360.4870	64.00	.37	1693.808	0.0	29434.059	0.0
360.4900	25.00	-4.51	34938.700	4.5	62670.810	4.5
360.4915	17.01	-1.28	147053.700	2.0	174785.700	1.0
360.4921	28.01	-3.62	110021.920	4.5	137753.870	4.5
360.4936	24.00	-2.34	24299.890	2.0	52031.720	3.0
360.4962	26.00	-2.14	17550.180	3.0	45281.816	2.0
360.4990	23.00	-3.24	9824.580	2.5	37556.000	3.5
360.5003	27.00	-1.38	16470.600	1.5	44201.920	2.5
360.5026	27.00	-4.04	25041.160	1.5	52772.300	2.5
360.5046	24.00	-.50	20520.920	3.0	48251.910	3.0
360.5080	16.01	-2.77	115892.300	.5	143623.030	1.5
360.5087	24.00	-4.66	23305.010	2.0	51035.680	2.0
360.5135	26.00	-3.73	27394.676	3.0	55124.974	3.0
360.5174	28.00	-3.26	15734.018	1.0	43464.019	1.0
360.5175	10.03	-.65	643672.000	1.5	671402.000	2.5
360.5321	24.00	.19	0.000	3.0	27728.670	2.0
360.5345	26.02	-3.86	98661.880	1.0	126390.570	1.0
360.5371	27.00	-1.00	4142.660	3.5	31871.150	3.5
360.5395	17.01	-.10	158177.100	1.0	185905.400	1.0
360.5406	24.00	.22	20523.690	4.0	48251.910	3.0
360.5449	22.01	-2.07	34543.360	3.5	62271.250	2.5
360.5456	26.00	-1.34	21999.132	4.0	49726.964	4.0
360.5463	24.00	-2.31	24303.940	3.0	52031.720	3.0
360.5480	92.01	-1.78	1693.808	0.0	29429.366	0.0
360.5494	21.01	-2.03	29823.920	2.0	57551.460	1.0
360.5499	26.00	-.72	22650.415	6.0	50377.920	5.0
360.5517	24.00	.27	31048.000	7.0	58775.360	6.0
360.5546	26.00	-3.22	26339.682	2.0	54066.821	2.0
360.5546	27.00	-2.10	18775.010	.5	46502.150	.5
360.5577	17.01	-.68	147125.700	3.0	174852.600	3.0
360.5588	27.00	-4.03	24733.280	2.5	52460.100	2.5
360.5610	24.00	-3.68	8307.570	4.0	36034.220	3.0
360.5640	44.00	-.66	9517.587	0.0	37251.914	0.0
360.5659	29.01	-3.42	123016.630	3.0	150742.900	3.0
360.5660	64.01	-1.22	241.973	0.0	27976.146	0.0
360.5662	26.02	-2.08	198655.660	3.0	226381.910	3.0
360.5677	25.00	-2.01	23719.520	1.5	51445.650	1.5
360.5690	24.00	-1.45	31049.330	6.0	58775.360	6.0
360.5694	24.00	-2.44	24277.060	0.0	52003.060	1.0
360.5698	29.01	-3.61	120789.630	4.0	148515.600	4.0
360.5707	24.00	-2.24	24286.540	1.0	52012.440	2.0
360.5713	25.01	-3.82	44521.520	4.0	72247.380	3.0
360.5748	25.00	-2.38	38669.600	3.5	66395.190	2.5
360.5798	25.01	-2.75	53597.130	2.0	81322.330	1.0
360.5800	28.01	-4.90	99132.780	5.5	126857.970	5.5
360.5834	28.01	-2.93	101754.800	2.5	129479.730	1.5
360.5860	45.00	-.41	10243.505	0.0	37976.140	0.0
360.5879	18.01	-.84	145668.800	1.5	173393.380	2.5
360.5980	27.01	-1.81	21624.400	5.0	49348.200	4.0
360.6034	26.01	-2.75	71964.810	2.5	99688.200	3.5
360.6060	29.01	-3.64	120919.410	1.0	148642.600	2.0
360.6070	74.00	-1.82	1613.150	0.0	29344.170	0.0
360.6113	27.00	-1.39	25937.590	4.5	53660.370	5.5
360.6123	15.01	-4.75	103630.600	2.0	131353.300	2.0
360.6166	28.01	-4.02	101144.630	3.5	128867.000	3.5
360.6173	26.01	-3.03	44929.590	2.5	72651.910	3.5
360.6260	26.02	-4.07	114325.350	5.0	142047.000	4.0
360.6341	28.01	-3.61	110021.920	4.5	137742.950	5.5
360.6369	26.00	-2.22	20641.110	4.0	48361.920	4.0
360.6480	70.01	-.02	33311.556	0.0	61039.424	0.0
360.6480	25.00	-3.10	35041.370	3.5	62761.330	2.5
360.6518	18.00	-3.07	93750.639	1.0	121470.304	0.0
360.6536	22.00	-4.70	18525.070	2.0	46244.600	2.0
360.6537	26.00	-2.75	19552.474	1.0	47271.999	1.0
360.6544	28.01	-3.18	101754.800	2.5	129474.270	3.5
360.6567	24.00	-3.62	31009.000	3.0	58726.290	4.0
360.6613	29.01	-1.75	108014.660	3.0	135733.600	3.0
360.6616	26.00	-4.90	26623.726	2.0	54342.640	2.0
360.6618	13.01	-1.59	121480.300	3.0	149199.200	3.0
360.6678	23.00	-1.75	10892.500	3.5	38610.940	3.5
360.6682	26.00	.31	21715.735	5.0	49434.142	6.0
360.6696	13.01	-.69	121480.900	2.0	149199.200	3.0
360.6698	22.00	-4.03	19421.576	3.0	47139.860	4.0
360.6699	25.00	-4.61	23296.670	3.5	51014.950	3.5
360.6706	25.01	-3.81	73780.810	3.0	101499.030	4.0
360.6753	28.01	-3.72	101144.630	3.5	128862.490	4.5
360.6786	22.00	-3.77	170.132	3.0	27887.740	3.0
360.6786	8.01	-3.48	233544.090	1.5	261261.700	1.5
360.6820	27.00	-2.42	23207.760	1.5	50925.110	1.5
360.6840	9.01	-.40	229550.110	2.0	257267.300	1.0
360.6842	28.00	-.62	29084.478	4.0	56801.654	5.0
360.6855	25.00	-3.53	30419.610	2.5	58136.690	3.5
360.6865	28.00	-1.77	30912.838	1.0	58629.840	2.0
360.6928	24.00	-3.05	24286.540	1.0	52003.060	1.0
360.6943	16.01	-1.55	125485.320	.5	153201.720	1.5
360.6984	24.00	-3.52	21856.940	3.0	49573.030	4.0
360.6989	25.01	-4.12	73785.250	2.0	101501.300	3.0
360.7037	27.00	-2.57	16195.680	.5	43911.360	1.5
360.7042	21.00	-6.63	11677.310	4.5	39392.950	3.5
360.7059	9.01	-.63	229551.790	1.0	257267.300	1.0
360.7068	27.00	-3.23	16467.900	4.5	44183.340	4.5
360.7070	74.00	-.07	19680.435	0.0	47403.767	0.0
360.7103	22.00	-1.40	19322.988	2.0	47038.160	3.0
360.7179	25.01	-4.36	73785.250	2.0	101499.840	2.0
360.7184	26.00	-4.09	29313.008	6.0	57027.560	7.0
360.7288	23.01	-1.91	19166.190	1.0	46879.940	2.0
360.7375	24.00	-2.59	24286.540	1.0	51999.620	0.0
360.7378	9.02	-3.90	441406.460	3.5	469119.520	2.5
360.7380	40.01	-.07	9920.875	0.0	37641.825	0.0
360.7401	18.01	-3.69	163299.470	2.5	191012.350	1.5
360.7405	9.01	-.50	229554.450	0.0	257267.300	1.0
360.7410	73.00	-1.09	1935.780	0.0	29656.499	0.0
360.7444	24.00	-2.49	24299.890	2.0	52012.440	2.0
360.7450	26.00	-4.79	27666.334	1.0	55378.842	2.0
360.7504	10.01	-2.92	281025.940	2.5	308738.030	1.5
360.7526	25.00	-.75	17282.000	3.5	44993.920	3.5
360.7542	23.03	-.88	255747.600	3.0	283459.400	3.0
360.7554	14.02	-3.50	230301.660	4.0	258013.370	3.0
360.7599	14.02	-3.39	230302.010	4.0	258013.370	3.0
360.7620	17.01	-2.37	146333.800	2.0	174045.000	3.0
360.7630	58.01	-.09	5404.054	0.0	33123.083	0.0
360.7802	24.01	-4.06	39684.000	3.5	67393.800	3.5
360.7805	26.00	-4.50	27666.334	1.0	55376.117	1.0
360.7870	28.01	-4.33	101144.630	3.5	128853.910	4.5
360.7875	28.01	-4.67	101144.630	3.5	128853.870	2.5
360.7918	24.00	-1.70	32097.360	6.0	59806.270	5.0
360.7953	24.00	-3.36	27500.370	3.0	55209.010	4.0
360.7972	24.00	-3.02	24303.940	3.0	52012.440	2.0
360.8037	24.00	-2.55	25177.390	4.0	52885.390	5.0
360.8129	22.00	-4.03	19322.988	2.0	47030.280	3.0
360.8134	26.00	-2.27	22996.661	4.0	50703.912	5.0
360.8161	26.02	-3.77	114339.950	4.0	142047.000	4.0
360.8174	26.00	-3.01	24118.815	4.0	51825.758	3.0
360.8203	22.00	-4.32	19573.968	4.0	47280.690	5.0
360.8267	24.00	-1.09	33113.270	4.0	60819.500	3.0
360.8313	27.00	-2.89	5075.830	1.5	32781.710	2.5
360.8327	23.01	-2.34	36425.070	4.0	64130.840	4.0
360.8335	26.00	-2.40	26406.490	1.0	54112.203	2.0
360.8336	23.00	-.50	9636.960	1.5	37342.660	2.5
360.8370	42.00	-.61	11372.710	0.0	39086.054	0.0
360.8388	28.00	-3.32	28569.210	2.0	56274.516	2.0
360.8395	24.00	.16	31049.330	6.0	58754.580	5.0
360.8401	26.01	-2.51	72213.100	.5	99918.300	1.5
360.8476	27.00	-4.51	26232.050	3.5	53936.660	2.5
360.8481	25.00	-.50	17451.520	2.5	45156.110	2.5
360.8487	26.01	-4.35	44915.070	3.5	72619.610	2.5
360.8524	22.01	-4.63	39233.440	1.5	66937.700	2.5
360.8557	22.00	-2.82	16267.510	5.0	43971.513	5.0
360.8649	24.01	-.79	39684.000	3.5	67387.300	2.5
360.8666	24.00	-2.60	24299.890	2.0	52003.060	1.0
360.8703	6.00	-4.02	60393.140	2.0	88096.030	2.0
360.8730	44.00	-.84	8952.985	0.0	36663.565	0.0
360.8750	64.01	.38	9033.642	0.0	36744.068	0.0
360.8770	69.01	-1.05	0.000	0.0	27710.272	0.0
360.8809	28.01	-2.48	25036.380	2.5	52738.450	2.5
360.8821	27.00	-1.31	16778.160	2.5	44480.140	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
360.8861	26.00	.02	8154.713	1.0	35856.386	2.0
360.8886	22.01	-4.27	12628.770	1.5	40330.250	.5
360.8942	9.01	-.50	229551.790	1.0	257252.840	0.0
360.8960	6.02	-.16	317795.000	0.0	345503.814	0.0
360.8960	6.02	-.51	317795.000	0.0	345503.814	0.0
360.8960	6.02	-.64	317795.000	0.0	345503.814	0.0
360.8960	6.02	-1.81	317795.000	0.0	345503.814	0.0
360.9023	24.00	-.65	20517.400	2.0	48217.830	2.0
360.9067	25.02	-2.02	88880.080	2.5	116580.170	1.5
360.9098	7.01	-.77	168892.210	1.0	196592.070	1.0
360.9104	24.00	-1.84	27816.880	5.0	55516.690	6.0
360.9179	24.00	-1.51	31055.350	5.0	58754.580	5.0
360.9179	10.00	-3.77	134818.640	0.0	162517.872	1.0
360.9200	23.00	-.95	15270.420	1.5	42969.490	1.5
360.9266	28.01	-4.08	88128.560	2.5	115827.120	3.5
360.9280	28.01	-4.66	106369.300	1.5	134067.760	1.5
360.9295	29.00	-3.84	13227.833	0.0	40934.075	0.0
360.9309	28.00	-1.95	879.813	2.0	28578.046	3.0
360.9314	28.00	-2.81	29888.505	2.0	57586.700	2.0
360.9320	25.00	-3.11	35725.850	2.5	63424.000	3.5
360.9412	10.01	-2.43	276276.850	1.5	303974.290	1.5
360.9440	90.01	-.72	4032.876	0.0	31738.005	0.0
360.9453	26.00	-1.80	23110.925	3.0	50808.053	4.0
360.9476	24.00	-4.80	31028.330	2.0	58725.280	1.0
360.9482	24.00	.07	20520.920	3.0	48217.830	2.0
360.9490	62.01	-.12	2177.753	0.0	29882.498	0.0
360.9498	23.00	-2.83	14548.830	2.5	42245.610	3.5
360.9529	10.01	-3.29	251522.120	1.5	279218.660	2.5
360.9539	28.00	-4.59	28578.046	3.0	56274.516	2.0
360.9550	46.00	.25	7662.464	0.0	35366.748	0.0
360.9588	22.00	-2.19	8602.340	2.0	36298.430	1.0
360.9610	6.02	-.64	317800.000	0.0	345503.824	0.0
360.9610	6.02	.11	317800.000	0.0	345503.824	0.0
360.9690	58.01	.28	7178.519	0.0	34881.729	0.0
360.9720	26.02	-4.95	114351.920	3.0	142047.000	4.0
360.9743	17.01	-1.33	147125.700	3.0	174820.600	2.0
360.9759	26.01	-1.35	73054.970	2.5	100749.750	2.5
360.9770	77.00	-1.61	2823.013	0.0	30525.609	0.0
360.9805	9.00	-2.55	102680.435	1.5	130374.860	1.5
360.9810	24.00	-3.79	24897.550	4.0	52591.940	5.0
360.9867	25.01	-2.76	43696.190	3.0	71390.140	3.0
360.9874	28.01	-4.28	109038.840	1.5	136732.740	1.5
360.9899	28.00	-2.23	28569.210	2.0	56262.920	3.0
360.9961	28.01	-3.83	67880.160	2.5	95573.390	3.5
361.0038	24.00	-.07	20517.400	2.0	48210.040	1.0
361.0152	26.00	.07	22650.415	6.0	50342.180	6.0
361.0154	22.00	-.67	7255.369	2.0	34947.120	1.0
361.0240	70.01	-.48	31375.775	0.0	59074.765	0.0
361.0278	26.00	-1.71	26140.164	3.0	53830.960	3.0
361.0292	25.00	-.62	17568.480	1.5	45259.170	1.5
361.0330	26.01	-2.89	33466.500	4.5	61156.900	3.5
361.0364	25.00	-.73	34343.900	4.5	62034.040	3.5
361.0461	28.00	-1.35	879.813	2.0	28569.210	2.0
361.0490	75.00	-.54	16212.162	0.0	43909.234	0.0
361.0496	28.01	-1.74	70778.120	3.5	98467.250	3.5
361.0510	48.00	1.08	31617.748	0.0	59314.666	0.0
361.0608	27.01	-2.65	22009.230	4.0	49697.500	4.0
361.0634	25.02	-4.37	86520.940	2.5	114209.010	3.5
361.0760	64.01	.56	10566.135	0.0	38261.135	0.0
361.0790	90.01	-1.42	4032.876	0.0	31727.646	0.0
361.0800	25.00	-2.39	38669.600	3.5	66356.400	4.5
361.0809	29.00	-1.04	44442.294	0.0	72136.919	0.0
361.0836	24.01	-3.94	42898.120	2.5	70584.640	2.5
361.0840	28.01	-3.96	109038.840	1.5	136725.330	.5
361.0910	58.01	-.37	7259.177	0.0	34953.027	0.0
361.0990	28.01	-3.88	110021.920	4.5	137707.260	3.5
361.1050	39.01	-.15	967.890	0.0	28660.666	0.0
361.1051	28.00	-3.42	28578.046	3.0	56262.920	3.0
361.1090	29.01	-2.56	117130.360	2.0	144814.930	3.0
361.1175	18.01	-3.57	142717.020	3.5	170400.940	2.5
361.1237	29.01	-1.97	120875.850	2.0	148559.300	2.0
361.1261	9.02	-4.13	416185.420	2.5	443868.680	2.5
361.1264	18.01	-1.98	183985.940	1.5	211669.180	2.5
361.1300	70.01	-.22	37344.432	0.0	65035.291	0.0
361.1340	58.01	-.96	2500.383	0.0	30190.936	0.0
361.1358	28.01	-3.84	101144.630	3.5	128827.150	3.5
361.1400	92.00	-1.33	0.000	0.0	27690.092	0.0
361.1420	28.00	-.83	29084.478	4.0	56766.523	4.0
361.1431	55.00	-2.21	0.000	0.0	27689.855	0.0
361.1449	24.01	-4.68	39824.520	4.5	67506.340	5.5
361.1496	24.00	-3.04	25038.610	5.0	52720.070	4.0
361.1530	24.01	-3.90	45730.740	2.5	73411.940	1.5
361.1546	28.00	-4.47	1332.153	3.0	29013.228	2.0
361.1570	63.01	-1.23	10243.505	0.0	37932.294	0.0
361.1599	10.01	-1.73	279218.660	2.5	306899.330	2.5
361.1619	23.02	-.96	61777.150	1.5	89457.670	2.5
361.1650	58.01	-.74	7823.779	0.0	35511.955	0.0
361.1691	26.02	-2.64	90483.590	3.0	118163.560	2.0
361.1694	27.00	-2.40	18775.010	.5	46454.950	1.5
361.1730	26.01	-2.53	72238.630	2.5	99918.300	1.5
361.1804	25.01	-3.59	55696.500	4.0	83375.600	3.0
361.1813	18.01	-2.57	145668.800	1.5	173347.830	1.5
361.1890	40.01	1.06	13953.751	0.0	41640.087	0.0
361.2000	42.00	.28	20245.038	0.0	47930.531	0.0
361.2026	30.02	-.25	236560.000	0.0	264237.400	1.0
361.2030	22.01	-2.17	39926.830	2.5	67604.200	3.5
361.2067	26.00	-2.19	22845.856	5.0	50522.940	6.0
361.2153	24.00	-1.93	31048.850	1.0	58725.280	1.0
361.2156	30.02	.26	233610.400	2.0	261286.800	1.0
361.2157	28.00	-1.88	31441.665	2.0	59118.060	2.0
361.2218	22.00	-1.71	16458.710	6.0	44134.639	7.0
361.2266	26.00	-2.92	32873.623	4.0	60549.180	5.0
361.2304	22.00	-5.92	14105.680	3.0	41780.950	4.0
361.2320	58.01	-.85	4436.164	0.0	32119.204	0.0
361.2326	10.01	-1.01	252798.480	.5	280473.580	1.5
361.2340	57.01	.63	24358.571	0.0	52041.458	0.0
361.2355	13.02	-.26	115958.500	1.5	143633.380	.5
361.2403	25.00	-2.35	37630.620	4.5	65305.130	3.5
361.2411	24.00	-4.84	27300.190	1.0	54974.640	2.0
361.2430	90.00	-1.06	0.000	0.0	27682.197	0.0
361.2446	23.00	-5.10	9824.580	2.5	37496.760	2.5
361.2450	42.00	.22	20809.640	0.0	48491.684	0.0
361.2470	45.00	-.25	3387.616	0.0	31069.507	0.0
361.2503	26.00	-3.18	26627.612	4.0	54301.360	4.0
361.2606	10.01	-1.55	290583.170	1.5	318256.130	2.5
361.2608	24.00	.05	31055.350	5.0	58728.290	4.0
361.2646	25.00	-3.77	35114.980	2.5	62787.630	1.5
361.2666	23.03	-2.86	226796.300	2.0	254468.800	2.0
361.2670	92.01	-1.68	887.233	0.0	28567.591	0.0
361.2733	28.00	-1.68	2216.519	2.0	29888.505	2.0
361.2752	24.00	-3.66	21847.880	2.0	49519.720	3.0
361.2823	17.02	.18	174093.800	1.5	201765.100	2.5
361.2870	90.00	-1.50	0.000	0.0	27678.826	0.0
361.2878	25.00	-2.53	37148.660	5.5	64819.530	5.5
361.2880	48.00	.37	31617.748	0.0	59296.497	0.0
361.2901	30.02	-.86	237642.700	3.0	265313.400	2.0
361.2929	26.00	-1.75	17550.180	3.0	45220.662	3.0
361.2942	26.00	-2.60	12560.933	3.0	40231.312	2.0
361.3032	28.01	-4.62	104081.040	4.5	131750.730	3.5
361.3044	24.01	-3.88	39684.000	3.5	67353.600	4.5
361.3075	26.00	-1.68	23192.486	2.0	50861.850	3.0
361.3080	57.00	-.84	0.000	0.0	27677.217	0.0
361.3100	40.01	-.41	241.973	0.0	27919.037	0.0
361.3144	26.00	-3.20	23192.486	2.0	50861.320	2.0
361.3155	24.01	-2.50	21824.250	.5	49493.000	.5
361.3208	16.01	-1.24	125485.320	.5	153153.660	.5
361.3230	24.01	-1.79	21824.820	1.5	49493.000	.5
361.3299	22.01	-2.87	12758.150	2.5	40425.600	1.5
361.3370	42.00	-.80	11372.710	0.0	39047.706	0.0
361.3390	64.01	.21	9275.615	0.0	36950.458	0.0
361.3424	24.01	-4.54	53566.220	3.5	81232.910	2.5
361.3426	26.01	-4.89	50076.100	1.5	77742.780	2.5
361.3439	26.00	-2.78	26224.961	3.0	53891.540	3.0
361.3488	24.00	-2.93	21810.840	1.0	49477.040	1.0
361.3488	24.00	-1.08	21810.840	1.0	49477.040	2.0
361.3570	22.00	-6.30	0.000	2.0	27665.570	1.0
361.3640	2.00	-1.66	166278.000	0.0	193950.928	0.0
361.3640	42.00	.24	21051.613	0.0	48724.541	0.0
361.3661	24.00	-1.14	23512.000	1.0	51176.880	0.0
361.3662	25.00	-2.41	38669.600	3.5	66334.470	3.5
361.3700	40.00	-.74	4113.534	0.0	31786.003	0.0
361.3700	58.01	-.21	4194.191	0.0	31866.660	0.0
361.3716	26.00	-3.19	19788.248	4.0	47452.702	4.0
361.3735	26.02	-4.60	198717.600	4.0	226381.910	3.0
361.3761	29.00	-.62	43474.403	0.0	71146.405	0.0
361.3779	12.01	-2.81	69804.950	.5	97468.920	1.5
361.3780	90.01	-1.56	4113.534	0.0	31785.390	0.0
361.3790	74.01	.30	14518.354	0.0	42190.133	0.0
361.3835	21.01	.48	177.630	3.0	27841.170	4.0
361.3865	10.01	-2.55	280473.580	1.5	308136.890	1.5
361.3935	24.00	-2.83	21856.940	3.0	49519.720	3.0
361.3941	26.00	-4.16	26351.049	5.0	54013.780	5.0
361.4089	27.00	-4.28	25041.160	1.5	52702.760	1.5
361.4097	27.00	-2.84	15774.040	1.5	43435.580	.5
361.4157	22.01	-2.00	34748.500	4.5	62409.580	3.5
361.4167	10.03	-3.31	642934.000	3.5	670595.000	2.5
361.4210	64.01	-.51	5807.341	0.0	33475.905	0.0
361.4215	28.01	-3.06	99559.330	2.5	127219.970	3.5
361.4218	29.00	-1.00	44442.294	0.0	72110.797	0.0
361.4220	28.01	-2.86	93390.060	2.5	121050.660	2.5
361.4243	24.01	-2.91	39684.000	3.5	67344.420	2.5
361.4324	30.02	-.38	234576.000	4.0	262235.800	3.0
361.4438	25.01	-4.35	55115.800	2.0	82774.730	1.0
361.4450	48.00	-.63	31617.748	0.0	59284.475	0.0
361.4481	28.01	-4.06	101144.630	3.5	128803.230	2.5
361.4765	26.00	-4.97	24180.848	3.0	51837.279	3.0
361.4770	40.01	-.10	2823.013	0.0	30487.290	0.0
361.4780	45.00	.18	16050.847	0.0	43715.048	0.0
361.4830	24.00	-4.83	21810.840	1.0	49466.770	2.0
361.4876	26.01	-2.05	33501.320	3.5	61156.900	3.5
361.4915	25.00	-2.72	37164.250	6.5	64819.530	5.5
361.4937	25.00	-3.62	33825.490	2.5	61480.600	3.5
361.4966	26.01	-2.66	72169.150	1.5	99824.040	2.5
361.5007	26.00	-4.93	19350.882	5.0	47005.455	5.0
361.5040	72.00	-2.03	0.000	0.0	27662.211	0.0
361.5056	17.01	-.76	147198.400	4.0	174856.600	3.0
361.5078	25.00	-4.20	35769.970	3.5	63424.000	3.5
361.5130	90.01	-1.03	4113.534	0.0	31775.057	0.0
361.5150	42.00	.39	26455.667	0.0	54117.037	0.0
361.5174	30.02	.05	234866.900	1.0	262520.200	2.0
361.5198	26.00	-2.20	26479.366	1.0	54132.480	1.0
361.5240	62.01	-1.56	1935.780	0.0	29596.461	0.0
361.5277	28.01	-3.30	93390.060	2.5	121042.570	1.5
361.5377	25.00	-.91	34423.270	3.5	62075.020	2.5
361.5387	27.00	-1.77	15774.040	1.5	43425.710	2.5
361.5394	21.01	-1.36	32349.980	3.0	60001.600	3.0
361.5417	24.01	-3.06	39742.360	2.5	67393.800	3.5
361.5500	41.00	.20	12259.943	0.0	39918.635	0.0
361.5526	22.00	-3.80	18593.990	3.0	46244.600	2.0
361.5540	23.00	-1.44	9824.580	2.5	37475.080	3.5
361.5557	23.01	-5.08	12545.150	4.0	40195.520	3.0
361.5583	12.01	-3.12	69804.950	.5	97455.120	.5
361.5630	58.01	-.89	5887.999	0.0	33545.696	0.0
361.5637	28.00	-4.15	30979.789	4.0	58629.550	3.0
361.5643	24.00	.44	0.000	3.0	27649.710	4.0
361.5664	9.00	-2.28	102840.376	.5	130489.930	.5
361.5665	26.00	-2.53	11976.239	4.0	39625.784	4.0
361.5693	24.00	-4.31	23386.350	3.0	51035.680	2.0
361.5730	26.02	-4.72	158729.890	3.0	186378.940	4.0
361.5736	10.01	-1.86	290803.820	.5	318452.820	1.5
361.5740	42.00	-.07	20003.065	0.0	47659.921	0.0
361.5785	25.00	-2.65	38120.180	4.5	65768.810	4.5
361.5820	60.01	-1.12	1613.150	0.0	29269.394	0.0
361.5865	7.01	-1.18	168892.210	1.0	196546.230	0.0
361.5948	26.00	-1.83	26623.726	2.0	54271.110	1.0
361.5998	25.02	-1.79	89204.690	4.5	116851.690	3.5
361.6008	10.01	-2.59	279422.890	.5	307069.810	1.5
361.6034	28.01	-4.99	106283.160	2.5	133929.880	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
361.6083	25.00	-2.62	35114.980	2.5	62761.330	2.5
361.6104	26.00	-7.19	12560.933	3.0	40207.120	3.0
361.6135	29.01	-3.02	120875.850	2.0	148521.800	1.0
361.6141	26.00	-1.81	25899.974	4.0	53545.882	3.0
361.6150	63.01	.23	26697.639	0.0	54351.359	0.0
361.6200	58.01	-.58	5565.369	0.0	33218.707	0.0
361.6267	24.01	-2.12	39742.360	2.5	67387.300	2.5
361.6278	26.02	-1.97	198737.050	4.0	226381.910	3.0
361.6321	26.00	-4.58	19552.474	1.0	47197.000	2.0
361.6330	92.00	-.23	3710.246	0.0	31362.590	0.0
361.6349	10.01	-3.60	281332.550	.5	308976.870	.5
361.6462	29.01	-4.84	109275.900	3.0	136919.350	3.0
361.6565	24.00	-2.34	38537.680	5.0	66180.340	5.0
361.6570	76.00	-.67	10082.190	0.0	37732.699	0.0
361.6579	24.00	-3.80	28637.000	3.0	56279.560	4.0
361.6580	68.00	-.20	0.000	0.0	27650.432	0.0
361.6840	42.00	-.24	18147.942	0.0	45796.386	0.0
361.6887	25.01	-1.56	86057.400	4.0	113697.600	3.0
361.6890	72.00	-.87	2339.068	0.0	29987.130	0.0
361.6913	16.01	-.45	131186.860	2.5	158826.870	2.5
361.6928	29.01	-1.60	120919.410	1.0	148559.300	2.0
361.6950	44.00	-1.06	9033.642	0.0	36681.246	0.0
361.6953	25.02	-1.89	89052.440	3.5	116692.140	2.5
361.7020	90.01	.48	15163.614	0.0	42810.683	0.0
361.7036	26.00	-4.18	23711.443	4.0	51350.505	4.0
361.7080	75.00	-.31	15647.559	0.0	43294.169	0.0
361.7103	26.00	-4.84	24574.655	4.0	52213.207	3.0
361.7122	15.01	-.48	104051.100	3.0	131689.500	4.0
361.7160	64.01	.24	10324.163	0.0	37970.162	0.0
361.7173	24.00	-.72	33040.100	2.0	60678.120	1.0
361.7210	77.00	-.81	9759.560	0.0	37405.176	0.0
361.7215	16.01	-3.04	131028.760	1.5	158666.450	1.5
361.7233	24.01	-1.10	39742.360	2.5	67379.920	1.5
361.7240	66.01	-1.19	4274.849	0.0	31920.236	0.0
361.7250	75.00	-.91	15647.559	0.0	43292.870	0.0
361.7268	55.00	-3.12	0.000	0.0	27645.173	0.0
361.7270	23.00	-2.48	10892.500	3.5	38529.780	4.5
361.7517	18.03	-2.27	268171.380	1.5	295806.770	1.5
361.7520	74.00	-.76	2903.671	0.0	30546.918	0.0
361.7525	26.00	-4.46	23744.826	1.0	50880.152	1.0
361.7599	25.01	-4.68	37847.900	2.0	65482.660	3.0
361.7601	28.01	-3.68	72375.420	1.5	100010.170	.5
361.7680	72.00	-.25	14437.696	0.0	42079.721	0.0
361.7683	22.00	-4.35	16267.510	5.0	43901.630	4.0
361.7710	41.00	.61	17341.367	0.0	44983.163	0.0
361.7768	25.02	-2.86	115711.600	4.5	143345.070	3.5
361.7781	26.00	.17	24335.764	2.0	51969.140	3.0
361.7840	23.00	-5.04	9824.580	2.5	37457.500	1.5
361.7894	10.01	-1.18	280262.330	3.5	307894.840	2.5
361.7919	23.01	-2.90	36425.070	4.0	64057.390	3.0
361.7928	26.00	-2.24	26351.049	5.0	53983.300	5.0
361.7965	26.00	-2.59	19788.248	4.0	47420.215	5.0
361.8005	25.00	-3.50	37630.620	4.5	65262.280	4.5
361.8009	27.00	-.35	8460.810	2.5	36092.440	2.5
361.8042	26.02	-4.40	186378.940	4.0	214010.320	5.0
361.8122	25.02	-3.58	86578.240	3.5	114209.010	3.5
361.8174	26.00	-3.01	24338.766	3.0	51969.140	3.0
361.8183	24.01	-2.71	47354.630	2.5	74984.930	1.5
361.8268	18.02	-1.37	211563.830	1.0	239193.480	1.0
361.8293	26.00	-2.60	22845.856	5.0	50475.320	4.0
361.8296	25.00	-2.56	35041.370	3.5	62670.810	4.5
361.8322	25.01	-3.12	43311.000	1.0	70940.240	2.0
361.8333	24.00	-2.01	21847.880	2.0	49477.040	1.0
361.8333	24.00	-1.62	21847.880	2.0	49477.040	2.0
361.8360	90.00	-.38	7420.492	0.0	35057.322	0.0
361.8372	26.00	-1.74	26140.164	3.0	53769.020	4.0
361.8389	26.00	.01	21999.132	4.0	49627.861	4.0
361.8440	41.00	-1.77	80.658	0.0	27716.877	0.0
361.8511	19.01	-.68	162507.000	2.0	190134.800	1.0
361.8563	27.00	-3.45	15184.040	2.5	42811.440	3.5
361.8563	23.00	-4.34	13801.530	1.5	41428.930	2.5
361.8580	58.01	-.59	4436.164	0.0	32071.314	0.0
361.8611	26.00	-1.99	26339.682	2.0	53966.720	2.0
361.8621	25.01	-2.34	43696.190	3.0	71323.150	2.0
361.8644	25.00	-2.81	23818.870	.5	51445.650	1.5
361.8747	22.00	-1.59	11639.804	3.0	39265.800	2.0
361.8762	10.01	-1.92	280268.960	2.5	307894.840	2.5
361.8769	26.00	.16	7985.783	2.0	35611.608	3.0
361.8773	23.03	-.75	256739.900	0.0	284365.700	1.0
361.8799	27.02	-4.96	77383.100	3.5	105008.700	3.5
361.8804	26.00	-2.34	23783.617	5.0	51409.180	4.0
361.8874	25.02	-2.08	86051.500	2.5	113676.530	2.5
361.8900	41.00	-.92	4920.109	0.0	32552.615	0.0
361.8904	17.01	-.21	149798.300	2.0	177423.100	1.0
361.8912	26.00	-2.16	19552.474	1.0	47177.210	1.0
361.8919	23.01	-.20	22273.540	1.0	49898.220	2.0
361.8960	26.00	-3.38	17927.378	1.0	45551.748	1.0
361.9052	26.02	-4.00	169277.600	4.0	196901.270	5.0
361.9074	26.00	-3.67	23711.443	4.0	51334.940	4.0
361.9107	23.00	-3.80	14514.750	1.5	42138.000	2.5
361.9130	92.01	-2.19	241.973	0.0	27872.923	0.0
361.9195	25.00	-2.47	35165.050	1.5	62787.630	1.5
361.9200	44.00	-.39	12743.888	0.0	40374.304	0.0
361.9257	24.00	-2.70	25771.400	6.0	53393.500	5.0
361.9268	25.00	-.73	17637.150	.5	45259.170	1.5
361.9271	24.00	-2.52	25038.610	5.0	52660.610	6.0
361.9276	26.02	-4.64	88694.670	5.0	116316.630	5.0
361.9284	23.01	-2.43	19132.690	2.0	46754.590	1.0
361.9294	27.00	-1.43	21215.900	.5	48837.720	.5
361.9349	27.01	-3.10	22414.500	3.0	50035.900	3.0
361.9386	28.00	.08	3409.925	2.0	31031.042	3.0
361.9412	22.00	-3.35	19322.988	2.0	46943.910	2.0
361.9416	26.00	-4.70	19757.020	3.0	47377.909	4.0
361.9430	76.00	-.34	15324.929	0.0	42953.589	0.0
361.9431	14.02	-.70	230301.220	3.0	257922.000	4.0
361.9439	22.00	-.20	19573.968	4.0	47194.680	4.0
361.9442	24.00	-1.92	33906.650	1.0	61527.340	1.0
361.9457	24.00	-1.83	20519.600	6.0	48140.180	7.0
361.9488	14.02	-2.24	230301.660	4.0	257922.000	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
361.9488	14.02	-.60	230301.660	4.0	257922.000	5.0
361.9488	14.02	-4.35	230301.660	4.0	257922.000	5.0
361.9510	41.01	-.12	7823.779	0.0	35451.828	0.0
361.9520	24.00	-4.85	21856.940	3.0	49477.040	2.0
361.9534	14.02	-4.92	230302.010	4.0	257922.000	5.0
361.9534	14.02	-.60	230302.010	4.0	257922.000	5.0
361.9534	14.02	-2.34	230302.010	4.0	257922.000	4.0
361.9554	28.01	-4.28	106283.160	2.5	133903.000	1.5
361.9579	14.02	-2.24	230302.350	5.0	257922.000	5.0
361.9579	14.02	-2.35	230302.350	5.0	257922.000	5.0
361.9579	14.02	-.52	230302.350	5.0	257922.000	6.0
361.9579	14.02	-3.98	230302.350	5.0	257922.000	4.0
361.9581	28.01	-1.70	101247.370	2.5	128867.000	3.5
361.9599	25.01	-4.81	55115.800	2.0	82735.290	2.0
361.9658	26.00	-3.74	19552.474	1.0	47171.520	0.0
361.9678	24.00	-4.49	21847.880	2.0	49466.770	2.0
361.9710	90.01	-1.29	10566.135	0.0	38192.658	0.0
361.9730	41.01	.09	15808.874	0.0	43435.244	0.0
361.9767	16.01	-3.20	115870.400	1.5	143488.610	.5
361.9770	26.00	-2.20	19390.165	6.0	47006.351	5.0
361.9820	70.01	.03	28633.420	0.0	56259.103	0.0
361.9910	29.01	-4.64	108335.430	2.0	135952.550	2.0
361.9920	58.01	-1.22	2500.383	0.0	30125.303	0.0
361.9980	22.00	-.38	19421.576	3.0	47038.160	3.0
361.9987	26.00	-1.22	26105.908	6.0	53722.440	5.0
361.9992	26.00	-3.82	23244.826	1.0	50861.320	2.0
362.0016	27.00	-2.07	16778.160	2.5	44394.470	3.5
362.0019	28.00	-4.13	2216.519	2.0	29832.810	3.0
362.0040	72.00	-1.44	5484.711	0.0	33108.715	0.0
362.0100	62.01	-1.66	322.630	0.0	27946.176	0.0
362.0223	23.02	-1.58	61578.740	.5	89193.470	1.5
362.0235	26.00	-2.49	22996.661	4.0	50611.303	3.0
362.0280	44.00	-.51	13550.463	0.0	41172.636	0.0
362.0311	26.02	-3.64	89907.850	4.0	117521.910	4.0
362.0311	26.02	-4.45	89907.850	5.0	117521.910	4.0
362.0352	29.00	-1.10	43474.403	0.0	71096.027	0.0
362.0355	24.00	-1.54	25106.340	3.0	52720.070	4.0
362.0361	25.01	-3.34	43131.400	2.0	70745.080	3.0
362.0366	26.00	-4.77	26224.961	3.0	53838.600	3.0
362.0398	30.02	.14	237642.700	3.0	265256.100	3.0
362.0416	27.00	-2.45	18389.570	1.5	46002.830	2.5
362.0460	14.02	-1.63	214532.170	1.0	242145.100	1.0
362.0460	45.00	-.91	7743.122	0.0	35363.922	0.0
362.0494	23.01	-.96	25191.080	2.0	52803.750	1.0
362.0494	28.00	-1.91	30912.838	1.0	58525.507	1.0
362.0499	27.00	-3.73	15184.040	2.5	42796.670	1.5
362.0558	24.01	-3.67	47372.750	1.5	74984.930	1.5
362.0580	62.01	-1.07	3871.561	0.0	31491.445	0.0
362.0627	25.00	-1.98	34463.370	1.5	62075.020	2.5
362.0647	27.02	-4.78	70934.100	2.5	98545.600	3.5
362.0743	25.00	-1.68	34423.270	3.5	62034.040	3.5
362.0793	9.00	-2.70	102405.710	2.5	130016.100	2.5
362.0809	18.01	-2.61	158730.210	2.5	186340.480	1.5
362.0820	24.00	-2.95	27597.220	3.0	55207.400	4.0
362.0828	25.00	-3.68	38351.780	.5	65961.900	1.5
362.0864	26.00	-1.97	26627.612	4.0	54237.460	4.0
362.0866	24.00	-4.17	21856.940	3.0	49466.770	2.0
362.0873	26.00	-4.26	23270.374	0.0	50880.152	1.0
362.0940	39.00	.09	483.945	0.0	28101.083	0.0
362.1014	22.00	-3.51	19421.576	3.0	47030.280	3.0
362.1014	18.01	-3.34	132630.650	1.5	160239.350	1.5
362.1030	41.00	-.93	2097.096	0.0	29713.548	0.0
362.1056	28.00	-1.45	30979.789	4.0	58588.168	3.0
362.1120	90.01	-.50	10485.478	0.0	38101.243	0.0
362.1150	58.01	-1.05	5404.054	0.0	33019.591	0.0
362.1187	26.00	-2.42	26140.164	3.0	53747.547	3.0
362.1198	27.01	-1.84	17771.500	3.0	45378.800	4.0
362.1199	23.01	-1.17	19132.690	2.0	46739.980	2.0
362.1230	62.01	-.60	806.575	0.0	28421.501	0.0
362.1245	29.00	-.62	44522.951	0.0	72137.763	0.0
362.1263	26.01	-1.64	37227.320	.5	64834.120	1.5
362.1303	28.01	-1.65	101247.370	2.5	128853.870	2.5
362.1333	26.01	-1.85	73143.480	3.5	100749.750	2.5
362.1349	29.01	-3.04	120875.850	2.0	148482.000	3.0
362.1391	28.01	-4.38	105838.060	3.5	133443.890	2.5
362.1439	28.00	-2.81	28578.046	3.0	56183.510	4.0
362.1460	75.00	-.51	16534.792	0.0	44147.965	0.0
362.1464	26.00	.22	21999.132	4.0	49604.402	5.0
362.1478	25.00	-.46	34138.880	6.5	61744.040	5.5
362.1526	24.01	-4.21	36101.820	3.5	63706.620	4.5
362.1547	24.00	-3.22	27382.180	2.0	54986.820	3.0
362.1581	28.00	-1.06	30163.140	2.0	57767.520	1.0
362.1697	28.00	-4.50	28569.210	2.0	56172.704	3.0
362.1721	26.00	-.50	28819.966	5.0	56423.276	4.0
362.1747	25.00	-3.64	35165.050	1.5	62768.160	.5
362.1747	20.00	-4.82	15315.943	2.0	42919.053	2.0
362.1842	29.01	-2.84	120919.410	1.0	148521.800	1.0
362.1906	8.01	-4.91	248009.100	1.5	275611.000	.5
362.1955	23.01	-3.28	36425.070	4.0	64026.600	4.0
362.1990	26.00	-2.39	20874.482	3.0	48475.740	3.0
362.2001	26.00	-.08	22249.430	3.0	49850.610	3.0
362.2006	25.01	-2.36	43339.100	2.0	70940.240	2.0
362.2133	18.01	-1.62	183985.940	1.5	211586.110	2.5
362.2140	18.01	-.95	155351.030	1.5	182951.150	.5
362.2150	58.01	.13	6855.889	0.0	34465.801	0.0
362.2213	18.01	-4.47	174820.930	.5	202420.490	.5
362.2282	23.01	-1.96	20980.920	2.0	48579.960	3.0
362.2313	28.00	-2.35	31031.042	3.0	58629.840	2.0
362.2330	90.00	-.53	5484.711	0.0	33091.252	0.0
362.2340	74.00	.16	19115.832	0.0	46722.296	0.0
362.2351	28.00	-2.56	31031.042	3.0	58629.550	3.0
362.2397	28.00	-2.80	30922.763	5.0	58520.923	5.0
362.2430	24.01	-2.10	42986.730	1.5	70584.640	2.5
362.2440	58.01	-1.13	3306.958	0.0	30912.660	0.0
362.2500	62.01	-1.66	322.630	0.0	27927.875	0.0
362.2540	63.01	-1.04	11050.080	0.0	38655.020	0.0
362.2544	22.00	-1.97	12118.394	4.0	39715.437	3.0
362.2549	24.00	-3.48	21856.940	3.0	49453.940	4.0
362.2582	25.01	-4.73	55115.800	2.0	82712.550	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
362.2614	23.00	-2.20	18438.070	4.5	46034.580	5.5
362.2640	16.01	-3.07	115892.300	.5	143488.610	.5
362.2644	25.00	-2.94	35165.050	1.5	62761.330	2.5
362.2681	17.02	-.22	173736.000	.5	201332.000	1.5
362.2699	28.01	-3.47	101258.010	1.5	128853.870	2.5
362.2736	25.02	-3.97	109841.120	3.5	137436.700	4.5
362.2791	27.00	-4.96	25269.250	3.5	52864.410	4.5
362.2800	90.00	-.85	3629.588	0.0	31232.547	0.0
362.2808	26.01	-3.82	44929.590	2.5	72524.620	1.5
362.2857	28.00	-4.43	28578.046	3.0	56172.704	3.0
362.3032	23.01	-3.17	19161.270	0.0	46754.590	1.0
362.3060	92.01	-1.39	887.233	0.0	28488.211	0.0
362.3124	22.00	-3.00	16458.710	6.0	44051.333	6.0
362.3145	24.00	-4.76	27382.180	2.0	54974.640	2.0
362.3181	15.01	-3.51	77711.000	2.0	105303.190	1.0
362.3188	26.00	-1.26	19390.165	6.0	46982.302	6.0
362.3190	26.01	-3.41	33501.320	3.5	61093.440	2.5
362.3227	24.01	-4.80	39742.360	2.5	67334.200	3.5
362.3247	24.00	-1.23	33935.650	2.0	61527.340	1.0
362.3311	28.01	-3.68	106022.790	.5	133613.990	1.5
362.3320	62.01	-1.45	806.575	0.0	28405.573	0.0
362.3420	69.01	-1.86	8872.327	0.0	36470.563	0.0
362.3432	26.00	-2.06	23783.617	5.0	51373.894	5.0
362.3440	26.00	-1.08	20641.110	4.0	48231.330	5.0
362.3499	24.00	-1.30	33040.100	2.0	60629.870	2.0
362.3504	26.00	-4.75	24180.848	3.0	51770.577	3.0
362.3577	23.00	-3.52	14548.830	2.5	42138.000	2.5
362.3640	44.00	-.88	10566.135	0.0	38162.695	0.0
362.3679	23.01	-3.42	19166.190	1.0	46754.590	1.0
362.3736	23.00	-2.33	13801.530	1.5	41389.490	1.5
362.3745	17.01	.10	158177.100	1.0	185765.000	2.0
362.3750	28.01	-2.97	107082.210	2.5	134670.070	1.5
362.3780	25.00	-.94	17568.480	1.5	45156.110	2.5
362.3803	26.00	-2.80	26479.366	1.0	54066.821	2.0
362.3840	58.01	.37	6291.287	0.0	33886.324	0.0
362.3860	40.00	-.28	564.603	0.0	28159.488	0.0
362.3894	26.00	-4.20	18378.187	2.0	45964.944	2.0
362.3951	18.01	-2.15	183985.940	1.5	211572.270	1.5
362.3990	71.01	-.25	17180.052	0.0	44773.947	0.0
362.4000	72.01	-.63	12824.546	0.0	40418.365	0.0
362.4007	14.02	-.70	230267.700	2.0	257853.600	3.0
362.4008	25.00	-2.96	23719.520	1.5	51305.410	2.5
362.4049	26.00	-1.93	26339.682	2.0	53925.260	1.0
362.4053	28.01	-3.94	106369.300	1.5	133954.850	.5
362.4063	9.02	-4.55	416185.420	2.5	443770.900	3.5
362.4071	26.01	-1.85	72238.630	2.5	99824.040	2.5
362.4086	16.01	-2.16	128233.070	2.5	155818.370	2.5
362.4112	20.00	-.79	15157.901	0.0	42743.002	1.0
362.4128	14.02	-1.79	230268.620	3.0	257853.600	3.0
362.4128	14.02	-.68	230268.620	3.0	257853.600	4.0
362.4128	14.02	-1.29	230268.620	3.0	257853.600	4.0
362.4157	9.02	-4.05	416168.300	1.5	443753.060	2.5
362.4178	30.02	.68	237047.800	2.0	264632.400	3.0
362.4180	58.01	-.92	2500.383	0.0	30092.831	0.0
362.4200	69.00	-1.68	0.000	0.0	27592.296	0.0
362.4236	29.00	-1.12	43474.403	0.0	71066.425	0.0
362.4270	23.03	-1.03	256781.800	1.0	284365.700	1.0
362.4311	26.00	-2.36	19552.474	1.0	47136.058	2.0
362.4338	27.00	-1.69	14399.280	.5	41982.660	1.5
362.4359	25.00	-4.49	37148.660	5.5	64731.880	6.5
362.4381	22.01	-3.53	39233.440	1.5	66816.490	1.5
362.4396	14.02	-2.00	230270.660	4.0	257853.600	4.0
362.4396	14.02	-2.14	230270.660	4.0	257853.600	4.0
362.4396	14.02	-.47	230270.660	4.0	257853.600	5.0
362.4396	14.02	-3.56	230270.660	4.0	257853.600	3.0
362.4427	28.01	-2.75	105861.190	2.5	133443.890	2.5
362.4460	42.00	.85	16615.449	0.0	44205.766	0.0
362.4518	26.00	-2.77	26550.466	0.0	54132.480	1.0
362.4664	15.01	-1.74	104051.100	3.0	131632.000	3.0
362.4722	28.00	-2.39	30163.140	2.0	57743.596	3.0
362.4728	28.00	-2.41	0.000	4.0	27580.411	5.0
362.4798	14.02	-4.21	230268.620	3.0	257848.500	2.0
362.4811	28.01	-3.51	101247.370	2.5	128827.150	3.5
362.4828	22.01	-.75	9850.900	.5	37430.550	.5
362.4887	26.01	-1.94	37227.320	.5	64806.520	.5
362.4887	21.01	-3.52	32349.980	3.0	59929.180	2.0
362.4900	90.01	-.98	6613.917	0.0	34200.885	0.0
362.4957	27.00	-2.34	5075.830	1.5	32654.500	2.5
362.4968	23.00	-3.03	13810.900	.5	41389.490	1.5
362.5133	26.00	-3.59	22845.856	5.0	50423.185	4.0
362.5170	41.00	-.09	10162.848	0.0	37747.761	0.0
362.5200	44.00	-.13	10566.135	0.0	38150.820	0.0
362.5233	28.01	-4.49	100309.290	5.5	127885.860	4.5
362.5240	73.00	-1.81	5565.369	0.0	33149.750	0.0
362.5249	24.01	-3.97	36272.660	4.5	63849.110	5.5
362.5260	64.01	-.36	8791.670	0.0	36375.898	0.0
362.5271	23.01	-3.50	25191.080	2.0	52767.360	3.0
362.5308	17.01	-1.78	146469.000	3.0	174045.000	3.0
362.5342	24.00	-2.97	33040.100	2.0	60615.640	3.0
362.5404	38.01	-2.81	47736.530	0.0	75319.663	0.0
362.5419	25.01	-3.61	44745.460	2.0	72320.620	1.0
362.5458	28.01	-2.01	101247.370	2.5	128822.230	1.5
362.5513	10.01	-2.43	279324.890	1.5	306899.330	2.5
362.5540	27.00	-2.60	25937.590	4.5	53511.830	5.5
362.5574	23.00	-2.86	18126.270	1.5	45700.250	2.5
362.5599	23.01	-1.81	19166.190	1.0	46739.980	2.0
362.5630	26.02	-4.49	158729.890	3.0	186303.440	3.0
362.5630	90.01	-1.44	1451.835	0.0	29033.248	0.0
362.5710	41.00	.25	12905.203	0.0	40486.008	0.0
362.5710	77.00	-.82	12824.546	0.0	40405.351	0.0
362.5739	20.00	-2.02	20349.260	2.0	47921.981	3.0
362.5839	21.00	-6.52	11677.310	4.5	39249.270	5.5
362.5895	24.01	-3.27	39877.280	3.5	67448.820	4.5
362.5910	75.00	-.62	15647.559	0.0	43226.843	0.0
362.5935	28.00	-4.24	26665.903	3.0	54237.136	4.0
362.5956	25.02	-3.32	115774.000	3.5	143345.070	3.5
362.5983	28.01	-2.36	76727.360	5.5	104298.230	4.5
362.6016	27.00	-2.34	14399.280	.5	41969.900	.5
362.6089	22.00	-5.16	170.132	3.0	27740.190	2.0
362.6134	28.01	-3.15	71770.830	2.5	99340.550	3.5
362.6180	42.00	-.30	12259.943	0.0	39837.173	0.0
362.6192	24.01	-4.12	39824.520	4.5	67393.800	3.5
362.6212	24.00	-.40	33060.740	3.0	60629.870	2.0
362.6290	77.00	-.89	9759.560	0.0	37335.954	0.0
362.6320	64.01	-.33	9033.642	0.0	36609.807	0.0
362.6321	29.01	-2.90	118991.500	4.0	146559.800	4.0
362.6372	25.00	-3.05	37737.220	3.5	65305.130	3.5
362.6397	27.00	-3.11	18389.570	1.5	45957.290	.5
362.6407	9.02	-4.05	416185.420	2.5	443753.060	2.5
362.6409	25.00	-2.25	37164.250	6.5	64731.880	6.5
362.6465	17.01	-3.97	159574.200	2.0	187141.400	2.0
362.6496	22.00	-4.80	21469.494	3.0	49036.460	4.0
362.6536	23.00	-3.56	23088.060	1.5	50654.720	2.5
362.6538	10.01	-2.41	281171.380	2.5	308738.030	1.5
362.6546	25.00	-2.67	34938.700	4.5	62505.290	3.5
362.6584	24.02	-1.98	69510.600	0.0	97076.900	1.0
362.6590	45.00	.20	9114.300	0.0	36688.412	0.0
362.6620	73.00	-.75	3871.561	0.0	31445.445	0.0
362.6637	22.00	-3.82	19573.968	4.0	47139.660	4.0
362.6701	26.00	-4.85	27559.568	2.0	55124.974	3.0
362.6715	8.03	-.42	546803.400	.5	574368.700	1.5
362.6740	44.00	.69	17018.737	0.0	44591.709	0.0
362.6742	29.01	-4.92	118991.500	4.0	146556.600	3.0
362.6776	25.02	-4.47	115780.230	2.5	143345.070	3.5
362.6780	29.01	-3.09	110084.290	1.0	137649.100	2.0
362.6857	28.01	-3.19	101258.010	1.5	128822.230	1.5
362.6892	27.00	-1.47	21920.090	4.5	49484.050	3.5
362.6934	29.01	-2.84	121078.960	3.0	148642.600	2.0
362.6986	28.01	-4.85	100332.090	4.5	127895.330	3.5
362.7010	62.01	-.73	2177.753	0.0	29748.672	0.0
362.7058	26.00	-1.31	28819.966	5.0	56382.664	5.0
362.7189	26.01	-2.18	48039.230	2.5	75600.930	3.5
362.7229	27.02	-4.82	78927.800	3.5	106489.200	3.5
362.7240	74.00	-.67	13227.833	0.0	40797.004	0.0
362.7290	44.00	-.68	13631.121	0.0	41199.912	0.0
362.7320	29.00	-.68	44522.951	0.0	72091.514	0.0
362.7429	28.01	-3.36	107082.210	2.5	134642.090	3.5
362.7429	27.00	-.12	23152.570	3.5	50712.450	2.5
362.7479	25.01	-.88	51553.060	5.0	79112.560	5.0
362.7505	24.00	-4.81	27649.710	4.0	55209.010	4.0
362.7708	26.01	-4.26	72130.440	4.5	99688.200	3.5
362.7710	23.01	-1.16	19132.690	2.0	46690.430	1.0
362.7716	17.01	-3.25	137804.400	1.0	165362.100	0.0
362.7718	22.01	-3.21	9872.870	.5	37430.550	.5
362.7791	28.00	-2.57	31031.042	3.0	58588.168	3.0
362.7799	27.00	-2.36	26232.050	3.5	53789.120	3.5
362.7800	45.00	-.73	11856.655	0.0	39421.570	0.0
362.7804	27.00	-.40	4142.660	3.5	31699.690	4.5
362.7838	22.00	-5.68	14028.470	2.0	41585.240	3.0
362.7843	27.00	-3.77	26232.050	3.5	53788.780	4.5
362.7889	24.00	-2.77	38537.680	5.0	66094.060	4.0
362.7958	28.01	-3.17	101247.370	2.5	128803.230	2.5
362.7970	62.01	-1.60	806.575	0.0	28370.199	0.0
362.8014	26.02	-4.80	186454.890	5.0	214010.320	5.0
362.8017	24.00	-2.89	27597.220	3.0	55152.630	2.0
362.8036	10.01	-.39	254165.010	1.5	281720.280	1.5
362.8058	24.00	-1.48	33060.740	3.0	60615.840	3.0
362.8079	22.00	-2.87	21469.494	3.0	49024.430	3.0
362.8079	25.02	-4.90	86654.070	4.5	114209.010	3.5
362.8093	26.01	-4.47	50187.950	3.5	77742.780	2.5
362.8093	26.00	-2.54	17726.985	2.0	45281.816	2.0
362.8110	78.00	-1.45	6533.259	0.0	34095.819	0.0
362.8233	28.01	-3.90	100332.090	4.5	127885.860	4.5
362.8250	58.01	-1.10	2500.383	0.0	30061.880	0.0
362.8291	24.00	-3.16	25038.610	5.0	52591.940	5.0
362.8350	42.00	-.07	20003.065	0.0	47563.802	0.0
362.8371	23.00	-3.22	18085.820	.5	45638.540	1.5
362.8435	29.01	-1.84	121078.960	3.0	148631.200	3.0
362.8594	20.00	-1.86	20371.000	3.0	47922.033	4.0
362.8601	20.00	-2.92	20371.000	3.0	47921.981	3.0
362.8617	28.00	-2.67	31441.665	2.0	58992.520	2.0
362.8656	28.00	-1.72	30979.789	4.0	58530.350	3.0
362.8660	42.00	-.29	16534.792	0.0	44093.174	0.0
362.8661	25.01	-2.39	53597.130	2.0	81147.650	2.0
362.8670	77.00	-.72	6291.287	0.0	33849.593	0.0
362.8710	39.01	-.78	967.890	0.0	28525.893	0.0
362.8729	8.03	-.16	546818.700	1.5	574368.700	2.5
362.8729	8.03	-1.12	546818.700	1.5	574368.700	1.5
362.8807	10.01	-2.18	280473.580	1.5	308022.990	.5
362.8814	26.00	-2.96	24118.815	4.0	51668.175	4.0
362.8830	57.01	-1.43	967.890	0.0	28524.981	0.0
362.8986	24.01	-2.70	47372.750	1.5	74920.800	.5
362.9017	29.01	-2.92	110365.980	2.0	137913.800	1.0
362.9094	21.01	-3.28	4802.750	2.0	32349.980	3.0
362.9200	75.00	-.59	19357.805	0.0	46912.087	0.0
362.9263	22.00	-2.26	11531.760	2.0	39077.713	1.0
362.9284	25.00	-3.45	34845.260	.5	62391.050	.5
362.9310	42.00	-.09	25487.776	0.0	53041.223	0.0
362.9317	23.00	-2.60	18198.080	2.5	45743.620	3.5
362.9322	29.01	-2.37	118484.000	3.0	146029.500	4.0
362.9396	25.00	-2.65	34845.260	.5	62390.200	1.5
362.9413	24.01	-2.76	39824.520	4.5	67369.330	5.5
362.9510	64.01	-.11	9356.272	0.0	36908.200	0.0
362.9524	22.00	-5.18	6661.003	3.0	34204.971	4.0
362.9612	14.02	-1.68	214994.650	1.0	242537.950	0.0
362.9628	21.00	-5.63	11610.240	3.5	39155.420	4.5
362.9637	28.01	-4.78	101754.800	2.5	129297.910	3.5
362.9694	24.00	-2.61	25177.390	4.0	52720.070	4.0
362.9731	25.00	-1.55	17451.520	2.5	44993.920	3.5
362.9771	29.00	-1.77	43716.376	0.0	71266.323	0.0
362.9822	28.01	-3.23	101258.010	1.5	128799.720	.5
362.9880	23.00	-3.33	23210.560	2.5	50751.830	3.5
362.9898	28.00	-.08	30979.789	4.0	58520.923	5.0
362.9950	76.00	-1.87	5081.424	0.0	32630.013	0.0
362.9957	9.00	-2.62	102680.435	1.5	130221.120	1.5
363.0020	40.01	-.91	2823.013	0.0	30371.071	0.0
363.0025	25.01	-2.82	52373.180	3.0	79915.350	4.0
363.0084	25.01	-4.05	43850.420	2.0	71390.140	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
363.0085	28.01	-4.47	101754.800	2.5	129294.510	2.5
363.0232	26.00	-1.60	29320.050	1.0	56858.650	2.0
363.0269	28.00	-1.04	30979.789	4.0	58518.110	4.0
363.0269	26.00	-1.43	26224.961	3.0	53763.280	3.0
363.0286	25.01	-3.50	53698.700	2.0	81236.890	1.0
363.0335	27.00	-3.24	21215.900	.5	48753.720	1.5
363.0341	26.00	-4.08	22996.661	4.0	50534.435	3.0
363.0364	30.02	-1.39	234384.000	3.0	261921.600	2.0
363.0377	29.01	-3.76	118484.000	3.0	146021.500	3.0
363.0420	58.01	-.38	10001.532	0.0	37546.554	0.0
363.0423	28.00	-2.87	29320.782	3.0	56857.933	4.0
363.0581	28.00	-1.34	30912.838	1.0	58448.790	0.0
363.0620	41.00	.16	12017.970	0.0	39561.475	0.0
363.0625	29.01	-2.06	119039.680	2.0	146575.300	2.0
363.0668	26.00	-3.99	18378.187	2.0	45913.480	3.0
363.0752	20.00	-.44	15210.063	1.0	42744.716	2.0
363.0754	21.01	.29	67.680	2.0	27602.320	3.0
363.0774	9.00	-3.97	102840.376	.5	130374.860	1.5
363.0840	22.01	-3.16	39233.440	1.5	66767.430	.5
363.0870	72.01	1.25	27907.502	0.0	55449.110	0.0
363.0878	28.01	-4.91	106369.300	1.5	133903.000	1.5
363.0924	10.01	-3.53	280473.580	1.5	308006.930	.5
363.0978	20.00	-.92	15210.063	1.0	42743.002	1.0
363.1094	26.00	-1.15	22845.856	5.0	50377.920	5.0
363.1152	9.00	-3.52	102405.710	2.5	129937.330	1.5
363.1190	58.01	-.61	3629.588	0.0	31168.769	0.0
363.1206	27.00	-4.48	24733.280	2.5	52264.490	1.5
363.1257	11.01	-.63	265693.290	1.0	293224.120	1.0
363.1267	27.00	-4.57	23611.780	5.5	51142.530	6.5
363.1342	14.02	-3.91	230301.220	3.0	257831.400	3.0
363.1342	14.02	-2.85	230301.220	3.0	257831.400	2.0
363.1379	27.01	-4.94	41313.900	3.0	68843.800	4.0
363.1384	27.00	-2.01	816.000	3.5	28345.860	4.5
363.1400	14.02	-2.98	230301.660	4.0	257831.400	3.0
363.1400	14.02	-4.16	230301.660	4.0	257831.400	4.0
363.1415	25.01	-1.57	52383.720	4.0	79913.350	4.0
363.1433	22.01	-3.47	40074.710	3.5	67604.200	3.5
363.1445	15.01	-2.14	104102.600	2.0	131632.000	3.0
363.1447	14.02	-4.26	230302.010	4.0	257831.400	4.0
363.1447	14.02	-3.08	230302.010	4.0	257831.400	3.0
363.1456	18.02	-2.83	239193.480	1.0	266722.800	2.0
363.1465	26.00	.25	7728.058	3.0	35257.309	4.0
363.1477	23.01	-1.97	19161.270	0.0	46690.430	1.0
363.1485	24.01	-1.30	21822.860	2.5	49351.960	2.5
363.1485	24.01	-2.88	42898.120	2.5	70427.220	3.5
363.1487	24.01	-3.57	39824.520	4.5	67353.600	4.5
363.1491	14.02	-2.61	230302.350	5.0	257831.400	4.0
363.1511	8.01	-4.23	233430.100	.5	260959.000	1.5
363.1601	27.00	-3.54	23184.230	2.5	50712.450	2.5
363.1648	28.01	-3.73	107142.210	1.5	134670.070	1.5
363.1678	24.00	-3.67	28682.180	2.0	56209.810	3.0
363.1710	44.00	-.93	6452.602	0.0	33987.840	0.0
363.1743	24.01	-1.73	21824.820	1.5	49351.960	2.5
363.1868	23.00	-2.64	18174.060	1.5	45700.250	2.5
363.1933	30.02	.80	234384.000	3.0	261909.700	4.0
363.1940	8.01	-3.14	248425.350	.5	275951.000	1.5
363.1942	27.00	-2.32	20500.710	1.5	48026.340	.5
363.1950	74.00	-1.71	1613.150	0.0	29146.569	0.0
363.1999	24.02	-1.70	69780.900	1.0	97306.100	2.0
363.2018	25.00	-2.71	37737.220	3.5	65262.280	4.5
363.2033	26.00	-.21	24772.019	1.0	52296.960	2.0
363.2048	9.02	-4.36	441158.600	1.5	468683.430	2.5
363.2110	58.01	-.85	2581.041	0.0	30113.247	0.0
363.2126	23.01	-2.21	19166.190	1.0	46690.430	1.0
363.2180	63.01	-1.18	10001.532	0.0	37533.207	0.0
363.2292	26.01	-3.19	33466.500	4.5	60989.480	4.5
363.2301	23.00	-3.28	23353.090	3.5	50876.000	4.5
363.2313	24.00	-4.90	21847.880	2.0	49370.700	3.0
363.2377	22.00	-4.46	19421.576	3.0	46943.910	2.0
363.2392	28.01	-2.86	93528.440	3.5	121050.660	2.5
363.2393	16.01	-2.33	128599.110	3.5	156121.330	2.5
363.2437	25.01	-3.17	53698.700	2.0	81220.580	3.0
363.2538	23.00	-2.80	18513.460	4.5	46034.580	5.5
363.2549	26.00	-.97	23783.617	5.0	51304.650	4.0
363.2558	29.00	-1.23	44442.294	0.0	71971.104	0.0
363.2620	90.01	-1.07	8952.985	0.0	36481.325	0.0
363.2668	28.01	-4.04	106007.890	2.5	133528.020	3.5
363.2679	18.00	-2.93	93750.639	1.0	121270.682	2.0
363.2680	10.01	-.51	252953.540	1.5	280473.580	1.5
363.2712	22.01	-3.08	39476.870	2.5	66996.670	3.5
363.2747	26.02	-3.77	186454.890	5.0	213974.420	6.0
363.2774	25.00	-3.26	38934.940	2.5	66454.270	3.5
363.2890	22.00	-3.91	14105.680	3.0	41624.130	4.0
363.2894	23.00	-2.86	18120.120	.5	45638.540	1.5
363.2902	24.00	-3.34	27300.190	1.0	54818.550	2.0
363.2939	23.00	-.93	9824.580	2.5	37342.660	2.5
363.2980	26.00	-1.56	20037.815	0.0	47555.584	1.0
363.3000	41.00	.06	12582.573	0.0	40108.034	0.0
363.3061	26.00	-3.21	23711.443	4.0	51228.595	5.0
363.3092	29.01	-1.78	119039.680	2.0	146556.600	3.0
363.3092	28.01	-3.91	101754.800	2.5	129271.720	3.5
363.3120	39.01	-.29	0.000	0.0	27524.552	0.0
363.3136	26.00	-3.57	27166.804	4.0	54683.390	4.0
363.3145	24.01	-4.04	39877.280	3.5	67393.800	3.5
363.3310	41.01	.35	15970.189	0.0	43493.302	0.0
363.3319	25.00	-3.01	37789.930	2.5	65305.130	3.5
363.3331	27.00	-1.58	18389.570	1.5	45904.680	1.5
363.3386	24.00	-3.46	33113.270	4.0	60627.960	4.0
363.3400	58.01	-1.72	0.000	0.0	27522.431	0.0
363.3490	40.01	.36	14034.408	0.0	41556.157	0.0
363.3509	24.00	-3.89	21856.940	3.0	49370.700	3.0
363.3560	68.00	-.69	0.000	0.0	27521.219	0.0
363.3591	28.01	-3.69	93390.060	2.5	120903.200	3.5
363.3636	26.00	-4.61	24506.902	2.0	52019.706	1.0
363.3636	22.00	-4.62	16458.710	6.0	43971.513	5.0
363.3651	28.01	-3.00	101357.200	4.5	128869.690	5.5
363.3664	10.00	-3.77	135888.717	1.0	163401.301	0.0
363.3706	23.00	-2.90	18126.270	1.5	45638.540	1.5
363.3710	41.00	-1.30	80.658	0.0	27600.741	0.0
363.3819	26.00	-1.62	24118.815	4.0	51630.230	5.0
363.3861	26.00	-4.66	26623.726	2.0	54134.820	2.0
363.3876	23.00	-2.38	18302.270	3.5	45813.250	4.5
363.3920	44.00	.03	17018.737	0.0	44537.229	0.0
363.3968	23.00	-2.66	11100.650	4.5	38610.940	3.5
363.3987	22.01	-3.54	24961.340	1.5	52471.480	2.5
363.3993	23.03	-3.04	258288.800	1.0	285798.900	2.0
363.4003	24.01	-2.20	39877.280	3.5	67387.300	2.5
363.4032	28.01	-3.63	101357.200	4.5	128867.000	3.5
363.4046	27.02	-2.68	83773.400	1.5	111283.100	.5
363.4048	24.01	-3.65	39824.520	4.5	67334.200	3.5
363.4072	25.00	-2.71	34845.260	.5	62354.760	1.5
363.4145	23.01	-2.62	25191.080	2.0	52700.030	2.0
363.4150	40.00	-.76	1209.863	0.0	28726.614	0.0
363.4163	28.00	-3.00	28068.091	4.0	55576.905	3.0
363.4166	24.01	-4.82	53923.570	4.5	81432.360	3.5
363.4200	2.00	-1.11	169087.000	0.0	196603.372	0.0
363.4230	27.01	-3.37	40694.900	4.0	68203.200	5.0
363.4290	62.01	-.23	1451.835	0.0	28967.526	0.0
363.4295	24.00	-3.11	31352.420	1.0	58860.230	2.0
363.4440	41.00	-.42	8711.012	0.0	36225.567	0.0
363.4455	26.00	-4.46	26406.490	1.0	53913.090	2.0
363.4457	18.00	-2.70	93750.639	1.0	121257.227	1.0
363.4474	23.00	-3.44	23519.840	4.5	51026.300	5.5
363.4511	26.00	-3.84	23192.486	2.0	50698.666	2.0
363.4560	28.01	-4.63	100389.520	2.5	127895.330	3.5
363.4567	10.01	-1.82	280268.960	2.5	307774.710	1.5
363.4587	24.02	-4.83	131118.100	3.0	158623.700	4.0
363.4628	28.01	-2.84	101357.200	4.5	128862.490	4.5
363.4664	24.00	-2.02	31355.210	2.0	58860.230	2.0
363.4700	46.00	.09	6533.259	0.0	34045.846	0.0
363.4706	29.01	-3.58	118991.500	4.0	146496.200	3.0
363.4708	27.00	-2.77	23207.760	1.5	50712.450	2.5
363.4713	24.00	-3.00	27597.220	3.0	55101.870	3.0
363.4733	24.00	-4.77	27300.190	1.0	54804.690	1.0
363.4760	64.01	-.04	9033.642	0.0	36545.775	0.0
363.4813	18.01	-1.56	144709.910	.5	172213.800	1.5
363.4857	24.00	-3.34	27703.840	4.0	55207.400	4.0
363.4910	18.03	-2.97	268171.380	1.5	295674.540	.5
363.4930	44.00	-.23	2016.438	0.0	29527.284	0.0
363.4930	62.01	-1.52	322.630	0.0	27833.476	0.0
363.4942	28.00	-4.30	3409.925	2.0	30912.838	1.0
363.4988	24.00	-.37	33113.270	4.0	60615.840	3.0
363.4997	11.02	-2.95	444748.100	1.5	472250.600	.5
363.5041	23.00	-2.81	18198.080	2.5	45700.250	2.5
363.5063	25.02	-3.03	109780.400	2.5	137282.400	2.5
363.5080	26.00	-1.82	29356.780	2.0	56858.650	2.0
363.5098	18.01	-4.05	132737.610	.5	160239.350	1.5
363.5140	42.01	.11	25165.146	0.0	52674.403	0.0
363.5142	29.01	-4.00	118484.000	3.0	145985.400	2.0
363.5213	22.00	-3.97	386.874	4.0	27887.740	3.0
363.5214	28.01	-3.70	101366.140	2.5	128867.000	3.5
363.5225	28.00	-4.50	29320.782	3.0	56821.553	3.0
363.5241	24.00	-1.81	31987.060	4.0	59487.710	4.0
363.5277	26.00	-3.13	23110.925	3.0	50611.303	3.0
363.5278	24.00	.33	0.000	3.0	27500.370	3.0
363.5300	92.00	-.58	3710.246	0.0	31218.292	0.0
363.5320	41.00	.03	12421.258	0.0	39929.153	0.0
363.5353	22.01	-1.65	9930.740	1.5	37430.550	.5
363.5394	24.00	-2.74	23163.270	0.0	50662.770	1.0
363.5400	92.01	-1.93	0.000	0.0	27507.289	0.0
363.5409	24.01	-3.88	36101.820	3.5	63601.200	3.5
363.5419	28.00	-2.04	31031.042	3.0	58530.350	3.0
363.5430	42.00	.72	16615.449	0.0	44122.511	0.0
363.5430	72.00	-1.39	5565.369	0.0	33072.431	0.0
363.5463	22.00	.35	0.000	2.0	27498.975	3.0
363.5520	44.00	-.71	9517.587	0.0	37023.968	0.0
363.5526	30.02	.24	237506.800	1.0	265005.300	2.0
363.5590	25.01	-2.58	53781.700	3.0	81279.710	4.0
363.5604	8.01	-4.18	233544.090	1.5	261042.000	2.5
363.5639	22.01	-3.25	24961.340	1.5	52458.980	1.5
363.5640	18.01	-2.01	159393.310	1.5	186890.950	2.5
363.5699	25.00	-.78	38120.180	4.5	65617.370	3.5
363.5762	28.01	-4.31	101357.200	4.5	128853.910	4.5
363.5813	26.00	-.57	22845.856	5.0	50342.180	6.0
363.5829	23.00	-3.53	23088.060	1.5	50584.270	1.5
363.5869	24.00	-1.46	31364.330	3.0	58860.230	2.0
363.5883	28.01	-4.88	66571.340	2.5	94067.140	1.5
363.5916	29.00	-.78	45813.471	0.0	73316.857	0.0
363.5965	23.00	-4.19	14514.750	1.5	42009.930	2.5
363.6068	29.01	-2.72	118484.000	3.0	145978.400	3.0
363.6131	28.01	-1.95	94067.140	1.5	121561.060	.5
363.6147	27.02	-2.69	83789.300	.5	111283.100	.5
363.6155	26.00	-1.79	25899.974	4.0	53393.715	4.0
363.6163	26.00	-2.13	17726.985	2.0	45220.662	3.0
363.6184	28.01	-3.83	102742.740	1.5	130236.260	2.5
363.6184	25.00	-1.25	34250.520	5.5	61744.040	5.5
363.6190	24.00	-1.95	20520.920	3.0	48014.400	4.0
363.6200	77.00	-.52	11775.998	0.0	39277.236	0.0
363.6221	26.00	-1.06	28604.610	2.0	56097.850	3.0
363.6233	27.00	-2.22	26232.050	3.5	53725.200	4.5
363.6250	71.00	-1.66	0.000	0.0	27500.859	0.0
363.6265	28.01	-4.39	106369.300	1.5	133862.210	1.5
363.6294	28.00	-1.82	29481.020	4.0	56973.707	5.0
363.6336	25.00	-4.79	25265.740	5.5	52758.110	4.5
363.6450	40.01	-.81	3710.246	0.0	31209.593	0.0
363.6481	26.00	-2.60	26339.682	2.0	53830.960	3.0
363.6498	26.00	-5.92	12560.933	3.0	40052.080	2.0
363.6499	26.00	-3.34	32873.623	4.0	60364.760	3.0
363.6556	24.00	-.51	20523.690	4.0	48014.400	4.0
363.6589	24.00	.36	20523.940	5.0	48014.400	4.0
363.6608	26.01	-4.16	33466.500	4.5	60956.820	3.5
363.6651	26.00	-1.23	24335.764	2.0	51825.758	3.0
363.6670	57.00	-1.08	1048.548	0.0	28546.231	0.0
363.6712	27.00	-1.48	15774.040	1.5	43263.570	1.5
363.6736	29.01	-4.54	118532.150	2.0	146021.500	3.0
363.6752	25.01	-3.60	44521.520	4.0	72010.750	4.0
363.6840	26.01	-1.86	72429.740	.5	99918.300	1.5
363.6851	26.00	-2.83	26623.726	2.0	54112.203	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
363.6856	22.00	-2.03	17369.590	1.0	44858.030	1.0
363.6858	28.01	-3.86	106369.300	1.5	133857.730	.5
363.6893	26.01	-4.17	33501.320	3.5	60989.480	4.5
363.6950	28.01	-3.54	101366.140	2.5	128853.870	2.5
363.6954	19.01	-1.37	187531.100	1.0	215018.800	1.0
363.6960	41.00	.01	12259.943	0.0	39755.434	0.0
363.6989	26.00	-1.23	20874.482	3.0	48361.920	4.0
363.6990	28.01	-4.30	66579.710	1.5	94067.140	1.5
363.7000	26.00	-3.32	26479.366	1.0	53966.720	2.0
363.7038	28.00	-1.54	31031.042	3.0	58518.110	4.0
363.7044	25.01	-4.00	39808.140	3.0	67295.160	4.0
363.7048	26.00	-2.48	24338.766	3.0	51825.758	3.0
363.7060	75.00	-.92	13711.778	0.0	41206.513	0.0
363.7075	26.00	-4.58	29371.860	3.0	56858.650	2.0
363.7120	24.00	-4.13	27500.370	3.0	54986.820	3.0
363.7150	57.01	-1.29	5646.026	0.0	33140.080	0.0
363.7160	68.00	-.68	5081.424	0.0	32575.403	0.0
363.7163	27.00	-4.59	24627.790	4.5	52113.910	5.5
363.7199	29.01	-2.62	120875.850	2.0	148361.700	1.0
363.7217	23.00	-3.12	16361.450	1.5	43847.160	2.5
363.7251	26.00	-1.88	19621.004	5.0	47106.463	4.0
363.7270	66.01	-.78	4274.849	0.0	31767.996	0.0
363.7310	27.00	-2.03	18775.010	.5	46260.020	1.5
363.7347	23.00	-2.56	18258.890	2.5	45743.620	3.5
363.7356	28.01	-3.21	101247.370	2.5	128732.030	1.5
363.7397	23.00	-3.81	14514.750	1.5	41999.100	1.5
363.7423	27.00	-3.92	16467.900	4.5	43952.060	5.5
363.7470	44.00	.01	13631.121	0.0	41122.757	0.0
363.7520	42.00	-1.18	11050.080	0.0	38541.338	0.0
363.7540	41.00	-.01	12017.970	0.0	39509.077	0.0
363.7570	90.01	-1.36	6613.917	0.0	34104.797	0.0
363.7590	72.00	-1.66	5565.369	0.0	33056.098	0.0
363.7735	26.00	-2.62	20641.110	4.0	48122.913	3.0
363.7750	58.01	-.98	3548.931	0.0	31038.451	0.0
363.7760	70.01	-.33	21293.585	0.0	48783.029	0.0
363.7797	24.01	-4.74	47372.750	1.5	74854.080	.5
363.7813	24.00	-1.83	33906.650	1.0	61387.860	0.0
363.7830	51.00	-.66	18309.257	0.0	45798.172	0.0
363.7840	75.00	-.44	11534.025	0.0	39022.865	0.0
363.7857	26.00	-2.62	23711.443	4.0	51192.320	4.0
363.7928	29.01	-3.06	121078.960	3.0	148559.300	2.0
363.7967	22.00	-2.98	0.000	2.0	27480.047	3.0
363.7985	28.01	-2.61	101357.200	4.5	128837.110	5.5
363.7996	22.00	-5.25	6598.749	2.0	34078.580	3.0
363.8020	44.00	-.52	14921.641	0.0	42409.120	0.0
363.8027	16.01	-1.49	131186.860	2.5	158666.450	1.5
363.8032	22.00	-7.23	14105.680	3.0	41585.240	3.0
363.8039	25.00	-2.23	38669.600	3.5	66149.100	3.5
363.8151	26.00	-4.43	22996.661	4.0	50475.320	4.0
363.8200	42.00	.11	18228.600	0.0	45714.720	0.0
363.8200	92.00	.32	3710.246	0.0	31196.366	0.0
363.8230	24.00	-1.14	33040.100	2.0	60518.160	3.0
363.8230	24.00	-1.06	33040.100	2.0	60518.160	3.0
363.8280	58.01	-.53	5726.684	0.0	33212.199	0.0
363.8300	26.00	.16	22249.430	3.0	49726.964	4.0
363.8340	27.00	-3.10	20500.710	1.5	47977.940	.5
363.8349	26.00	-3.33	21038.987	2.0	48516.150	1.0
363.8410	69.00	-1.03	0.000	0.0	27484.533	0.0
363.8449	26.01	-4.43	49101.090	.5	76577.500	.5
363.8461	24.01	-3.25	39877.280	3.5	67353.600	4.5
363.8483	22.00	-3.28	11639.804	3.0	39115.958	4.0
363.8488	21.00	-6.24	11677.310	4.5	39153.420	4.5
363.8524	14.02	-.74	227081.190	1.0	254557.030	2.0
363.8541	26.01	-1.50	73016.330	3.5	100492.040	3.5
363.8544	24.00	-4.24	28679.430	1.0	56155.120	2.0
363.8640	90.00	-.44	8711.012	0.0	36193.808	0.0
363.8702	8.02	.30	378408.500	2.0	405883.000	3.0
363.8720	40.00	-1.37	4355.506	0.0	31837.698	0.0
363.8790	41.00	-1.16	2742.356	0.0	30224.019	0.0
363.8790	78.00	-1.26	10001.532	0.0	37483.195	0.0
363.8894	14.02	-.57	227084.210	2.0	254557.260	3.0
363.8908	24.00	-4.43	28682.180	2.0	56155.120	2.0
363.8924	14.02	-1.47	227084.210	2.0	254557.030	2.0
363.8936	25.01	-3.06	43850.420	2.0	71323.150	2.0
363.8943	25.00	-4.38	25285.430	4.5	52758.110	4.5
363.9019	23.00	-.57	14548.830	2.5	42020.930	3.5
363.9021	27.00	-3.51	26232.050	3.5	53704.140	2.5
363.9050	26.01	-2.44	72352.170	3.5	99824.040	2.5
363.9108	25.02	-2.30	85173.880	1.5	112645.310	.5
363.9144	25.00	-3.38	17052.290	4.5	44523.450	3.5
363.9148	28.01	-4.08	92325.850	3.5	119796.980	2.5
363.9205	17.01	-.47	149952.400	1.0	177423.100	1.0
363.9287	28.01	-.97	103663.500	1.5	131133.580	2.5
363.9287	27.00	-3.97	26232.050	3.5	53702.130	3.5
363.9330	41.00	.39	12905.203	0.0	40382.788	0.0
363.9441	14.02	-.41	227088.720	3.0	254557.640	4.0
363.9442	27.00	-.69	15774.040	1.5	43242.950	2.5
363.9450	90.01	-.95	6129.972	0.0	33606.651	0.0
363.9479	9.00	-2.70	102680.435	1.5	130149.070	.5
363.9491	14.02	-1.47	227088.720	3.0	254557.260	3.0
363.9510	45.00	-.35	10888.765	0.0	38364.991	0.0
363.9522	14.02	-3.01	227088.720	3.0	254557.030	2.0
363.9580	82.00	-.58	7743.122	0.0	35218.820	0.0
363.9594	25.00	-2.64	37420.240	5.5	64888.000	4.5
363.9650	24.00	-3.31	23933.900	4.0	51401.240	5.0
363.9677	24.01	-3.75	39877.280	3.5	67344.420	2.5
363.9706	8.01	-2.80	234402.480	1.5	261869.400	2.5
363.9754	21.01	-4.16	4883.420	3.0	32349.980	3.0
363.9789	26.02	-3.75	166144.630	2.0	193610.920	3.0
363.9806	24.00	.50	20519.600	6.0	47985.760	5.0
363.9833	18.01	.06	172213.800	1.5	199679.760	2.5
363.9861	25.00	-4.90	23549.200	2.5	51014.950	3.5
363.9890	69.01	-2.86	161.315	0.0	27634.673	0.0
364.0029	23.00	-2.91	18174.060	1.5	45638.540	1.5
364.0067	22.00	-1.21	19573.968	4.0	47038.160	3.0
364.0093	25.00	-2.09	34250.520	5.5	61714.520	4.5
364.0103	25.00	-1.97	35041.370	3.5	62505.290	3.5
364.0180	64.01	-.68	4758.794	0.0	32229.963	0.0
364.0228	24.00	-2.89	21847.880	2.0	49310.860	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
364.0240	66.01	-.23	4678.136	0.0	32146.852	0.0
364.0288	22.00	-1.05	18695.230	4.0	46157.760	5.0
364.0295	10.01	-3.11	276511.820	.5	303974.290	1.5
364.0329	22.00	-4.67	6742.757	4.0	34204.971	4.0
364.0330	76.00	.11	14760.326	0.0	42230.363	0.0
364.0347	23.00	-2.92	16449.850	2.5	43911.930	3.5
364.0349	24.00	-2.19	20523.690	4.0	47985.760	5.0
364.0382	24.00	-.61	20523.940	5.0	47985.760	5.0
364.0392	26.00	-1.61	21999.132	4.0	49460.876	5.0
364.0429	25.00	-2.71	35769.970	3.5	63231.430	4.5
364.0443	26.02	-3.95	166144.630	2.0	193605.990	2.0
364.0461	9.00	-1.68	102680.435	1.5	130141.650	1.5
364.0477	23.00	-2.98	14548.830	2.5	42009.930	2.5
364.0489	28.01	-4.50	101366.140	2.5	128827.150	3.5
364.0513	22.01	-3.70	39476.870	2.5	66937.700	2.5
364.0590	25.00	-2.97	38934.940	2.5	66395.190	2.5
364.0620	42.00	.32	20809.640	0.0	48277.489	0.0
364.0640	44.00	-.12	12743.888	0.0	40211.566	0.0
364.0640	41.00	-1.31	80.658	0.0	27548.356	0.0
364.0690	58.01	-.93	6452.602	0.0	33919.923	0.0
364.0696	25.01	-4.75	55371.300	3.0	82830.750	4.0
364.0802	27.00	-.98	23152.570	3.5	50611.220	3.5
364.0917	23.01	-3.07	22273.540	1.0	49731.320	2.0
364.0950	92.01	-1.36	1693.808	0.0	29159.167	0.0
364.0965	24.00	-1.50	33060.740	3.0	60518.160	3.0
364.0965	24.00	-2.85	33060.740	3.0	60518.160	3.0
364.0990	42.00	.09	20003.065	0.0	47468.123	0.0
364.0992	25.01	-3.89	53597.130	2.0	81054.350	2.0
364.1004	24.00	-3.24	20517.400	2.0	47974.530	3.0
364.1019	9.02	-4.42	416168.300	1.5	443625.310	2.5
364.1031	24.01	-4.31	39877.280	3.5	67334.200	3.5
364.1078	23.00	-2.64	16361.450	1.5	43818.020	1.5
364.1084	29.01	-3.18	119039.680	2.0	146496.200	3.0
364.1112	22.00	-4.71	19573.968	4.0	47030.280	3.0
364.1141	28.01	-3.87	101366.140	2.5	128822.230	1.5
364.1220	26.01	-3.21	33501.320	3.5	60956.820	3.5
364.1265	24.01	-3.80	40415.340	.5	67870.500	1.5
364.1271	26.02	-4.54	166144.630	2.0	193599.740	1.0
364.1335	22.01	-.58	9975.920	1.5	37430.550	.5
364.1339	12.02	-1.65	535179.600	2.0	562634.200	1.0
364.1354	25.01	-3.73	53597.130	2.0	81051.620	3.0
364.1390	64.01	.11	10324.163	0.0	37786.204	0.0
364.1403	25.00	-1.70	34938.700	4.5	62392.820	4.5
364.1410	74.01	.04	8630.355	0.0	36092.245	0.0
364.1429	24.00	-2.98	21856.940	3.0	49310.860	3.0
364.1440	26.00	-3.96	23244.826	1.0	50698.666	2.0
364.1470	24.00	-1.68	20520.920	3.0	47974.530	3.0
364.1530	57.00	-.38	1048.548	0.0	28509.533	0.0
364.1631	28.00	-4.22	2216.519	2.0	29668.918	3.0
364.1635	28.01	-4.37	67880.160	2.5	95332.530	2.5
364.1671	28.01	-4.48	106283.160	2.5	133735.260	2.5
364.1693	29.00	-1.26	43716.376	0.0	71176.132	0.0
364.1708	28.01	-4.80	106283.160	2.5	133734.980	3.5
364.1778	27.00	-1.01	16470.600	1.5	43921.890	2.5
364.1782	25.02	-3.47	121117.140	3.5	148568.400	2.5
364.1819	29.01	-2.47	95565.650	4.0	123016.630	3.0
364.1838	24.00	-.91	20523.690	4.0	47974.530	3.0
364.1913	23.00	-2.79	14548.830	2.5	41999.100	1.5
364.1963	25.02	-3.94	115711.600	4.5	143161.500	4.5
364.2006	26.01	-2.74	72238.630	2.5	99688.200	3.5
364.2034	25.02	-4.95	149234.400	2.5	176683.760	2.5
364.2060	73.00	-.89	5565.369	0.0	33022.358	0.0
364.2089	26.01	-4.42	53698.700	2.0	81147.650	2.0
364.2200	26.00	-1.44	27543.000	1.0	54991.110	1.0
364.2200	42.00	.05	20809.640	0.0	48265.573	0.0
364.2219	22.00	-3.13	21588.496	4.0	49036.460	4.0
364.2250	90.00	-.88	0.000	0.0	27455.556	0.0
364.2316	10.02	-2.80	412313.110	1.0	439760.350	0.0
364.2387	28.00	-2.37	16017.317	0.0	43464.019	1.0
364.2447	29.01	-3.03	118532.150	2.0	145978.400	3.0
364.2481	25.00	-2.59	35041.370	3.5	62487.360	2.5
364.2494	26.00	-2.86	26479.366	1.0	53925.260	1.0
364.2514	28.00	-3.66	29320.782	3.0	56766.523	4.0
364.2536	22.00	-1.76	21469.494	3.0	48915.070	2.0
364.2541	9.02	-4.71	416185.420	2.5	443630.960	3.5
364.2608	10.01	-1.52	291495.040	2.5	318940.080	1.5
364.2609	28.01	-4.77	107082.210	2.5	134527.240	3.5
364.2670	24.01	-4.19	40415.340	.5	67859.910	.5
364.2675	22.00	.46	170.132	3.0	27614.667	4.0
364.2724	23.00	-3.76	23210.560	2.5	50654.720	2.5
364.2760	62.01	-1.18	4355.506	0.0	31807.218	0.0
364.2792	21.01	.12	0.000	1.0	27443.650	2.0
364.2812	29.01	-3.41	118484.000	3.0	145927.500	2.0
364.2831	25.02	-4.10	121117.140	3.5	148560.500	4.5
364.2852	24.00	-.74	33060.740	3.0	60503.940	4.0
364.2876	26.00	-4.41	19562.435	4.0	47005.455	5.0
364.2922	26.01	-4.41	72130.440	4.5	99573.110	4.5
364.2973	29.01	-1.74	120919.410	1.0	148361.700	1.0
364.2990	75.00	-1.78	11695.340	0.0	39145.319	0.0
364.3006	25.00	-1.62	34343.900	4.5	61785.940	3.5
364.3096	23.00	-2.63	18258.890	2.5	45700.250	2.5
364.3097	23.00	-2.84	18302.270	3.5	45743.620	3.5
364.3107	25.02	-3.25	109841.120	3.5	137282.400	2.5
364.3107	18.00	-2.54	93750.639	1.0	121191.920	2.0
364.3121	28.01	-4.55	110573.360	2.5	138014.530	2.5
364.3169	27.00	-1.29	23152.570	3.5	50593.380	4.5
364.3170	78.00	-.21	18470.572	0.0	45919.195	0.0
364.3172	23.00	-2.60	18372.460	3.5	45813.250	4.5
364.3176	27.00	-.50	16470.600	1.5	43911.360	1.5
364.3176	24.01	-2.31	20024.180	3.5	47464.940	4.5
364.3216	23.00	-3.54	18198.080	2.5	45638.540	1.5
364.3319	28.01	-1.24	103663.500	1.5	131103.180	2.5
364.3340	41.00	.01	12905.203	0.0	40352.545	0.0
364.3344	8.00	-2.41	101155.422	1.0	128594.916	2.0
364.3425	25.01	-2.94	53781.700	3.0	81220.580	3.0
364.3510	90.00	-.54	6291.287	0.0	33737.349	0.0
364.3538	22.01	-3.74	25193.040	2.5	52631.070	3.5
364.3595	27.01	-2.22	24074.600	2.0	51512.200	3.0
364.3618	26.00	-3.67	23711.443	4.0	51148.870	3.0

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OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
364.3662	26.01	-3.84	44915.070	3.5	72352.170	3.5
364.3663	28.01	-4.07	101366.140	2.5	128803.230	2.5
364.3666	26.01	-2.39	73054.970	2.5	100492.040	3.5
364.3704	25.00	-4.10	37148.660	5.5	64585.440	4.5
364.3706	8.01	-4.11	248514.230	1.5	275951.000	1.5
364.3706	8.01	-3.22	248514.230	1.5	275951.000	2.5
364.3708	26.00	-1.38	21038.987	2.0	48475.740	3.0
364.3720	41.00	.29	15163.614	0.0	42608.094	0.0
364.3723	29.01	-1.29	121078.960	3.0	148515.600	4.0
364.3759	24.00	-3.31	27382.180	2.0	54818.550	2.0
364.3772	21.01	-.33	30815.650	1.0	58251.920	2.0
364.3785	26.00	-2.01	26224.961	3.0	53661.130	3.0
364.3816	26.00	-3.10	12968.552	2.0	40404.492	1.0
364.3817	22.00	-2.75	21588.496	4.0	49024.430	3.0
364.3834	25.02	-3.11	115774.000	3.5	143209.800	2.5
364.3861	23.00	-.71	14514.750	1.5	41950.350	2.5
364.3890	66.01	-1.26	0.000	0.0	27443.199	0.0
364.3928	10.01	-.59	224087.020	1.5	251522.120	1.5
364.3937	28.00	-.84	29668.918	3.0	57103.946	3.0
364.3970	28.01	-4.79	94705.930	3.5	122140.710	4.5
364.4050	22.00	-1.80	17423.853	2.0	44858.030	1.0
364.4111	26.02	-4.80	93392.450	3.0	120826.170	2.0
364.4186	26.01	-4.51	36126.410	1.5	63559.560	.5
364.4240	92.00	-.37	564.603	0.0	28005.167	0.0
364.4251	18.01	-4.77	174820.930	.5	202253.590	1.5
364.4259	23.00	-2.87	16572.540	3.5	44005.140	4.5
364.4270	28.01	-4.14	106620.530	3.5	134053.050	2.5
364.4290	58.01	-1.03	5646.026	0.0	33086.213	0.0
364.4307	24.00	-4.47	35398.020	4.0	62830.260	5.0
364.4350	90.01	-1.08	10566.135	0.0	38005.870	0.0
364.4352	29.01	-3.61	118991.500	4.0	146423.400	4.0
364.4360	72.01	-.57	6291.287	0.0	33730.947	0.0
364.4413	20.00	-.17	15315.943	2.0	42747.387	3.0
364.4423	23.00	-1.22	10892.500	3.5	38323.870	4.5
364.4586	26.00	-3.45	20874.482	3.0	48304.623	2.0
364.4611	24.00	-2.42	31987.060	4.0	59417.010	3.0
364.4662	25.02	-3.35	115780.230	2.5	143209.800	2.5
364.4673	24.01	-2.33	19798.010	2.5	47227.500	3.5
364.4718	22.00	-4.65	14028.470	2.0	41457.620	3.0
364.4720	23.00	-1.58	11100.650	4.5	38529.780	4.5
364.4751	24.00	-.63	33762.740	6.0	61191.640	6.0
364.4768	20.00	-.92	15315.943	2.0	42744.716	2.0
364.4772	27.00	-4.21	24733.280	2.5	52162.020	3.5
364.4797	26.00	-1.63	26140.164	3.0	53568.720	2.0
364.4858	10.01	-.01	254292.190	.5	281720.280	1.5
364.4877	18.02	-3.88	225147.930	2.0	252575.880	1.0
364.4940	41.00	-.35	9356.272	0.0	36791.566	0.0
364.4995	20.00	-2.09	15315.943	2.0	42743.002	1.0
364.5003	10.03	.19	643975.000	2.5	671402.000	2.5
364.5005	27.00	-4.17	23184.230	2.5	50611.220	3.5
364.5066	26.00	-1.42	29356.780	2.0	56783.306	3.0
364.5067	26.00	-3.54	22996.661	4.0	50423.185	4.0
364.5089	26.00	-2.61	24335.764	2.0	51762.120	2.0
364.5115	27.00	-1.59	23152.570	3.5	50578.730	3.5
364.5176	8.01	-4.23	248185.300	2.5	275611.000	1.5
364.5188	27.00	-4.25	15774.040	1.5	43199.650	2.5
364.5189	8.02	-.45	378408.500	2.0	405834.100	2.0
364.5230	58.01	-.59	5404.054	0.0	32837.165	0.0
364.5232	29.00	-.97	45894.129	0.0	73327.225	0.0
364.5290	62.01	-1.20	1451.835	0.0	28884.495	0.0
364.5310	21.01	-.40	177.630	3.0	27602.320	3.0
364.5390	62.01	-1.14	2661.698	0.0	30093.605	0.0
364.5410	66.01	.28	806.575	0.0	28238.332	0.0
364.5420	57.01	-1.07	0.000	0.0	27431.681	0.0
364.5427	22.00	-5.57	6556.828	1.0	33980.639	2.0
364.5434	27.00	-1.53	16778.160	2.5	44201.920	2.5
364.5450	58.01	-.93	2581.041	0.0	30012.497	0.0
364.5461	28.00	-2.75	30163.140	2.0	57586.700	2.0
364.5467	26.00	-3.55	23110.925	3.0	50534.435	3.0
364.5488	26.00	-1.78	24338.766	3.0	51762.120	2.0
364.5496	26.00	-4.24	24180.848	3.0	51604.146	3.0
364.5576	24.00	-2.33	20519.600	6.0	47942.290	6.0
364.5591	26.01	-3.73	44929.590	2.5	72352.170	3.5
364.5620	64.01	-.34	3387.616	0.0	30817.792	0.0
364.5667	24.01	-3.59	50687.630	2.5	78109.640	1.5
364.5766	10.01	-3.38	280473.580	1.5	307894.840	2.5
364.5780	26.01	-3.71	33466.500	4.5	60887.660	5.5
364.5822	26.00	-.43	25091.620	0.0	52512.460	1.0
364.5841	18.02	-3.50	225155.180	1.0	252575.880	1.0
364.5900	62.01	-1.53	1451.835	0.0	28879.905	0.0
364.5902	23.01	-1.43	19166.190	1.0	46586.430	0.0
364.5969	22.00	-3.15	16961.420	3.0	44381.160	4.0
364.6078	24.01	-3.80	42898.420	2.5	70317.040	2.5
364.6091	26.00	-4.07	23192.486	2.0	50611.303	3.0
364.6110	44.00	-.20	12743.888	0.0	40170.378	0.0
364.6153	24.00	-1.90	20523.940	5.0	47942.290	6.0
364.6190	64.01	.32	1855.123	0.0	29281.011	0.0
364.6198	22.00	-2.81	0.000	2.0	27418.015	2.0
364.6256	22.00	-4.99	6661.003	3.0	34078.580	3.0
364.6297	27.00	-4.79	21780.470	5.5	49197.740	4.5
364.6423	23.02	-2.34	61777.150	1.5	89193.470	1.5
364.6429	10.01	-4.65	276511.820	.5	303928.100	.5
364.6520	74.01	.28	14518.354	0.0	41941.760	0.0
364.6584	28.01	-4.31	99442.860	4.5	126857.970	5.5
364.6606	8.01	-1.73	234454.450	2.5	261869.400	2.5
364.6611	8.01	-3.93	233544.090	1.5	260959.000	1.5
364.6628	25.01	-3.71	53805.800	4.0	81220.580	3.0
364.6659	24.00	-2.10	25177.390	4.0	52591.940	5.0
364.6693	25.00	-3.28	17282.000	3.5	44696.290	2.5
364.6700	69.00	-1.36	0.000	0.0	27422.053	0.0
364.6703	10.02	-2.57	412293.590	0.0	439707.810	1.0
364.6769	23.00	-1.41	14514.750	1.5	41928.470	.5
364.6781	22.00	-1.22	18893.990	3.0	46007.620	4.0
364.6790	68.00	-1.04	7097.862	0.0	34519.238	0.0
364.6799	25.01	-2.91	43850.420	2.0	71263.920	1.0
364.6839	8.02	.03	378420.900	1.0	405834.100	2.0
364.6861	23.01	-2.85	25191.080	2.0	52604.110	1.0
364.6957	27.00	-4.31	23855.620	4.5	51267.930	4.5
364.6961	28.01	-1.51	103663.500	1.5	131075.780	1.5
364.6970	58.01	-.53	2339.068	0.0	29759.091	0.0
364.6972	17.01	-1.92	132162.000	3.0	159574.200	2.0
364.7072	26.00	-2.74	29371.860	3.0	56783.306	3.0
364.7078	29.01	-2.31	118991.500	4.0	146402.900	5.0
364.7078	27.00	-.28	18775.010	.5	46186.410	1.5
364.7139	23.00	-2.90	16728.750	4.5	44139.690	5.5
364.7200	24.01	-3.74	38269.670	3.5	65680.150	4.5
364.7259	28.01	-4.65	100475.820	3.5	127885.860	4.5
364.7279	23.00	-3.09	16917.150	5.5	44327.040	6.5
364.7310	41.00	-.21	12905.203	0.0	40322.670	0.0
364.7363	24.01	-2.54	19631.280	1.5	47040.540	2.5
364.7411	26.00	-3.91	12560.933	3.0	39969.830	3.0
364.7424	26.00	-.81	24772.019	1.0	52180.820	1.0
364.7438	10.01	-3.08	280768.520	.5	308177.220	1.5
364.7548	26.00	-2.46	26339.682	2.0	53747.547	3.0
364.7658	27.00	-2.03	1809.330	1.5	29216.370	2.5
364.7665	25.01	-3.64	44899.820	3.0	72306.810	2.0
364.7702	9.02	-3.80	441276.720	2.5	468683.430	2.5
364.7750	58.01	-.03	7420.492	0.0	34834.651	0.0
364.7770	71.00	-.58	4113.534	0.0	31527.543	0.0
364.7799	25.01	-2.93	43339.100	2.0	70745.080	3.0
364.7834	26.00	-1.88	26140.164	3.0	53545.882	3.0
364.7844	26.00	.24	7376.762	4.0	34782.406	5.0
364.7866	10.01	-2.54	281332.550	.5	308738.030	1.5
364.7944	24.00	-1.47	33113.270	4.0	60518.160	3.0
364.7944	24.00	-1.67	33113.270	4.0	60518.160	3.0
364.7950	58.01	.08	8307.725	0.0	35720.381	0.0
364.8049	17.01	-.97	150019.000	0.0	177423.100	1.0
364.8080	28.01	-4.15	72985.650	1.5	100389.520	2.5
364.8170	90.01	-2.19	0.000	0.0	27411.003	0.0
364.8191	29.01	-2.65	121078.960	3.0	148482.000	3.0
364.8253	28.00	-.76	31786.210	3.0	59186.780	3.0
364.8280	23.00	-1.79	15078.250	.5	42480.620	.5
364.8345	26.00	-1.66	26406.490	1.0	53808.370	1.0
364.8383	29.00	-1.35	43716.376	0.0	71125.779	0.0
364.8393	23.00	-2.12	14548.830	2.5	41950.350	2.5
364.8480	64.00	-.70	1693.808	0.0	29102.482	0.0
364.8525	24.00	-1.66	20517.400	2.0	47917.930	2.0
364.8549	28.01	-1.61	103663.500	1.5	131063.850	.5
364.8550	26.01	-1.75	73091.700	4.5	100492.040	3.5
364.8577	25.00	-2.58	34343.900	4.5	61744.040	5.5
364.8610	42.00	-.46	16534.792	0.0	43942.490	0.0
364.8623	6.00	-2.87	61981.820	1.0	89381.610	0.0
364.8658	25.00	-1.71	38934.940	2.5	66334.470	3.5
364.8690	25.00	-.75	37420.240	5.5	64819.530	5.5
364.8763	23.00	-3.99	23353.090	3.5	50751.830	3.5
364.8780	24.00	-2.40	33762.740	6.0	61161.350	5.0
364.8794	22.01	-2.60	12628.770	1.5	40027.280	1.5
364.8810	76.00	-.23	19599.777	0.0	47005.972	0.0
364.8839	29.01	-2.50	108335.430	2.0	135733.600	3.0
364.8858	24.00	-1.74	27703.840	4.0	55101.870	3.0
364.8864	23.00	-3.72	18302.270	3.5	45700.250	2.5
364.8899	22.01	-3.02	12676.990	4.5	40074.710	3.5
364.8916	23.00	-.76	15571.900	2.5	42969.490	1.5
364.8954	23.00	-2.59	16449.850	2.5	43847.160	2.5
364.8994	24.00	-.90	20520.920	3.0	47917.930	2.0
364.9008	30.02	-.62	233610.400	2.0	261007.300	2.0
364.9008	30.02	-1.78	233610.400	2.0	261007.300	2.0
364.9010	22.01	-3.23	4628.610	2.5	32025.500	2.5
364.9048	8.02	-1.63	378408.500	2.0	405805.100	1.0
364.9100	72.00	-1.29	2339.068	0.0	29743.085	0.0
364.9167	24.00	-1.51	27597.220	3.0	54992.930	2.0
364.9181	13.01	-1.02	105424.300	0.0	132819.900	1.0
364.9215	29.01	-3.15	118532.150	2.0	145927.500	2.0
364.9250	90.01	-.85	7259.177	0.0	34662.068	0.0
364.9301	10.02	-4.02	412313.110	1.0	439707.810	1.0
364.9304	26.00	-3.16	0.000	4.0	27394.676	3.0
364.9328	27.00	-2.46	23184.230	2.5	50578.730	3.5
364.9330	26.00	-1.59	24574.655	4.0	51969.140	3.0
364.9393	26.00	-2.43	33412.706	3.0	60806.720	3.0
364.9437	26.01	-2.31	72524.620	1.5	99918.300	1.5
364.9440	64.01	-.06	9356.272	0.0	36757.736	0.0
364.9453	26.02	-4.06	88923.070	6.0	116316.630	5.0
364.9493	25.00	-1.34	35689.980	1.5	63083.240	1.5
364.9509	26.00	-.16	21715.735	5.0	49108.876	4.0
364.9530	62.01	-.75	2984.328	0.0	30385.117	0.0
364.9530	57.00	-.77	0.000	0.0	27400.789	0.0
364.9601	28.01	-4.64	102742.740	1.5	130135.190	1.5
364.9688	26.00	-3.22	23711.443	4.0	51103.237	5.0
364.9730	58.01	-1.18	4436.164	0.0	31835.451	0.0
364.9730	90.00	-.46	5484.711	0.0	32883.998	0.0
364.9768	24.02	-1.00	70291.800	2.0	97683.000	3.0
364.9829	18.00	-3.04	95399.870	1.0	122790.612	0.0
364.9850	41.00	-.84	322.630	0.0	27721.016	0.0
364.9858	24.00	-1.37	27816.880	5.0	55207.400	4.0
364.9886	25.00	-1.84	35114.980	2.5	62505.290	3.5
364.9890	28.01	-4.80	109846.000	3.5	137236.280	3.5
364.9913	28.00	-2.24	29320.782	3.0	56710.889	2.0
365.0019	26.00	-.16	24180.848	3.0	51570.160	3.0
365.0037	28.01	-4.26	94067.140	1.5	121456.320	1.5
365.0090	24.00	-3.48	27820.230	3.0	55209.010	4.0
365.0108	26.00	-3.74	27166.804	4.0	54555.450	4.0
365.0120	58.01	-1.11	2581.041	0.0	29977.401	0.0
365.0127	17.01	-1.93	119809.900	3.0	147198.400	4.0
365.0150	80.00	1.11	43797.033	0.0	71193.167	0.0
365.0180	57.01	-1.49	0.000	0.0	27395.909	0.0
365.0180	59.01	-1.78	0.000	0.0	27395.909	0.0
365.0190	62.01	-1.17	1935.780	0.0	29331.614	0.0
365.0205	29.01	-2.33	119039.680	2.0	146427.600	1.0
365.0247	10.02	-3.23	412320.210	2.0	439707.810	1.0
365.0262	26.00	-4.49	31322.603	3.0	58710.090	3.0
365.0281	26.00	-1.21	19621.004	5.0	47006.351	5.0
365.0320	44.00	-.54	7985.094	0.0	35379.953	0.0
365.0338	24.01	-.88	40202.140	6.5	67589.060	6.5
365.0418	25.01	-3.65	43131.400	2.0	70517.720	3.0
365.0487	25.02	-3.44	115762.600	1.5	143146.400	1.5
365.0530	72.00	.24	19196.490	0.0	46589.773	0.0
365.0541	25.02	-4.72	115711.600	4.5	143097.000	3.5
365.0637	25.01	-4.69	56883.380	1.0	84268.060	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
365.0701	8.02	-.45	378420.900	1.0	405805.100	1.0
365.0770	90.01	-.90	8952.985	0.0	36344.467	0.0
365.0786	24.00	-3.32	27825.450	5.0	55209.010	4.0
365.0810	41.00	-.98	967.890	0.0	28359.072	0.0
365.0855	29.00	-1.66	44522.951	0.0	71913.795	0.0
365.0889	18.01	-1.23	155708.020	.5	183090.810	1.5
365.0950	64.01	.09	9275.615	0.0	36665.746	0.0
365.0965	25.00	-4.50	23549.200	2.5	50931.420	2.5
365.0970	24.00	-2.03	0.000	3.0	27382.180	2.0
365.0999	24.00	-3.74	31393.400	5.0	58775.360	6.0
365.1000	62.01	-1.18	4355.506	0.0	31745.262	0.0
365.1000	74.00	-.44	16857.422	0.0	44247.178	0.0
365.1009	22.00	-5.76	6598.749	2.0	33980.639	2.0
365.1026	26.00	-2.30	25899.974	4.0	53281.735	5.0
365.1061	13.01	-1.14	105438.400	1.0	132819.900	1.0
365.1061	13.01	-.66	105438.400	1.0	132819.900	2.0
365.1093	26.00	-2.21	22996.661	4.0	50377.920	5.0
365.1115	26.00	-3.00	26623.726	2.0	54004.820	3.0
365.1162	9.00	-1.86	102840.376	.5	130221.120	1.5
365.1174	28.01	-4.66	94705.930	3.5	122086.580	3.5
365.1185	24.01	-1.77	59130.510	1.5	86511.080	1.5
365.1186	18.01	-1.37	184191.710	.5	211572.270	1.5
365.1190	41.01	-.06	7420.492	0.0	34808.823	0.0
365.1241	24.00	-3.08	33113.270	4.0	60493.420	3.0
365.1250	27.00	-1.89	16467.900	4.5	43847.980	3.5
365.1266	10.01	-1.82	280797.260	2.5	308177.220	1.5
365.1307	23.00	-2.67	18258.890	2.5	45638.540	1.5
365.1350	42.00	-.86	11050.080	0.0	38437.211	0.0
365.1367	22.00	-2.99	16875.190	2.0	44254.390	3.0
365.1397	28.01	-3.75	103653.030	3.5	131032.010	2.5
365.1399	9.00	-2.63	102680.435	1.5	130059.400	.5
365.1470	26.00	-2.78	22249.430	3.0	49627.861	4.0
365.1501	25.01	-4.45	62572.200	2.0	89950.400	3.0
365.1516	21.01	-4.82	11736.350	0.0	39114.440	1.0
365.1526	28.01	-3.93	108368.050	2.5	135746.060	3.5
365.1633	26.00	-3.88	26627.612	4.0	54004.820	3.0
365.1642	24.01	-2.91	19528.330	.5	46905.520	1.5
365.1660	75.00	-.83	6534.192	0.0	43919.598	0.0
365.1672	28.00	-1.80	9481.020	4.0	56857.933	4.0
365.1678	24.01	-.80	59130.510	1.5	86507.380	2.5
365.1791	29.01	-2.38	119039.680	2.0	146415.700	2.0
365.1799	21.01	-.50	67.680	2.0	27443.650	2.0
365.1840	72.00	-1.23	4516.821	0.0	31900.277	0.0
365.1865	28.00	-3.36	30392.052	1.0	57767.520	1.0
365.1894	22.00	-3.10	11776.806	4.0	39152.057	5.0
365.1904	23.00	-3.05	18438.070	4.5	45813.250	4.5
365.1914	15.01	-3.54	102799.200	1.0	130174.300	2.0
365.1955	26.00	-4.13	26550.466	0.0	53925.260	1.0
365.1960	28.01	-3.40	93528.440	3.5	120903.200	3.5
365.1968	28.01	-4.72	88582.010	1.5	115956.710	2.5
365.1970	75.00	-.12	16212.162	0.0	43594.643	0.0
365.2000	2.00	-2.19	169087.000	0.0	196469.256	0.0
365.2051	13.02	-.60	189876.100	2.5	217250.170	3.5
365.2094	13.02	-.49	189876.420	3.5	217250.170	4.5
365.2094	13.02	-2.03	189876.420	3.5	217250.170	3.5
365.2100	23.00	-4.14	23210.560	2.5	50584.270	1.5
365.2213	24.00	-.57	31352.420	1.0	58725.280	1.0
365.2220	22.00	-4.16	18695.230	4.0	46068.040	4.0
365.2252	26.00	-1.84	24335.764	2.0	51708.330	2.0
365.2260	58.01	-.09	11856.655	0.0	39236.962	0.0
365.2277	25.00	-1.78	35114.980	2.5	62487.360	2.5
365.2320	44.00	-1.86	2661.698	0.0	30041.555	0.0
365.2340	29.00	-.58	43716.376	0.0	71096.083	0.0
365.2366	24.00	-3.20	27300.190	1.0	54671.900	1.0
365.2409	26.00	-2.52	26351.049	5.0	53722.440	5.0
365.2415	25.02	-1.95	121197.050	2.5	148568.400	2.5
365.2431	28.01	-4.31	109148.050	4.5	136519.280	4.5
365.2440	23.00	-2.34	18372.460	3.5	45743.620	3.5
365.2464	8.01	-4.97	211521.980	1.5	238892.960	2.5
365.2512	25.00	-2.08	34343.900	4.5	61714.520	4.5
365.2537	27.00	-1.94	1406.840	2.5	28777.270	3.5
365.2540	90.01	-1.13	7743.122	0.0	35121.330	0.0
365.2562	22.00	-4.20	21469.494	3.0	48839.740	3.0
365.2585	24.00	-.34	31355.210	2.0	58725.280	1.0
365.2615	26.02	-1.66	202200.510	3.0	229570.360	2.0
365.2653	26.00	-2.32	24338.766	3.0	51708.330	2.0
365.2735	29.01	-3.73	118532.150	2.0	145901.100	1.0
365.2812	10.01	-2.61	280768.520	.5	308136.890	1.5
365.2824	6.00	-2.42	61981.820	1.0	89350.100	2.0
365.2836	22.00	-1.41	18525.070	2.0	45893.260	3.0
365.2839	23.00	-3.12	16449.850	2.5	43818.020	1.5
365.2839	25.02	-3.26	115780.230	2.5	143148.400	1.5
365.2860	68.00	-.17	7097.862	0.0	34473.672	0.0
365.2979	9.00	-2.52	102405.710	2.5	129772.830	2.5
365.2984	25.00	-2.36	34343.900	4.5	61710.980	3.5
365.2995	8.02	-.33	378438.100	0.0	405805.100	1.0
365.3024	27.01	-4.69	25317.720	1.0	52684.500	1.0
365.3110	58.01	-.40	2823.013	0.0	30196.949	0.0
365.3134	28.01	-4.30	106369.300	1.5	133735.260	2.5
365.3135	25.01	-4.96	53781.700	3.0	81147.650	2.0
365.3143	28.01	-3.88	101366.140	2.5	128732.030	1.5
365.3210	92.00	-.46	3710.246	0.0	31083.433	0.0
365.3342	25.02	-3.38	115762.600	1.5	143127.000	.5
365.3349	26.00	-2.75	20874.482	3.0	48238.832	2.0
365.3390	73.00	-1.09	12743.888	0.0	40115.726	0.0
365.3397	25.01	-4.32	55371.300	3.0	82735.290	2.0
365.3401	24.00	-4.84	31364.330	3.0	58728.290	4.0
365.3496	22.00	.55	386.874	4.0	27750.124	5.0
365.3501	25.00	-3.68	17451.520	2.5	44814.730	1.5
365.3502	15.01	.27	103630.600	2.0	130993.600	3.0
365.3542	25.01	-4.11	62587.500	3.0	89950.400	3.0
365.3573	25.00	-1.69	34423.270	3.5	61785.940	3.5
365.3583	30.02	-1.05	237642.700	3.0	265005.300	2.0
365.3610	69.01	-.60	8711.012	0.0	36081.202	0.0
365.3617	21.01	-3.56	4987.640	4.0	32349.980	3.0
365.3620	75.00	-.10	23471.338	0.0	50841.453	0.0
365.3662	22.00	-3.99	6842.964	5.0	34204.971	4.0
365.3670	58.01	-.09	3710.246	0.0	31079.987	0.0
365.3700	27.00	-3.92	24733.280	2.5	52095.000	3.5
365.3756	26.00	-2.34	19621.004	5.0	46982.302	6.0
365.3772	24.00	-3.67	31393.400	5.0	58754.580	5.0
365.3826	8.02	-3.21	273080.070	1.0	300440.850	2.0
365.3830	73.00	-1.08	15324.929	0.0	42693.471	0.0
365.3847	24.01	-2.53	40228.440	5.5	67589.060	6.5
365.3910	24.00	-.95	20517.400	2.0	47877.550	1.0
365.4037	12.02	-.97	534776.900	2.0	562136.100	2.0
365.4113	26.02	-3.29	166252.740	3.0	193611.370	4.0
365.4173	26.02	-3.88	166252.740	3.0	193610.920	3.0
365.4191	28.00	-3.11	27414.893	2.0	54772.940	3.0
365.4250	25.00	-1.14	37630.620	4.5	64988.220	3.5
365.4278	25.00	-.74	35725.850	2.5	63083.240	1.5
365.4292	25.02	-3.67	109780.400	2.5	137137.690	1.5
365.4400	44.00	.49	16131.504	0.0	43495.777	0.0
365.4411	24.02	-3.67	131267.300	4.0	158623.700	4.0
365.4437	27.00	-2.03	15774.040	1.5	43130.240	.5
365.4443	25.01	-3.34	52383.720	4.0	79739.880	5.0
365.4443	23.00	-4.34	23519.840	4.5	50876.000	4.5
365.4481	27.00	-2.37	21215.900	.5	48571.770	.5
365.4490	76.00	-.13	15324.929	0.0	42688.528	0.0
365.4507	22.00	-6.02	13981.750	1.0	41337.430	2.0
365.4511	25.01	-3.09	53698.700	2.0	81054.350	2.0
365.4592	22.00	-4.37	0.000	2.0	27355.042	1.0
365.4620	64.01	-.04	564.603	0.0	27927.229	0.0
365.4654	24.00	-1.14	33113.270	4.0	60467.850	5.0
365.4670	23.00	-1.89	18680.120	5.5	46034.580	5.5
365.4673	26.00	-3.21	17927.378	1.0	45281.816	2.0
365.4774	28.01	-2.61	76727.360	5.5	104081.040	4.5
365.4790	28.01	-5.88	29070.930	1.5	56424.490	1.5
365.4830	80.00	.14	43797.033	0.0	71158.087	0.0
365.4831	26.02	-4.72	166252.740	3.0	193605.990	2.0
365.4831	23.00	-1.92	10892.500	3.5	38245.750	3.5
365.4860	62.01	-1.55	2177.753	0.0	29538.582	0.0
365.4870	45.00	-.94	5646.026	0.0	33006.780	0.0
365.4890	92.00	-.46	3790.903	0.0	31151.568	0.0
365.4970	58.01	-.57	2581.041	0.0	29941.047	0.0
365.4972	13.01	-2.32	105467.700	2.0	132819.900	1.0
365.4972	13.01	-1.14	105467.700	2.0	132819.900	2.0
365.4999	13.01	-.39	105467.700	2.0	132819.700	3.0
365.5006	22.00	-5.38	14105.680	3.0	41457.620	3.0
365.5072	25.00	-1.80	35041.370	3.5	62392.820	4.5
365.5128	25.00	-2.89	38669.600	3.5	66020.630	2.5
365.5191	7.00	-4.24	83364.590	2.5	110715.152	3.5
365.5222	24.00	-2.86	31377.960	4.0	58728.290	4.0
365.5252	23.00	-3.88	9824.580	2.5	37174.680	3.5
365.5282	18.01	-.40	160239.350	1.5	187589.230	2.5
365.5327	24.00	-.58	36577.730	4.0	63927.270	5.0
365.5355	26.00	-3.68	19552.474	1.0	46901.808	1.0
365.5448	28.00	-1.80	30619.440	2.0	57968.080	3.0
365.5458	26.01	-2.90	73143.480	3.5	100492.040	3.5
365.5467	26.00	-1.21	22838.320	2.0	50186.814	2.0
365.5516	27.00	-3.31	23855.620	4.5	51203.750	5.5
365.5560	40.01	-1.07	7743.122	0.0	35098.712	0.0
365.5730	70.00	-.38	17905.969	0.0	45260.287	0.0
365.5780	50.00	-.09	17018.737	0.0	44372.681	0.0
365.5799	24.00	-3.58	27300.190	1.0	54646.200	0.0
365.5850	58.01	.18	2500.383	0.0	29853.803	0.0
365.5859	24.00	-2.63	20520.920	3.0	47866.480	4.0
365.5859	29.00	-.85	43474.403	0.0	70827.756	0.0
365.5867	24.02	-4.02	131118.100	3.0	158463.600	3.0
365.5894	24.01	-3.86	47372.750	1.5	74718.050	1.5
365.5917	24.00	-3.89	24056.110	5.0	51401.240	5.0
365.5938	26.00	-3.64	33412.706	3.0	60757.680	4.0
365.5980	41.00	-1.49	80.658	0.0	27433.105	0.0
365.6018	28.00	-4.33	15609.861	2.0	42954.234	2.0
365.6049	18.01	-1.24	158730.210	2.5	186074.350	2.5
365.6150	64.01	-.08	1129.205	0.0	28480.380	0.0
365.6188	27.01	-3.11	24886.500	2.0	52229.600	2.0
365.6200	90.01	-1.06	9678.902	0.0	37029.703	0.0
365.6214	28.01	-4.36	73903.250	.5	101246.160	.5
365.6230	24.00	-1.30	20523.690	4.0	47866.480	4.0
365.6263	24.00	-.64	20523.940	5.0	47866.480	4.0
365.6308	13.01	-2.92	121480.300	3.0	148822.500	2.0
365.6308	13.01	-1.74	121480.300	3.0	148822.500	3.0
365.6308	13.01	-.31	121480.300	3.0	148822.500	4.0
365.6331	27.00	-2.22	16195.680	.5	43537.710	1.5
365.6335	26.00	-1.50	33412.706	3.0	60754.710	4.0
365.6342	26.00	-3.92	23192.486	2.0	50534.435	3.0
365.6388	13.01	-1.37	121480.900	2.0	148822.500	2.0
365.6388	13.01	-.84	121480.900	2.0	148822.500	3.0
365.6429	13.01	-.64	121481.200	1.0	148822.500	2.0
365.6436	25.01	-4.59	55371.300	3.0	82712.550	3.0
365.6498	26.01	-3.22	33466.500	4.5	60807.280	4.5
365.6531	28.00	-2.32	29481.020	4.0	56821.553	3.0
365.6602	16.02	-.83	146696.190	0.0	174036.190	1.0
365.6602	16.02	-1.18	146696.190	0.0	174036.190	1.0
365.6652	10.01	-2.08	280797.260	2.5	308136.890	1.5
365.6654	22.01	-2.88	39476.870	2.5	66816.490	1.5
365.6684	23.00	-2.46	16572.540	3.5	43911.930	3.5
365.6716	22.00	-4.63	11776.806	4.0	39115.958	4.0
365.6723	27.00	-2.98	26450.020	2.5	53789.120	3.5
365.6741	27.01	-2.95	22009.230	4.0	49348.200	4.0
365.6766	26.01	-4.46	36126.410	1.5	63465.190	1.5
365.6785	29.00	-1.18	44522.951	0.0	71869.377	0.0
365.6870	13.01	-4.76	105438.400	1.0	132776.400	0.0
365.6900	76.00	-1.52	2661.698	0.0	30007.264	0.0
365.6950	17.02	-.23	173736.000	.5	201073.400	.5
365.6961	27.00	-2.75	4690.180	2.5	32027.500	3.5
365.6989	24.00	-4.85	27649.710	4.0	54986.820	3.0
365.7041	27.00	-4.15	24733.280	2.5	52070.000	2.5
365.7110	41.00	.10	13066.518	0.0	40410.514	0.0
365.7134	26.01	-1.72	72352.170	3.5	99688.200	3.5
365.7135	26.00	-1.50	19552.474	1.0	46888.494	2.0
365.7162	22.00	-4.63	6742.757	4.0	34078.580	3.0
365.7183	9.00	-2.28	102680.435	1.5	130016.100	2.5
365.7195	23.00	-4.13	14910.040	3.5	42245.610	3.5
365.7245	28.02	-4.08	156524.100	2.0	183859.300	3.0
365.7270	73.00	-.89	13227.833	0.0	40570.632	0.0
365.7286	24.00	-4.64	31393.400	5.0	58726.290	4.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
365.7293	24.00	-4.33	33040.100	2.0	60374.940	2.0
365.7298	22.01	-3.50	39602.900	1.5	66937.700	2.5
365.7300	27.00	-3.18	17233.680	3.5	44568.470	2.5
365.7350	42.00	.28	16534.792	0.0	43876.993	0.0
365.7446	30.02	-.49	234576.000	4.0	261909.700	4.0
365.7472	23.00	-2.96	137.380	2.5	27470.880	3.5
365.7490	73.00	-2.27	1935.780	0.0	29276.935	0.0
365.7590	74.01	-.44	8791.670	0.0	36132.077	0.0
365.7693	28.00	-1.71	31786.210	3.0	59118.060	2.0
365.7830	28.01	-4.74	106283.160	2.5	133613.990	1.5
365.7897	25.00	-1.24	34138.880	6.5	61469.210	5.5
365.7899	24.01	-2.27	42986.730	1.5	70317.040	2.5
365.7918	27.00	-1.77	21215.900	.5	48546.070	1.5
365.7921	22.00	-1.65	18482.860	1.0	45813.010	2.0
365.7990	45.00	-.09	1451.835	0.0	28789.253	0.0
365.8020	26.00	-1.81	24338.766	3.0	51668.175	4.0
365.8031	9.02	-3.39	441276.720	2.5	468606.050	3.5
365.8056	27.00	-2.50	29216.370	2.5	56545.510	2.5
365.8060	90.01	-.76	6936.547	0.0	34273.441	0.0
365.8096	22.00	-.70	170.132	3.0	27498.975	3.0
365.8171	24.01	-1.36	39684.000	3.5	67012.280	2.5
365.8190	64.00	-.55	483.945	0.0	27819.868	0.0
365.8192	24.01	-1.55	39742.360	2.5	67070.480	1.5
365.8237	23.00	-2.59	18372.460	3.5	45700.250	2.5
365.8247	28.01	-4.86	78955.450	1.5	106283.160	2.5
365.8260	58.01	-1.42	2500.383	0.0	29835.783	0.0
365.8262	23.01	-1.84	20280.190	5.0	47607.790	6.0
365.8306	22.00	-3.50	19322.988	2.0	46650.260	3.0
365.8383	17.01	-2.50	119799.000	2.0	147125.700	3.0
365.8506	23.01	-5.16	11908.270	2.0	39234.050	3.0
365.8548	26.00	-2.53	20641.110	4.0	47966.571	3.0
365.8637	24.02	-4.59	131118.100	3.0	158442.900	4.0
365.8731	17.01	-4.12	159574.200	2.0	186898.300	3.0
365.8780	73.00	.05	19519.120	0.0	46850.635	0.0
365.8790	13.02	-.68	189928.490	3.5	217252.150	4.5
365.8803	26.01	-4.37	44915.070	3.5	72238.630	2.5
365.8815	13.02	-.59	189928.680	4.5	217252.150	5.5
365.8815	13.02	-2.32	189928.680	4.5	217252.150	4.5
365.8878	25.02	-4.80	115774.000	3.5	143097.000	3.5
365.8970	25.00	-2.28	35165.050	1.5	62487.360	2.5
365.9160	92.00	-.02	564.603	0.0	27893.280	0.0
365.9195	28.00	-2.61	29481.020	4.0	56801.654	5.0
365.9230	58.01	-.56	1371.178	0.0	28699.332	0.0
365.9259	26.00	-4.19	27559.568	2.0	54879.720	2.0
365.9321	22.00	-3.00	11639.804	3.0	38959.499	4.0
365.9328	22.00	-5.56	6661.003	3.0	33980.639	2.0
365.9334	15.01	-.63	103630.600	2.0	130950.200	2.0
365.9347	30.02	-1.60	237506.800	1.0	264826.300	1.0
365.9353	29.00	-1.07	45894.129	0.0	73221.364	0.0
365.9459	27.00	-4.25	23855.620	4.5	51174.280	5.5
365.9459	28.01	-2.56	94067.140	1.5	121385.800	1.5
365.9519	26.00	-1.15	19788.248	4.0	47106.463	4.0
365.9526	18.00	-3.28	93750.639	1.0	121068.804	1.0
365.9610	28.00	-3.91	27414.893	2.0	54732.425	2.0
365.9610	41.01	.62	15405.586	0.0	42730.902	0.0
365.9620	62.01	-1.30	3468.273	0.0	30793.514	0.0
365.9741	22.01	-.53	12758.150	2.5	40074.710	3.5
365.9842	12.02	-1.23	581734.700	1.0	609050.500	2.0
365.9842	17.01	-1.88	119809.900	3.0	147125.700	3.0
365.9893	10.01	-1.12	252953.540	1.5	280268.960	2.5
365.9970	58.01	-.66	1371.178	0.0	28693.806	0.0
366.0014	27.00	-3.36	23855.620	4.5	51170.140	4.5
366.0035	24.00	-2.61	33113.270	4.0	60427.630	5.0
366.0057	24.00	-4.83	33060.740	3.0	60374.940	2.0
366.0077	28.01	-3.47	77332.470	2.5	104646.520	3.5
366.0104	25.00	-4.95	23549.200	2.5	50863.050	1.5
366.0160	58.01	.12	10162.848	0.0	37484.058	0.0
366.0299	22.00	-1.93	18695.230	4.0	46007.620	4.0
366.0317	26.00	-4.16	23110.925	3.0	50423.185	4.0
366.0370	41.00	-.40	2742.356	0.0	30061.999	0.0
366.0392	25.01	-4.76	55759.270	3.0	83070.970	2.0
366.0400	25.00	.38	37420.240	5.5	64731.880	6.5
366.0401	26.00	-3.25	21038.987	2.0	48350.620	1.0
366.0438	18.01	.13	172213.800	1.5	199525.150	1.5
366.0448	26.01	-4.55	72261.830	5.5	99573.110	4.5
366.0509	13.02	-4.26	189928.490	3.5	217239.310	3.5
366.0509	13.02	-2.83	189928.490	3.5	217239.310	2.5
366.0520	75.00	-.02	27100.927	0.0	54419.450	0.0
366.0535	13.02	-2.72	189928.680	4.5	217239.310	3.5
366.0631	22.00	-2.74	170.132	3.0	27480.047	3.0
366.0640	58.01	-.32	967.890	0.0	28285.518	0.0
366.0695	27.00	-2.84	13795.520	2.5	41104.960	2.5
366.0747	26.02	-2.07	202200.510	3.0	229509.560	3.0
366.0759	22.00	-6.31	14028.470	2.0	41337.430	2.0
366.0795	9.00	-2.03	102840.376	.5	130149.070	.5
366.0810	44.00	-.29	16131.504	0.0	43447.863	0.0
366.0900	26.01	-4.59	70986.690	6.5	98294.600	5.5
366.0920	42.00	.43	26713.694	0.0	53529.232	0.0
366.1007	25.00	-2.36	41031.480	4.5	68338.590	3.5
366.1050	72.01	-.32	15002.299	0.0	42316.867	0.0
366.1176	22.00	-2.23	17075.310	4.0	44381.160	4.0
366.1200	40.00	-1.05	564.603	0.0	27878.052	0.0
366.1216	23.00	-4.17	18438.070	4.5	45743.620	3.5
366.1257	26.00	-2.49	29798.960	4.0	57104.207	5.0
366.1348	28.00	-4.41	28569.210	2.0	55873.780	2.0
366.1350	44.00	-.06	1129.205	0.0	28441.535	0.0
366.1360	62.01	-.58	322.630	0.0	27634.886	0.0
366.1364	26.00	-2.84	19788.248	4.0	47092.693	3.0
366.1373	23.01	-.30	26839.820	3.0	54144.200	4.0
366.1382	23.00	-1.09	11100.650	4.5	38404.960	5.5
366.1397	24.01	-2.24	40202.140	6.5	67506.340	5.5
366.1399	25.00	-3.35	34423.270	3.5	61727.460	2.5
366.1451	17.02	-.99	216524.600	2.5	243828.400	2.5
366.1641	28.01	-4.95	106620.530	3.5	133922.910	4.5
366.1645	28.01	-3.96	100592.980	3.5	127895.330	3.5
366.1665	30.02	-.49	230606.000	0.0	257908.200	1.0
366.1665	15.01	-4.20	104051.100	3.0	131353.300	2.0
366.1680	41.00	-.56	10162.848	0.0	37472.717	0.0
366.1690	73.00	-1.09	11130.738	0.0	38440.532	0.0
366.1708	22.00	-1.95	18462.830	0.0	45764.710	1.0
366.1710	77.00	-.25	12985.861	0.0	40295.506	0.0
366.1730	58.01	-.74	4194.191	0.0	31503.687	0.0
366.1742	23.00	-4.21	23353.090	3.5	50654.720	2.5
366.1780	42.00	-.66	11775.998	0.0	39085.121	0.0
366.1809	10.01	-2.45	280473.580	1.5	307774.710	1.5
366.1860	45.00	.23	16050.847	0.0	43359.373	0.0
366.1941	28.00	-2.35	1713.080	1.0	29013.228	2.0
366.1963	27.00	-4.39	24733.280	2.5	52033.260	1.5
366.1989	23.00	-2.10	18513.460	4.5	45813.250	4.5
366.2008	16.02	-.38	146736.540	1.0	174036.190	1.0
366.2008	16.02	-.86	146736.540	1.0	174036.190	1.0
366.2038	26.01	-1.63	72524.620	1.5	99824.040	2.5
366.2050	41.00	-1.45	1129.205	0.0	28436.314	0.0
366.2058	22.00	-1.77	18593.990	3.0	45893.260	3.0
366.2080	57.01	-1.73	967.890	0.0	28274.776	0.0
366.2130	75.00	-.19	27342.899	0.0	54649.412	0.0
366.2136	26.01	-3.65	72619.610	2.5	99918.300	1.5
366.2140	40.01	-.01	13308.491	0.0	40614.929	0.0
366.2149	15.01	-4.36	104054.700	1.0	131353.300	2.0
366.2151	27.00	-.01	18389.570	1.5	45688.150	2.5
366.2156	28.01	-4.65	87538.090	3.5	114836.630	3.5
366.2170	26.00	-2.25	32873.623	4.0	60172.060	4.0
366.2221	22.01	-.59	12628.770	1.5	39926.830	2.5
366.2260	64.01	-.56	0.000	0.0	27305.544	0.0
366.2270	62.01	-1.40	2661.698	0.0	29967.167	0.0
366.2289	9.02	-4.52	441385.880	1.5	468683.430	2.5
366.2340	73.01	-.36	9598.245	0.0	36903.192	0.0
366.2363	24.00	-2.85	20517.400	2.0	47814.400	3.0
366.2397	22.00	-1.99	21739.713	5.0	49036.460	4.0
366.2456	23.00	-3.10	14949.300	4.5	42245.610	3.5
366.2497	24.02	-2.29	69780.900	1.0	97076.900	1.0
366.2533	28.00	-3.15	28578.046	3.0	55873.780	2.0
366.2533	27.00	-2.82	25568.680	5.5	52864.410	4.5
366.2596	24.01	-3.64	19528.380	.5	46823.640	.5
366.2629	8.01	-1.98	234402.480	1.5	261697.500	1.5
366.2743	18.01	-4.15	172816.210	.5	200110.380	.5
366.2835	24.00	-1.52	20520.920	3.0	47814.400	3.0
366.2854	18.01	-4.11	143107.600	2.5	170400.940	2.5
366.2880	80.00	-.43	43797.033	0.0	71097.955	0.0
366.2894	28.01	-3.41	104503.220	2.5	131796.260	2.5
366.2900	62.01	-1.35	2984.328	0.0	30285.101	0.0
366.2902	25.01	-4.87	73395.120	3.0	100688.100	3.0
366.2904	22.00	-2.17	16961.420	3.0	44254.390	3.0
366.2990	42.00	.68	25729.749	0.0	53029.851	0.0
366.2990	58.01	-.86	4194.191	0.0	31494.293	0.0
366.3135	25.00	-1.84	34423.270	3.5	61714.520	4.5
366.3200	90.01	-.48	11453.368	0.0	38751.905	0.0
366.3207	24.00	-1.00	20523.690	4.0	47814.400	3.0
366.3253	26.00	-1.65	24118.815	4.0	51409.180	4.0
366.3280	80.00	.04	43797.033	0.0	71094.974	0.0
366.3300	42.00	.32	20809.640	0.0	48107.432	0.0
366.3340	24.00	-4.17	27382.180	2.0	54671.900	1.0
366.3341	25.00	-3.13	37630.620	4.5	64920.330	3.5
366.3345	24.00	-.73	36552.130	3.0	63841.810	4.0
366.3360	74.00	-.44	16292.819	0.0	43590.164	0.0
366.3370	44.00	-.16	7420.492	0.0	34717.762	0.0
366.3444	26.00	-3.48	20874.482	3.0	48163.427	2.0
366.3454	26.00	-2.69	20641.110	4.0	47929.981	4.0
366.3466	16.01	-3.91	113461.220	1.5	140750.000	1.5
366.3475	26.00	-3.35	27394.676	3.0	54683.390	4.0
366.3535	28.01	-4.60	88582.010	1.5	115870.280	2.5
366.3578	23.00	-2.01	16361.450	1.5	43649.400	2.5
366.3579	22.00	-1.79	18525.070	2.0	45813.010	2.0
366.3610	26.02	-1.43	202282.650	2.0	229570.360	2.0
366.3610	25.00	-2.63	34423.270	3.5	61710.980	3.5
366.3632	8.00	-3.49	88630.599	1.0	115918.143	1.0
366.3650	40.00	-.32	1209.863	0.0	28505.047	0.0
366.3681	25.01	-4.28	73395.120	3.0	100682.300	4.0
366.3700	58.01	-.84	4839.451	0.0	32134.262	0.0
366.3700	90.01	-.57	9356.272	0.0	36651.083	0.0
366.3707	8.00	-3.34	88631.158	2.0	115918.143	1.0
366.3728	8.00	-4.17	88631.315	0.0	115918.143	1.0
366.3817	28.01	-4.68	88881.590	.5	116167.760	1.5
366.3828	7.01	-4.40	170572.610	2.0	197858.690	1.0
366.3906	28.00	-3.48	29481.020	4.0	56766.523	4.0
366.3948	8.00	-3.48	86625.769	1.0	113910.957	2.0
366.3953	26.00	-2.02	23783.617	5.0	51068.770	5.0
366.3978	26.02	-4.50	89783.590	4.0	117068.560	3.0
366.3979	28.00	-3.09	27414.893	2.0	54699.852	3.0
366.4073	10.01	-.26	219130.780	2.5	246415.040	1.5
366.4085	28.00	-2.42	2216.519	2.0	29500.690	1.0
366.4085	26.02	-4.71	93412.930	2.0	120697.100	1.0
366.4136	23.00	-2.47	15078.250	.5	42362.040	.5
366.4220	8.00	-3.26	86627.790	2.0	113910.957	2.0
366.4226	29.01	-2.47	110365.980	2.0	137649.100	2.0
366.4229	15.01	-.36	103630.600	2.0	130913.700	3.0
366.4242	27.01	-3.75	22414.500	3.0	49697.500	4.0
366.4249	21.01	-2.40	2540.970	2.0	29823.920	2.0
366.4300	42.00	-.46	16615.449	0.0	43905.791	0.0
366.4397	22.00	-1.94	18482.860	1.0	45764.710	1.0
366.4530	26.00	-3.72	24180.848	3.0	51461.707	4.0
366.4553	23.00	-4.88	15688.800	2.5	42969.490	1.5
366.4600	72.00	-.52	13953.751	0.0	41241.859	0.0
366.4610	39.01	-.59	1371.178	0.0	28659.211	0.0
366.4620	77.00	-1.14	5726.684	0.0	33014.643	0.0
366.4688	26.00	-4.14	24180.848	3.0	51460.530	3.0
366.4700	41.00	-.51	645.260	0.0	27932.623	0.0
366.4714	8.00	-3.11	86631.466	3.0	113910.957	2.0
366.4730	58.01	-.98	5404.054	0.0	32691.194	0.0
366.4810	42.00	.57	18228.600	0.0	45515.144	0.0
366.4847	24.00	-4.89	28637.000	3.0	55915.500	4.0
366.4855	22.01	-3.43	25193.040	2.5	52471.480	2.5
366.4927	24.01	-.98	40228.440	5.5	67506.340	5.5
366.5012	25.00	-3.58	38669.600	3.5	65946.870	2.5
366.5048	10.03	-1.37	643975.000	2.5	671252.000	3.5
366.5050	58.01	-1.02	3790.903	0.0	31075.660	0.0
366.5052	9.02	-4.31	441406.460	3.5	468683.430	2.5
366.5122	9.02	-2.94	441406.460	3.5	468682.910	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
366.5130	23.00	-2.31	16728.750	4.5	44005.140	4.5
366.5173	28.01	-4.31	100619.260	4.5	127895.330	3.5
366.5200	18.01	-3.88	173347.830	1.5	200623.700	.5
366.5288	25.00	-2.13	35114.980	2.5	62390.200	1.5
366.5350	72.01	-.51	11856.655	0.0	39139.179	0.0
366.5368	23.00	-2.93	16572.540	3.5	43847.160	2.5
366.5419	24.01	-4.76	19631.280	1.5	46905.520	1.5
366.5422	24.00	-2.73	20519.600	6.0	47793.820	5.0
366.5423	28.01	-4.98	95573.390	3.5	122847.600	3.5
366.5485	24.00	-4.38	27935.260	4.0	55209.010	4.0
366.5601	10.02	-2.92	412313.110	1.0	439586.000	2.0
366.5633	25.01	-3.98	53781.700	3.0	81054.350	2.0
366.5735	29.00	-1.37	43716.376	0.0	70996.035	0.0
366.5810	69.01	-.68	8711.012	0.0	35990.113	0.0
366.5836	28.00	-1.41	29832.810	3.0	57103.946	3.0
366.5859	22.00	-2.95	15877.180	2.0	43148.150	3.0
366.5954	23.00	-1.95	9544.540	.5	36814.600	1.5
366.5972	24.00	-1.93	20523.690	4.0	47793.820	5.0
366.6000	28.01	-4.33	71770.830	2.5	99040.750	1.5
366.6000	25.01	-3.38	53781.700	3.0	81051.620	3.0
366.6000	24.01	-2.66	39742.360	2.5	67012.280	2.5
366.6005	24.00	-2.52	20523.940	5.0	47793.820	5.0
366.6030	9.02	-4.66	442294.310	1.5	469564.010	.5
366.6106	22.01	-4.09	12758.150	2.5	40027.280	1.5
366.6164	24.00	-1.96	20517.400	2.0	47786.100	2.0
366.6220	45.00	-.76	2581.041	0.0	29857.091	0.0
366.6242	26.00	-4.14	19621.004	5.0	46889.126	4.0
366.6270	24.01	-2.03	50667.330	3.5	77935.240	2.5
366.6283	26.00	-1.59	26623.726	2.0	53891.540	3.0
366.6310	76.00	.04	18793.202	0.0	46068.582	0.0
366.6357	9.02	-4.33	442294.310	1.5	469561.580	1.5
366.6446	28.01	-3.47	100619.260	4.5	127885.860	4.5
366.6525	21.01	-1.81	177.630	3.0	27443.650	2.0
366.6530	41.00	-.44	11130.738	0.0	38404.482	0.0
366.6535	22.01	-4.30	25193.040	2.5	52458.980	1.5
366.6556	10.02	-4.10	412320.210	2.0	439586.000	2.0
366.6576	26.00	-4.20	21038.987	2.0	48304.623	2.0
366.6637	24.00	-1.40	20520.920	3.0	47786.100	2.0
366.6720	42.00	.10	16615.449	0.0	43887.780	0.0
366.6784	25.00	-2.04	34463.370	1.5	61727.460	2.5
366.6785	24.00	-2.03	36577.730	4.0	63841.610	4.0
366.6806	26.00	-1.73	26627.612	4.0	53891.540	3.0
366.6910	45.00	-.48	11856.655	0.0	39127.572	0.0
366.6940	42.00	-.93	11775.998	0.0	39046.692	0.0
366.6944	24.02	-4.12	69510.600	0.0	96773.500	1.0
366.6963	26.00	-4.12	12968.552	2.0	40231.312	2.0
366.6980	90.00	-.20	8711.012	0.0	35981.409	0.0
366.7000	41.00	-.38	12259.943	0.0	39530.191	0.0
366.7136	28.01	-3.10	76402.030	2.5	103663.500	1.5
366.7161	28.00	-2.83	29013.228	2.0	56274.516	2.0
366.7226	24.00	-4.75	35501.260	3.0	62762.060	4.0
366.7259	26.00	-1.26	25899.974	4.0	53160.530	3.0
366.7280	58.01	-.73	5726.684	0.0	32994.850	0.0
366.7323	25.01	-2.69	52653.270	4.0	79913.350	4.0
366.7610	28.01	-3.71	94067.140	1.5	121325.090	2.5
366.7610	24.00	-3.56	27728.870	2.0	54986.620	3.0
366.7660	41.00	-.48	10808.108	0.0	38073.449	0.0
366.7687	25.00	-.64	37630.620	4.5	64888.000	4.5
366.7720	74.00	-.31	17986.627	0.0	45251.522	0.0
366.7742	23.00	-1.90	16449.850	2.5	43706.820	3.5
366.7751	9.00	-2.26	102680.435	1.5	129937.330	1.5
366.7793	10.01	-1.78	281720.280	1.5	308976.870	.5
366.7818	22.00	-3.00	15975.590	3.0	43231.990	4.0
366.7930	62.01	-1.15	2177.753	0.0	29441.087	0.0
366.7980	58.01	-.09	2823.013	0.0	30085.975	0.0
366.7986	26.00	-1.36	25899.974	4.0	53155.130	4.0
366.7996	26.00	-2.73	24118.815	4.0	51373.894	5.0
366.8000	42.00	-.07	20809.640	0.0	48072.454	0.0
366.8012	25.00	-3.54	41031.480	4.5	68286.440	4.5
366.8015	25.01	-4.71	54938.100	1.0	82193.040	2.0
366.8020	24.00	-2.00	20517.400	2.0	47772.300	1.0
366.8028	22.00	-3.08	21469.494	3.0	48724.340	2.0
366.8047	17.01	-1.68	119799.000	2.0	147053.700	2.0
366.8078	10.01	-3.59	280768.520	.5	308022.990	.5
366.8090	69.01	-1.43	0.000	0.0	27262.145	0.0
366.8168	30.02	.90	234576.000	4.0	261829.800	5.0
366.8169	9.00	-1.56	102405.710	2.5	129659.500	3.5
366.8198	25.00	-.86	38008.700	5.5	65262.280	4.5
366.8202	26.00	-1.99	26140.164	3.0	53393.715	4.0
366.8210	72.00	-1.04	8872.327	0.0	36133.580	0.0
366.8211	28.00	-.11	31786.210	3.0	59039.693	4.0
366.8396	27.00	-4.88	26450.020	2.5	53702.130	3.5
366.8450	40.01	-1.03	3226.301	0.0	30485.770	0.0
366.8490	39.01	.41	28230.132	0.0	55489.304	0.0
366.8490	42.00	-.09	20003.065	0.0	47262.237	0.0
366.8505	13.01	-1.62	121480.300	3.0	148731.600	3.0
366.8512	22.00	-2.71	21588.496	4.0	48839.740	3.0
366.8531	26.00	-2.55	24574.655	4.0	51825.758	3.0
366.8545	25.00	-3.18	37737.220	3.5	64988.220	3.5
366.8547	27.00	-.39	29294.520	3.5	56545.510	2.5
366.8553	24.00	-4.21	33040.100	2.0	60291.040	1.0
366.8563	26.00	-3.36	21038.987	2.0	48289.852	1.0
366.8572	7.01	-3.12	170607.890	1.0	197858.690	1.0
366.8586	15.01	-4.40	104102.600	2.0	131353.300	2.0
366.8586	13.01	-.72	121480.900	2.0	148731.600	3.0
366.8600	6.00	-3.84	61981.820	1.0	89232.410	1.0
366.8620	41.00	-.84	4920.109	0.0	32178.315	0.0
366.8654	27.00	-2.21	15184.040	2.5	42434.230	2.5
366.8660	74.00	-.16	19115.832	0.0	46373.741	0.0
366.8668	26.00	-3.61	26874.534	5.0	54124.620	4.0
366.8712	28.01	-4.95	109038.840	1.5	136288.600	2.5
366.8720	58.01	-1.20	0.000	0.0	27257.463	0.0
366.8891	26.00	-2.87	20874.482	3.0	48122.913	3.0
366.8947	26.02	-2.19	202282.650	2.0	229530.670	1.0
366.8965	22.00	-2.89	170.132	3.0	27418.015	2.0
366.9000	28.01	-2.86	103653.030	3.5	130900.650	2.5
366.9002	24.01	-4.16	50687.630	2.5	77935.240	2.5
366.9006	20.02	-1.34	346896.260	2.0	374143.840	3.0
366.9010	41.00	-.57	5242.739	0.0	32498.048	0.0
366.9010	68.00	-.21	7097.862	0.0	34353.171	0.0
366.9015	28.01	-2.58	104503.220	2.5	131750.730	3.5
366.9045	16.01	-4.86	113461.220	1.5	140708.510	2.5
366.9092	26.00	-3.75	27166.804	4.0	54413.740	3.0
366.9097	17.01	-4.60	147605.700	3.0	174852.600	3.0
366.9153	26.00	-1.05	24118.815	4.0	51365.300	3.0
366.9157	27.00	-4.70	17233.680	3.5	44480.140	2.5
366.9185	25.00	-3.20	17568.480	1.5	44814.730	1.5
366.9231	27.00	-4.37	13795.520	2.5	41041.430	3.5
366.9233	28.00	-3.00	1332.153	3.0	28578.046	3.0
366.9243	25.01	-3.00	53805.800	4.0	81051.620	3.0
366.9309	24.00	-5.00	33762.740	6.0	61008.070	5.0
366.9340	42.00	.48	21051.613	0.0	48304.470	0.0
366.9356	20.02	-1.80	323655.060	2.0	350900.040	2.0
366.9384	25.00	-2.53	17451.520	2.5	44696.290	2.5
366.9395	28.01	-4.00	106369.300	1.5	133613.990	1.5
366.9411	23.01	-.27	20363.220	6.0	47607.790	6.0
366.9457	25.01	-4.29	78913.170	2.0	106157.400	3.0
366.9481	25.01	-3.91	43696.190	3.0	70940.240	2.0
366.9490	44.00	.29	12098.628	0.0	39350.371	0.0
366.9515	17.01	-2.58	119809.900	3.0	147053.700	2.0
366.9523	26.00	-.13	21999.132	4.0	49242.872	3.0
366.9562	21.01	-1.77	12101.450	1.0	39344.900	2.0
366.9605	18.01	-1.60	155708.020	.5	182951.150	.5
366.9616	8.01	-3.42	234454.450	2.5	261697.500	1.5
366.9686	24.01	-5.16	19798.010	2.5	47040.540	2.5
366.9700	70.01	.04	26939.612	0.0	54189.796	0.0
366.9740	41.00	-.05	12179.286	0.0	39429.173	0.0
366.9780	75.00	-.70	16212.162	0.0	43461.752	0.0
366.9831	25.00	-2.09	17282.000	3.5	44523.450	3.5
366.9844	10.01	-3.64	276276.850	1.5	303518.210	1.5
366.9960	90.00	.06	8065.752	0.0	35314.005	0.0
367.0004	23.00	-2.82	15078.250	.5	42318.420	1.5
367.0026	26.00	-1.30	22946.810	1.0	50186.814	2.0
367.0040	27.00	-1.84	16195.680	.5	43435.580	.5
367.0056	25.00	-2.06	35114.980	2.5	62354.760	1.5
367.0070	92.01	-.42	887.233	0.0	28134.670	0.0
367.0075	22.00	-2.78	18525.070	2.0	45764.710	1.0
367.0084	26.00	-.76	23783.617	5.0	51023.190	6.0
367.0086	26.01	-4.03	44929.590	2.5	72169.150	1.5
367.0118	25.00	-3.19	38669.600	3.5	65908.920	4.5
367.0130	24.01	-4.41	20512.750	5.5	47751.980	5.5
367.0220	26.00	-7.47	12968.552	2.0	40207.120	3.0
367.0234	25.02	-1.83	121117.140	3.5	148355.600	3.5
367.0241	10.01	-3.05	280768.520	.5	308006.930	.5
367.0270	17.02	-.12	174093.800	1.5	201332.000	1.5
367.0360	75.00	-.09	23793.968	0.0	51039.252	0.0
367.0407	25.00	-2.51	37586.030	1.5	64823.210	2.5
367.0420	42.00	-.37	20245.038	0.0	47489.876	0.0
367.0423	28.00	-2.39	1332.153	3.0	28569.210	2.0
367.0427	23.00	-2.43	14514.750	1.5	41751.780	.5
367.0427	23.00	-5.61	14514.750	1.5	41751.780	1.5
367.0471	24.01	-4.94	53051.550	1.5	80288.250	1.5
367.0502	25.00	-1.93	17052.290	4.5	44288.760	4.5
367.0530	75.00	-.53	14115.066	0.0	41359.088	0.0
367.0570	26.02	-1.10	202334.390	1.0	229570.360	2.0
367.0666	18.00	-2.38	95399.870	1.0	122635.128	2.0
367.0690	70.01	-.34	38151.007	0.0	65393.841	0.0
367.0725	25.00	-3.31	34250.520	5.5	61485.340	4.5
367.0748	27.00	-3.94	24326.110	3.5	51560.760	2.5
367.0811	26.00	-1.91	20037.815	0.0	47271.999	1.0
367.0837	25.01	-4.69	55371.300	3.0	82605.290	4.0
367.0840	62.01	-.52	806.575	0.0	28048.296	0.0
367.0890	76.00	-.35	10969.423	0.0	38210.773	0.0
367.0960	22.00	-4.36	11531.760	2.0	38764.832	3.0
367.1006	18.01	-.85	172213.800	1.5	199446.540	.5
367.1087	24.01	-5.70	20519.850	4.5	47751.980	5.5
367.1106	23.00	-4.59	23519.840	4.5	50751.830	3.5
367.1139	22.00	-8.73	14105.680	3.0	41337.430	2.0
367.1200	64.01	-.33	564.603	0.0	27803.653	0.0
367.1205	23.00	-.47	10892.500	3.5	38123.760	4.5
367.1270	40.01	-.35	5726.684	0.0	32965.215	0.0
367.1353	23.00	-2.61	18513.460	4.5	45743.620	3.5
367.1358	10.01	-2.33	280947.100	1.5	308177.220	1.5
367.1370	41.00	-.53	11937.313	0.0	39175.102	0.0
367.1504	26.00	-2.71	26339.682	2.0	53568.720	2.0
367.1510	82.00	-.17	21293.585	0.0	48530.335	0.0
367.1520	26.00	-2.78	19788.248	4.0	47017.170	3.0
367.1540	90.00	-.61	6291.287	0.0	33527.814	0.0
367.1552	22.00	-1.18	19421.576	3.0	46650.260	3.0
367.1636	24.01	-4.37	38315.000	2.5	65543.060	3.5
367.1640	26.00	-2.04	21999.132	4.0	49227.160	3.0
367.1650	23.00	-3.19	14910.040	3.5	42138.000	2.5
367.1672	22.00	-.71	386.874	4.0	27614.667	4.0
367.1677	25.01	-4.80	43850.420	2.0	71078.180	1.0
367.1791	26.02	-1.08	202282.650	2.0	229509.560	3.0
367.1886	26.02	-4.01	109570.840	2.0	136797.050	3.0
367.1914	25.00	-2.45	35165.050	1.5	62391.050	.5
367.1919	29.01	-3.51	123556.640	2.0	150782.600	2.0
367.1940	58.01	-.95	2500.383	0.0	29733.943	0.0
367.1953	29.00	-1.13	45894.129	0.0	73127.593	0.0
367.2020	28.00	-2.25	22102.349	4.0	49327.560	3.0
367.2020	57.00	-1.53	0.000	0.0	27232.967	0.0
367.2029	25.00	-1.87	35165.050	1.5	62390.200	1.5
367.2049	17.01	-1.44	126032.000	2.0	153257.000	2.0
367.2185	22.00	-3.41	16106.080	4.0	43330.070	5.0
367.2289	23.00	-3.55	11100.650	4.5	38323.870	4.5
367.2298	23.00	-4.97	10892.500	3.5	38115.650	3.5
367.2310	66.01	-.32	4678.136	0.0	31908.953	0.0
367.2321	26.02	-3.73	109570.840	2.0	136793.820	2.0
367.2381	23.00	-2.16	16917.150	5.5	44139.690	5.5
367.2386	23.03	-1.45	257143.200	2.0	284365.700	1.0
367.2410	75.00	-1.09	14518.354	0.0	41748.429	0.0
367.2440	41.00	-1.77	322.630	0.0	27552.483	0.0
367.2534	11.02	-4.03	440552.400	3.5	467773.800	2.5
367.2559	26.02	-.69	202200.510	3.0	229421.730	4.0
367.2597	26.01	-4.40	72352.170	3.5	99573.110	4.5
367.2602	26.00	-2.34	29371.860	3.0	56592.760	4.0
367.2672	24.01	-4.92	40228.440	5.5	67448.820	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
367.2694	28.00	-4.37	15734.018	1.0	42954.234	2.0
367.2709	26.00	-2.61	19788.248	4.0	47008.351	5.0
367.2790	58.01	.05	7259.177	0.0	34486.435	0.0
367.2820	42.00	1.30	26455.667	0.0	53682.702	0.0
367.2823	16.01	-.96	128599.110	3.5	155818.370	2.5
367.2855	9.00	-3.22	102840.376	.5	130059.400	.5
367.2856	22.00	-2.78	18593.990	3.0	45813.010	2.0
367.2900	25.00	-2.40	34250.520	5.5	61469.210	5.5
367.3122	26.00	-4.12	27394.676	3.0	54611.720	2.0
367.3126	28.01	-4.83	95573.390	3.5	122790.410	4.5
367.3150	66.01	-1.30	0.000	0.0	27224.589	0.0
367.3163	24.00	-3.17	21810.840	1.0	49027.580	2.0
367.3190	63.01	.24	26939.612	0.0	54163.905	0.0
367.3230	41.00	-.51	13066.518	0.0	40290.514	0.0
367.3261	18.01	-3.09	172816.210	.5	200032.230	1.5
367.3286	25.00	-1.77	35689.980	1.5	62905.810	2.5
367.3339	28.00	-2.90	29888.505	2.0	57103.946	3.0
367.3348	26.01	-4.04	44915.070	3.5	72130.440	4.5
367.3390	23.00	-1.79	16572.540	3.5	43787.600	4.5
367.3412	17.01	-1.67	147605.700	3.0	174820.600	2.0
367.3415	26.00	-4.89	26623.726	2.0	53838.600	3.0
367.3418	20.00	-2.04	20335.360	1.0	47550.214	2.0
367.3512	25.00	-2.32	38934.940	2.5	66149.100	3.5
367.3588	22.01	-3.72	39602.900	1.5	66816.490	1.5
367.3625	9.01	-3.80	269563.930	2.0	296777.250	2.0
367.3640	58.01	-.83	2500.383	0.0	29721.341	0.0
367.3676	26.00	-3.81	31307.235	4.0	58520.180	4.0
367.3690	25.01	-2.08	62587.500	3.0	89800.340	4.0
367.3736	12.02	-4.01	534923.600	3.0	562136.100	2.0
367.3772	26.01	-3.99	36252.960	2.5	63465.190	1.5
367.3790	90.01	-1.06	7259.177	0.0	34479.024	0.0
367.3841	18.01	-4.80	163299.470	2.5	190511.190	2.5
367.3857	17.01	-2.38	119842.100	1.0	147053.700	2.0
367.3914	25.01	-3.61	43131.400	2.0	70342.580	3.0
367.3938	28.02	-4.67	155841.700	4.0	183052.700	4.0
367.4046	28.00	-4.38	29500.690	1.0	56710.889	2.0
367.4046	24.02	-3.99	131118.100	3.0	158328.300	2.0
367.4046	23.00	-1.73	15270.420	1.5	42480.620	.5
367.4050	64.00	.10	161.315	0.0	27379.235	0.0
367.4050	58.01	-.26	9517.587	0.0	36735.507	0.0
367.4059	28.00	-2.68	204.786	3.0	27414.893	2.0
367.4070	62.01	-1.73	0.000	0.0	27217.772	0.0
367.4088	18.00	-2.76	95399.870	1.0	122609.760	1.0
367.4130	23.00	-2.53	14548.830	2.5	41758.410	3.5
367.4133	8.01	-4.67	211521.980	1.5	238731.540	1.5
367.4139	28.00	-1.33	3409.925	2.0	30619.440	2.0
367.4319	25.01	-3.57	43536.900	4.0	70745.080	3.0
367.4384	23.03	-1.93	256251.700	4.0	283459.400	3.0
367.4513	25.00	-2.29	38669.600	3.5	65876.340	3.5
367.4561	26.02	-3.59	199300.150	2.0	226506.540	1.0
367.4572	28.00	-2.39	31786.210	3.0	58992.520	2.0
367.4580	74.00	-.04	19519.120	0.0	46733.115	0.0
367.4586	26.00	-4.58	26339.682	2.0	53545.682	3.0
367.4630	63.01	-1.43	10566.135	0.0	37779.759	0.0
367.4697	23.01	-.99	19902.600	0.0	47107.980	1.0
367.4720	40.01	-.42	2500.383	0.0	29713.341	0.0
367.4758	26.00	-1.39	22838.320	2.0	50043.250	1.0
367.4760	45.00	-.70	10888.765	0.0	38101.427	0.0
367.4780	41.00	-1.08	322.630	0.0	27535.143	0.0
367.4825	26.01	-2.14	72619.610	2.5	99824.040	2.5
367.4830	73.00	-1.10	11130.738	0.0	38342.881	0.0
367.4919	22.00	-1.59	15877.180	2.0	43080.920	2.0
367.4937	9.01	-1.57	269573.640	1.0	296777.250	2.0
367.4975	24.01	-4.45	20024.180	3.5	47227.500	3.5
367.4980	77.00	-.23	12985.861	0.0	40196.693	0.0
367.4993	28.01	-4.99	110573.360	2.5	137776.550	3.5
367.5025	23.00	-1.71	14548.830	2.5	41751.780	1.5
367.5080	70.01	-.06	30407.885	0.0	57618.177	0.0
367.5120	73.00	-1.33	11695.340	0.0	38905.336	0.0
367.5162	28.01	-1.33	103025.580	2.5	130227.520	2.5
367.5180	68.00	-.99	7097.862	0.0	34307.414	0.0
367.5220	26.01	-4.36	72130.440	4.5	99331.950	4.5
367.5232	18.00	-3.07	95399.870	1.0	122601.290	1.0
367.5233	28.01	-4.33	106007.890	2.5	133209.300	2.5
367.5268	21.01	-2.14	2540.970	2.0	29742.120	1.0
367.5287	20.00	-1.86	20349.260	2.0	47550.271	3.0
367.5288	24.00	-2.85	24200.230	6.0	51401.240	5.0
367.5295	20.00	-2.77	20349.260	2.0	47550.214	2.0
367.5308	23.01	-2.66	25191.080	2.0	52391.940	3.0
367.5360	42.00	.45	25810.406	0.0	53018.625	0.0
367.5385	28.01	-1.09	103025.580	2.5	130225.870	3.5
367.5445	26.00	-2.94	21038.987	2.0	48238.832	2.0
367.5450	76.00	-.42	15082.956	0.0	42290.509	0.0
367.5479	9.02	-3.91	441406.460	3.5	468606.050	3.5
367.5485	23.00	-2.68	16449.850	2.5	43649.400	2.5
367.5494	9.02	-2.53	441406.460	3.5	468605.940	4.5
367.5560	74.00	-.75	12098.628	0.0	39305.367	0.0
367.5570	90.01	-1.22	1451.835	0.0	28658.500	0.0
367.5655	25.00	-1.05	37789.930	2.5	64988.220	3.5
367.5674	26.00	-4.90	24506.902	2.0	51705.052	2.0
367.5689	23.00	-1.02	2220.130	2.5	29418.170	3.5
367.5690	22.00	-3.09	18695.230	4.0	45893.260	3.0
367.5740	72.00	.46	15566.901	0.0	42772.307	0.0
367.5751	26.00	-3.82	31322.603	3.0	58520.180	4.0
367.5781	27.00	-3.64	23855.620	4.5	51052.980	3.5
367.5924	24.02	-3.75	131267.300	4.0	158463.600	3.0
367.5927	26.02	-1.32	202334.390	1.0	229530.670	1.0
367.5978	19.01	-.78	187531.100	1.0	214727.000	0.0
367.5980	42.00	-.83	18147.942	0.0	45351.572	0.0
367.6000	75.00	-.97	16534.792	0.0	43738.274	0.0
367.6025	25.01	-4.38	39813.380	2.0	67008.930	3.0
367.6147	28.00	-4.99	30392.052	1.0	57586.700	2.0
367.6160	58.01	-1.13	2581.041	0.0	29783.339	0.0
367.6225	10.01	-2.13	280700.770	3.5	307894.640	2.5
367.6240	42.00	0.00	20003.065	0.0	47204.771	0.0
367.6271	9.02	-4.18	442370.280	.5	469564.010	.5
367.6282	24.00	-2.33	31009.000	3.0	58202.650	3.0
367.6310	41.00	-.05	12582.573	0.0	39783.761	0.0
367.6313	26.00	-1.97	20641.110	4.0	47834.529	5.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
367.6321	24.00	-.65	24093.160	2.0	51286.520	2.0
367.6329	15.01	.22	103756.900	1.0	130950.200	2.0
367.6350	26.00	-3.07	20641.110	4.0	47834.260	3.0
367.6443	7.01	-3.94	170666.230	0.0	197858.690	1.0
367.6457	24.01	-3.71	19631.280	1.5	46823.640	.5
367.6560	92.01	-.79	6210.629	0.0	33409.968	0.0
367.6600	9.02	-4.72	442370.280	.5	469561.580	1.5
367.6695	23.00	-2.01	17136.440	6.5	44327.040	6.5
367.6700	21.01	-1.29	12154.340	2.0	39344.900	2.0
367.6731	14.02	-.59	227665.090	2.0	254855.420	3.0
367.6804	10.01	-2.47	280947.100	1.5	308136.890	1.5
367.6815	25.00	-2.65	35165.050	1.5	62354.760	1.5
367.6830	30.02	-4.05	237047.800	2.0	264237.400	1.0
367.6880	28.01	-3.67	106620.530	3.5	133809.760	3.5
367.6909	28.00	-1.04	29668.918	3.0	56857.933	4.0
367.6923	25.00	.32	37630.620	4.5	64819.530	5.5
367.7003	24.00	-2.07	33934.880	3.0	61123.200	4.0
367.7023	28.00	-1.55	31441.665	2.0	58629.840	2.0
367.7023	26.00	-4.75	27559.568	2.0	54747.740	1.0
367.7033	27.02	-2.60	83773.400	1.5	110961.500	1.5
367.7062	28.00	-3.22	31441.665	2.0	58629.550	3.0
367.7077	23.00	-2.70	0.000	1.5	27187.770	2.5
367.7080	41.00	-.25	10969.423	0.0	38164.915	0.0
367.7088	10.01	-3.56	280989.530	1.5	308177.220	1.5
367.7282	29.01	-3.40	123556.640	2.0	150742.900	3.0
367.7290	30.02	-.66	233610.400	2.0	260796.600	3.0
367.7290	30.02	.50	233610.400	2.0	260796.600	3.0
367.7302	26.00	-.28	28604.610	2.0	55790.720	3.0
367.7339	26.00	-3.62	24118.815	4.0	51304.650	4.0
367.7364	8.01	-3.90	248425.350	.5	275611.000	.5
367.7364	8.01	-4.24	248425.350	.5	275611.000	1.5
367.7390	92.00	-.20	3710.246	0.0	30903.446	0.0
367.7393	26.02	-3.00	199262.440	3.0	226447.880	2.0
367.7459	25.00	-1.03	38120.180	4.5	65305.130	3.5
367.7500	26.00	-1.50	26623.726	2.0	53808.370	1.0
367.7562	25.01	-4.50	44138.960	1.0	71323.150	2.0
367.7587	28.01	-4.89	68709.760	.5	95893.760	1.5
367.7631	26.00	-.17	22249.430	3.0	49433.108	2.0
367.7681	28.01	-1.59	103025.580	2.5	130208.890	3.5
367.7683	24.01	-1.58	21822.860	2.5	49006.150	1.5
367.7698	23.00	-2.87	16728.750	4.5	43911.930	3.5
367.7708	25.00	-.78	37737.220	3.5	64920.330	3.5
367.7764	22.00	-1.10	11776.806	4.0	38959.499	4.0
367.7780	41.00	-.38	9275.615	0.0	36465.931	0.0
367.7817	28.01	-4.02	106007.890	2.5	133190.190	1.5
367.7820	27.00	-3.19	18775.010	.5	45957.290	.5
367.7871	24.01	-1.51	21824.250	.5	49006.150	1.5
367.7899	17.01	-2.11	158723.700	1.0	185905.400	1.0
367.7949	24.01	-1.90	21824.820	1.5	49006.150	1.5
367.7997	27.00	-2.94	4690.180	2.5	31871.150	3.5
367.8040	90.01	-.68	7904.437	0.0	35092.831	0.0
367.8088	8.01	-3.75	211712.660	2.5	238892.960	2.5
367.8094	7.00	-4.40	83364.590	2.5	110544.850	2.5
367.8134	25.00	-.61	35725.850	2.5	62905.810	2.5
367.8169	24.00	-2.13	21847.880	2.0	49027.580	2.0
367.8214	20.00	-1.70	20371.000	3.0	47550.371	4.0
367.8228	20.00	-2.77	20371.000	3.0	47550.271	3.0
367.8235	20.00	-4.31	20371.000	3.0	47550.214	2.0
367.8253	22.00	-1.92	17075.310	4.0	44254.390	3.0
367.8260	63.01	.25	27100.927	0.0	54287.695	0.0
367.8270	18.01	-.98	155043.070	2.5	182222.030	1.5
367.8315	25.01	-2.53	43339.100	2.0	70517.720	3.0
367.8319	26.02	-3.65	199327.950	1.0	226506.540	1.0
367.8320	44.00	-1.31	2661.698	0.0	29848.022	0.0
367.8321	24.00	-4.85	24833.860	3.0	52012.440	2.0
367.8367	21.01	.16	32349.980	3.0	59528.220	3.0
367.8421	23.00	-1.72	9636.960	1.5	36814.800	1.5
367.8429	23.01	-7.12	20242.320	4.0	47420.100	4.0
367.8456	25.00	-3.68	17637.150	.5	44814.730	1.5
367.8570	25.01	-2.73	55759.270	3.0	82936.010	3.0
367.8573	8.02	-3.91	297557.500	1.0	324734.220	2.0
367.8667	29.01	-2.88	119039.680	2.0	146215.700	1.0
367.8675	28.01	-4.13	68156.570	1.5	95332.530	2.5
367.8720	41.00	-.23	15324.929	0.0	42508.297	0.0
367.8724	24.02	-2.80	131267.300	4.0	158442.900	4.0
367.8819	24.02	-3.92	131448.800	5.0	158623.700	4.0
367.8860	69.01	-.71	8872.327	0.0	36054.661	0.0
367.8862	26.00	-1.33	19552.474	1.0	46727.055	2.0
367.8897	24.00	-.85	31028.330	2.0	58202.650	3.0
367.8900	40.01	.25	14034.408	0.0	41210.446	0.0
367.9000	26.00	-2.31	18378.187	2.0	45551.748	1.0
367.9072	24.00	-1.91	20519.600	6.0	47692.630	7.0
367.9136	22.00	-1.46	15975.590	3.0	43148.150	3.0
367.9160	58.01	-1.12	2581.041	0.0	29761.158	0.0
367.9184	27.02	-3.41	83789.300	.5	110961.500	1.5
367.9194	26.01	-4.69	72651.910	3.5	99824.040	2.5
367.9210	64.00	-.33	483.945	0.0	27663.693	0.0
367.9259	28.01	-2.19	103025.580	2.5	130197.230	1.5
367.9333	15.01	-3.79	103630.600	2.0	130801.700	1.0
367.9336	24.01	-2.95	38509.070	3.5	65680.150	4.5
367.9348	26.00	-2.53	20641.110	4.0	47612.104	4.0
367.9380	92.00	-.63	564.603	0.0	27743.095	0.0
367.9381	28.01	-3.97	77332.470	2.5	104503.220	2.5
367.9396	24.00	-1.77	21856.940	3.0	49027.580	2.0
367.9420	58.01	-.05	8065.752	0.0	35243.949	0.0
367.9592	26.02	-3.52	199212.720	4.0	226361.910	3.0
367.9610	74.00	-.69	15002.299	0.0	42179.092	0.0
367.9661	22.01	-.52	12758.150	2.5	39926.830	2.5
367.9752	22.00	-2.23	11531.760	2.0	38699.767	2.0
367.9801	28.01	-3.97	104503.220	2.5	131670.870	2.5
367.9809	24.00	-1.77	20520.920	3.0	47688.510	4.0
367.9815	10.01	-.87	254165.010	1.5	281332.550	.5
367.9858	23.02	-1.20	61777.150	1.5	88944.360	2.5
367.9863	24.01	-4.68	40202.140	6.5	67369.330	5.5
367.9915	26.00	-1.63	0.000	4.0	27166.804	4.0
367.9927	24.00	-4.85	24897.550	4.0	52064.270	4.0
367.9935	28.01	-4.81	110021.920	4.5	137188.580	4.5
367.9944	24.00	-3.69	27820.230	3.0	54986.820	3.0
368.0015	25.02	-4.08	84610.530	.5	111776.600	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
368.0061	18.01	-.23	172816.210	.5	199981.940	1.5
368.0062	22.00	-1.71	17215.440	5.0	44381.160	4.0
368.0080	58.01	-.82	2581.041	0.0	29754.363	0.0
368.0105	23.00	-1.69	16728.750	4.5	43894.150	5.5
368.0133	25.00	-.43	37420.240	5.5	64585.440	4.5
368.0184	24.00	-2.75	20523.690	4.0	47688.510	4.0
368.0184	22.00	-4.98	18525.070	2.0	45689.890	3.0
368.0210	75.00	-.41	24277.914	0.0	51450.276	0.0
368.0218	24.00	-2.88	20523.940	5.0	47688.510	4.0
368.0223	22.01	-3.21	39602.900	1.5	66767.430	.5
368.0241	26.02	-4.67	186882.980	3.0	214047.380	4.0
368.0370	40.00	-1.64	1209.863	0.0	28381.044	0.0
368.0562	28.01	-1.45	106007.890	2.5	133169.920	3.5
368.0576	16.00	-2.54	52622.690	2.0	79784.620	3.0
368.0580	27.02	-2.29	83799.600	2.5	110961.500	1.5
368.0600	42.00	.73	16696.107	0.0	43865.590	0.0
368.0660	26.00	-1.60	25899.974	4.0	53061.280	5.0
368.0730	27.00	-3.41	17233.680	3.5	44394.470	3.5
368.0732	26.00	-3.50	27394.676	3.0	54555.450	4.0
368.0741	26.02	-4.10	89907.850	4.0	117068.560	3.0
368.0850	58.01	-1.43	2581.041	0.0	29748.679	0.0
368.0871	28.00	-3.24	27414.893	2.0	54574.640	1.0
368.0908	28.00	-2.27	29013.228	2.0	56172.704	3.0
368.0980	62.00	-.08	3064.986	0.0	30231.664	0.0
368.0988	24.00	-.52	31009.000	3.0	58167.890	4.0
368.0998	28.01	-1.29	103025.580	2.5	130184.390	2.5
368.1027	23.03	.09	256781.800	1.0	283940.400	2.0
368.1034	25.02	-2.95	121197.050	2.5	148355.600	3.5
368.1039	25.01	-3.28	55759.270	3.0	82917.780	2.0
368.1040	45.00	.02	11856.655	0.0	39022.891	0.0
368.1040	73.00	-1.04	13227.833	0.0	40394.069	0.0
368.1042	10.01	-2.53	280262.330	3.5	307420.820	2.5
368.1103	28.00	-4.81	15609.861	2.0	42767.900	3.0
368.1257	22.00	-.90	15877.180	2.0	43034.080	1.0
368.1280	75.00	-.31	25971.721	0.0	53136.186	0.0
368.1380	58.01	-.12	8307.725	0.0	35471.452	0.0
368.1403	14.02	-.68	214989.270	2.0	242145.100	1.0
368.1550	42.00	.08	20809.640	0.0	47972.112	0.0
368.1556	19.01	-.35	162507.000	2.0	189661.700	2.0
368.1570	76.00	-.11	18954.517	0.0	46116.842	0.0
368.1580	22.00	-4.80	15156.787	4.0	42311.310	3.0
368.1638	26.00	-3.81	24180.848	3.0	51334.940	4.0
368.1690	24.00	-.95	24093.160	2.0	51246.870	1.0
368.1836	28.00	-3.05	29668.918	3.0	56821.553	3.0
368.1880	90.01	-.91	11453.368	0.0	38613.406	0.0
368.1941	10.01	-3.18	280268.960	2.5	307420.820	2.5
368.2020	10.01	-4.41	281025.940	2.5	308177.220	1.5
368.2030	17.02	-.19	174613.900	2.5	201765.100	2.5
368.2064	23.00	-2.78	9544.540	.5	36695.490	.5
368.2080	58.01	-.45	5565.369	0.0	32723.932	0.0
368.2087	25.00	.24	37737.220	3.5	64888.000	4.5
368.2088	24.00	-3.54	23512.000	1.0	50662.770	1.0
368.2090	74.00	-.87	6129.972	0.0	33288.461	0.0
368.2132	14.02	-.99	214994.650	1.0	242145.100	1.0
368.2138	26.00	-1.37	23711.443	4.0	50861.850	3.0
368.2160	26.00	-3.35	24180.848	3.0	51331.090	2.0
368.2228	28.01	-3.13	104646.520	3.5	131796.260	2.5
368.2231	25.01	-4.67	79800.520	4.0	106950.240	3.0
368.2231	22.00	-7.49	14105.680	3.0	41255.400	4.0
368.2236	26.00	-.03	28604.610	2.0	55754.290	2.0
368.2240	72.00	-.81	0.000	0.0	27157.382	0.0
368.2242	14.02	-1.38	214995.460	0.0	242145.100	1.0
368.2243	10.00	-2.42	135888.717	1.0	163038.351	2.0
368.2301	24.00	-2.34	23512.000	1.0	50661.200	0.0
368.2403	28.01	-1.52	103025.580	2.5	130174.030	1.5
368.2419	29.01	-1.69	117666.600	4.0	144814.930	3.0
368.2423	28.01	-2.60	103653.030	3.5	130801.330	4.5
368.2453	28.00	-1.58	30619.440	2.0	57767.520	1.0
368.2460	92.01	-1.07	6210.629	0.0	33366.389	0.0
368.2478	14.02	-2.70	230267.700	2.0	257415.600	2.0
368.2478	14.02	-1.97	230267.700	2.0	257415.600	1.0
368.2478	14.02	-4.24	230267.700	2.0	257415.600	3.0
368.2501	26.02	-3.03	199300.150	2.0	226447.880	2.0
368.2537	23.00	-3.88	323.420	3.5	27470.880	3.5
368.2545	18.01	-1.39	145668.800	1.5	172816.210	.5
368.2551	10.01	-1.94	280989.530	1.5	308136.890	1.5
368.2566	25.01	-2.45	52653.270	4.0	79800.520	4.0
368.2603	14.02	-2.73	230268.620	3.0	257415.600	3.0
368.2603	14.02	-1.82	230268.620	3.0	257415.600	2.0
368.2651	20.01	-4.19	36126.410	1.5	63273.030	2.5
368.2667	28.00	-1.87	31441.665	2.0	58588.168	3.0
368.2684	24.01	-3.93	38563.150	4.5	65709.530	5.5
368.2699	26.02	-4.46	179178.620	3.0	206324.890	2.0
368.2711	25.01	-4.19	71263.920	1.0	98410.100	2.0
368.2858	23.00	-4.12	11100.650	4.5	38245.750	3.5
368.2879	14.02	-1.64	230270.660	4.0	257415.600	3.0
368.3043	27.00	-.17	16778.160	2.5	43921.890	2.5
368.3056	26.00	-2.61	415.932	3.0	27559.568	2.0
368.3071	25.00	-4.69	23719.520	1.5	50863.050	1.5
368.3088	24.00	-3.13	33934.880	3.0	61078.280	3.0
368.3111	23.00	-.65	2153.200	1.5	29296.430	2.5
368.3175	24.00	-3.26	23512.000	1.0	50654.760	2.0
368.3193	24.00	-3.03	33935.650	2.0	61078.280	3.0
368.3265	25.00	-2.77	38120.180	4.5	65262.280	4.5
368.3299	22.01	-3.96	39674.640	.5	66816.490	1.5
368.3300	23.00	-4.78	15103.770	4.5	42245.610	3.5
368.3310	74.00	.40	18147.942	0.0	45297.435	0.0
368.3342	22.00	-9.14	14028.470	2.0	41170.003	3.0
368.3354	25.00	-1.17	34343.900	4.5	61485.340	4.5
368.3386	17.02	-.62	194959.500	2.5	222100.700	1.5
368.3387	30.02	.81	237642.700	3.0	264783.900	4.0
368.3401	18.02	-2.17	225147.930	2.0	252289.020	3.0
368.3429	24.01	-3.19	40228.440	5.5	67369.330	5.5
368.3480	82.00	-.20	7743.122	0.0	34891.362	0.0
368.3482	24.02	-4.23	69780.900	1.0	96921.400	2.0
368.3556	23.00	-2.71	14514.750	1.5	41654.700	2.5
368.3562	23.01	-6.37	20280.190	5.0	47420.100	4.0
368.3610	26.00	-.37	26623.726	2.0	53763.280	3.0
368.3611	25.01	-1.74	52373.180	3.0	79512.730	3.0
368.3632	26.00	-1.81	20037.815	0.0	47177.210	1.0
368.3641	24.00	-.95	27597.220	3.0	54736.550	4.0
368.3697	20.01	-1.29	60533.020	.5	87671.930	1.5
368.3758	26.00	-4.54	31686.342	2.0	58824.810	2.0
368.3794	10.01	-2.11	291801.880	1.5	318940.080	1.5
368.3851	21.00	-8.02	11520.150	1.5	38657.930	2.5
368.3920	22.00	-2.31	18695.230	4.0	45832.500	5.0
368.3940	74.00	.16	19438.462	0.0	46583.312	0.0
368.3984	17.01	-1.31	158768.600	2.0	185905.400	1.0
368.3998	25.00	-2.33	34343.900	4.5	61480.600	3.5
368.4100	3.01	-.25	554761.000	0.0	581904.671	0.0
368.4110	26.00	-1.56	21999.132	4.0	49135.003	3.0
368.4114	25.00	-.62	35769.970	3.5	62905.810	2.5
368.4130	64.00	.37	0.000	0.0	27143.450	0.0
368.4138	26.00	-.58	26627.612	4.0	53763.280	3.0
368.4216	24.00	-1.74	31987.060	4.0	59122.150	3.0
368.4220	42.01	.64	36537.857	0.0	63680.644	0.0
368.4228	24.01	-2.63	39877.280	3.5	67012.280	2.5
368.4270	68.00	-.56	5081.424	0.0	32223.843	0.0
368.4295	24.00	-2.54	31028.330	2.0	58162.840	2.0
368.4326	23.00	-2.49	16572.540	3.5	43706.820	3.5
368.4330	25.01	-4.60	55696.500	4.0	82830.750	4.0
368.4341	24.00	-4.15	24897.550	4.0	52031.720	3.0
368.4357	6.00	-3.85	70743.950	1.0	97878.000	2.0
368.4364	26.02	-4.50	179194.220	4.0	206328.220	3.0
368.4381	28.01	-4.30	104503.220	2.5	131637.100	3.5
368.4452	25.01	-3.05	52379.380	2.0	79512.730	3.0
368.4457	28.01	-3.91	94729.250	2.5	121862.570	3.5
368.4473	27.00	-1.26	16778.160	2.5	43911.360	1.5
368.4482	23.00	-2.79	18680.120	5.5	45813.250	4.5
368.4518	25.00	-1.10	30354.210	3.5	57487.080	2.5
368.4660	74.00	-.17	19115.832	0.0	46255.378	0.0
368.4674	25.00	-4.31	33825.490	2.5	60957.210	3.5
368.4785	27.01	-7.62	19189.900	4.0	46320.800	4.0
368.4853	25.00	.12	37789.930	2.5	64920.330	3.5
368.4952	27.00	-1.24	18775.010	.5	45904.680	1.5
368.4959	24.01	-3.36	47354.630	2.5	74484.250	2.5
368.5042	25.01	-2.80	52383.720	4.0	79512.730	3.0
368.5060	25.01	-1.45	43528.300	5.0	70657.180	5.0
368.5123	29.01	-4.60	110084.290	1.0	137212.700	1.0
368.5193	22.01	.10	4897.600	3.5	32025.500	2.5
368.5194	22.00	-4.42	18593.990	3.0	45721.878	4.0
368.5194	22.01	-.07	4628.610	2.5	31756.500	1.5
368.5205	25.00	-2.89	17568.480	1.5	44696.290	2.5
368.5327	25.00	-2.19	37586.030	1.5	64712.940	2.5
368.5352	28.01	-3.20	101740.270	3.5	128867.000	3.5
368.5372	26.02	-2.75	114339.950	4.0	141466.530	3.0
368.5390	23.00	-4.25	9636.960	1.5	36763.410	2.5
368.5463	22.00	-1.49	16106.080	4.0	43231.990	4.0
368.5466	24.00	-4.34	23933.900	4.0	51059.790	4.0
368.5545	25.00	-.44	34343.900	4.5	61469.210	5.5
368.5583	22.00	-2.33	11639.804	3.0	38764.832	3.0
368.5588	18.02	-2.00	225147.930	2.0	252272.920	1.0
368.5592	25.01	-4.15	44138.960	1.0	71263.920	1.0
368.5647	22.00	-4.35	20062.980	1.0	47187.540	2.0
368.5663	26.00	-3.66	21038.987	2.0	48163.427	2.0
368.5667	20.02	-.58	323655.060	2.0	350779.470	3.0
368.5701	28.00	-2.68	30619.440	2.0	57743.596	3.0
368.5736	10.00	-2.55	135888.717	1.0	163012.621	1.0
368.5780	92.00	-.73	564.603	0.0	27695.902	0.0
368.5931	22.00	-1.13	11531.760	2.0	38654.230	1.0
368.5950	44.00	-.72	13550.463	0.0	40680.511	0.0
368.5954	14.01	-1.37	101023.310	1.5	128145.610	2.5
368.5964	28.01	-3.17	101740.270	3.5	128862.490	4.5
368.5989	26.00	-1.97	23711.443	4.0	50833.485	5.0
368.6110	42.00	-.39	20164.380	0.0	47294.250	0.0
368.6119	25.01	-2.62	39808.140	3.0	66929.220	2.0
368.6131	14.01	-1.21	101024.610	2.5	128145.610	3.5
368.6131	14.01	-2.51	101024.610	2.5	128145.610	2.5
368.6180	73.00	-1.11	9598.245	0.0	36726.600	0.0
368.6228	25.01	-2.35	43536.900	4.0	70657.180	5.0
368.6260	26.00	-1.51	19552.474	1.0	46672.523	0.0
368.6269	23.00	-.37	11100.650	4.5	38220.630	5.5
368.6276	26.02	-3.89	199327.950	1.0	226447.880	2.0
368.6338	26.02	-2.82	199262.440	3.0	226381.910	3.0
368.6416	24.00	-3.91	24282.340	4.0	51401.240	5.0
368.6425	25.01	-3.48	81051.620	3.0	108170.450	2.0
368.6474	27.00	-1.64	21215.900	.5	48334.370	1.5
368.6512	25.01	-4.42	81054.350	2.0	108172.540	1.0
368.6539	17.02	-2.30	216710.400	3.5	243828.400	2.5
368.6548	29.01	-3.50	121524.670	3.0	148642.600	2.0
368.6560	41.00	-1.39	2097.096	0.0	29222.655	0.0
368.6574	18.02	-1.69	225155.180	1.0	252272.920	1.0
368.6635	22.00	-4.71	18593.990	3.0	45711.280	4.0
368.6643	28.01	-3.47	104503.220	2.5	131620.450	1.5
368.6674	24.01	-1.07	38563.150	4.5	65680.150	4.5
368.6796	25.01	-2.36	81054.350	2.0	108170.450	2.0
368.6832	25.01	-3.50	39813.380	2.0	66929.220	2.0
368.6999	26.02	-3.74	114351.920	3.0	141466.530	3.0
368.7021	28.01	-4.12	106620.530	3.5	133734.980	3.5
368.7026	10.02	-2.27	409845.080	2.0	436959.490	1.0
368.7032	24.01	-3.40	38269.670	3.5	65384.040	4.5
368.7080	77.00	-.75	10485.478	0.0	37607.211	0.0
368.7083	24.00	-1.23	31048.850	1.0	58162.840	2.0
368.7098	26.00	-1.43	17550.180	3.0	44664.061	2.0
368.7101	28.01	-4.42	109846.000	3.5	136959.860	2.5
368.7131	28.01	-3.81	101740.270	3.5	128853.910	4.5
368.7134	26.01	-3.92	44929.590	2.5	72043.210	1.5
368.7136	28.01	-3.81	101740.270	3.5	128853.870	2.5
368.7281	24.00	-3.45	31055.350	5.0	58167.890	4.0
368.7323	28.01	-3.72	103653.030	3.5	130765.260	3.5
368.7340	22.00	-2.48	386.874	4.0	27498.975	3.0
368.7422	24.01	-3.79	47372.750	1.5	74484.250	2.5
368.7426	27.00	-2.71	20500.710	1.5	47612.180	1.5
368.7438	29.00	-.82	30811.173	0.0	57930.273	0.0
368.7440	41.00	-.64	12017.970	0.0	39137.055	0.0
368.7459	26.00	-.84	6928.266	5.0	34039.495	4.0
368.7466	23.00	-1.59	16917.150	5.5	44028.330	6.5
368.7497	10.01	-1.49	281025.940	2.5	308136.890	1.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
368.7505	23.00	-2.91	14910.040	3.5	42020.930	3.5
368.7513	24.00	-2.97	20519.600	6.0	47630.430	6.0
368.7661	26.00	-1.39	21999.132	4.0	49108.676	4.0
368.7683	26.00	-4.34	26623.726	2.0	53733.310	3.0
368.7740	64.01	.11	2823.013	0.0	29939.892	0.0
368.7779	22.00	-2.74	19421.576	3.0	46530.450	4.0
368.7800	58.01	-.71	3548.931	0.0	30665.369	0.0
368.7857	25.02	-3.65	109780.400	2.5	136888.700	1.5
368.7859	25.00	-2.92	41230.300	3.5	68338.590	3.5
368.7905	28.01	-2.74	75917.630	3.5	103025.580	2.5
368.7912	30.02	.26	238205.500	1.0	265313.400	2.0
368.7965	24.01	-3.95	19798.010	2.5	46905.520	1.5
368.7970	41.01	.53	17341.367	0.0	44456.555	0.0
368.8061	23.00	-.24	2311.370	3.5	29418.170	3.5
368.8061	17.02	-1.24	182076.000	1.5	209182.800	1.5
368.8070	74.00	.72	19519.120	0.0	46633.573	0.0
368.8098	29.01	-2.51	121524.670	3.0	148631.200	3.0
368.8104	24.00	-2.09	20523.940	5.0	47630.430	6.0
368.8180	41.01	-.39	10808.108	0.0	37921.752	0.0
368.8184	24.00	-4.36	27223.050	2.0	54328.950	3.0
368.8188	23.00	-3.46	14548.830	2.5	41654.700	2.5
368.8203	18.02	-1.54	225147.930	2.0	252253.690	2.0
368.8261	22.00	-.74	15975.590	3.0	43080.920	2.0
368.8310	42.01	.39	25003.831	0.0	52116.519	0.0
368.8377	28.01	-4.45	103653.030	3.5	130757.510	4.5
368.8407	28.00	-2.55	2216.519	2.0	29320.782	3.0
368.8407	10.02	-3.09	409855.230	1.0	436959.490	1.0
368.8414	28.01	-3.32	104646.520	3.5	131750.730	3.5
368.8420	63.01	-.70	0.000	0.0	27111.880	0.0
368.8420	62.01	-1.44	806.575	0.0	27918.455	0.0
368.8429	17.01	-1.81	145468.500	1.0	172572.600	2.0
368.8455	26.00	-4.51	26224.961	3.0	53328.670	4.0
368.8455	24.00	-1.83	20517.400	2.0	47621.310	3.0
368.8660	58.01	-.85	5887.999	0.0	32998.115	0.0
368.8700	41.00	-1.44	645.260	0.0	27755.082	0.0
368.8810	23.00	-2.91	9824.580	2.5	36925.880	3.5
368.8930	25.00	-2.87	30411.740	.5	57512.160	1.5
368.8934	24.00	-3.10	20520.920	3.0	47621.310	3.0
368.8947	21.00	-6.68	11557.640	2.5	38657.930	2.5
368.8970	42.00	.35	25729.749	0.0	52837.587	0.0
368.8993	26.00	-2.63	27166.804	4.0	54266.760	5.0
368.9002	23.00	-4.02	14910.040	3.5	42009.930	2.5
368.9011	26.00	-3.71	19621.004	5.0	46720.824	4.0
368.9021	28.01	-3.50	107142.210	1.5	134241.960	.5
368.9032	25.01	-3.61	43131.400	2.0	70231.070	2.0
368.9040	41.00	-.30	10969.423	0.0	38076.746	0.0
368.9060	76.00	-.64	10969.423	0.0	38076.599	0.0
368.9094	25.00	-1.02	38669.600	3.5	65768.810	4.5
368.9119	28.00	-4.86	29084.478	4.0	56183.510	4.0
368.9120	22.00	-4.15	6556.828	1.0	33655.853	2.0
368.9160	58.01	-1.21	4436.164	0.0	31542.606	0.0
368.9190	18.02	-2.60	225155.160	1.0	252253.690	2.0
368.9220	25.02	-4.93	86578.240	3.5	113676.530	2.5
368.9270	25.00	-3.06	37586.030	1.5	64683.950	1.5
368.9311	24.00	-3.52	20523.690	4.0	47621.310	3.0
368.9313	28.00	-1.95	29668.918	3.0	56766.523	4.0
368.9316	10.01	-2.66	280797.260	2.5	307894.640	2.5
368.9362	26.00	-4.54	24506.902	2.0	51604.146	3.0
368.9402	9.00	-2.20	102840.376	.5	129937.330	1.5
368.9427	8.01	-4.20	248514.230	1.5	275611.000	.5
368.9427	8.01	-3.12	248514.230	1.5	275611.000	1.5
368.9448	26.00	-.55	23711.443	4.0	50808.053	4.0
368.9450	17.01	-1.09	158768.600	2.0	185865.200	3.0
368.9471	26.00	-1.91	22946.810	1.0	50043.250	1.0
368.9500	75.00	-.12	14115.066	0.0	41219.010	0.0
368.9621	25.00	-1.57	34938.700	4.5	62034.040	3.5
368.9621	24.00	-.80	27703.840	4.0	54799.180	5.0
368.9691	26.00	-1.90	26627.612	4.0	53722.440	5.0
368.9730	73.00	-1.12	9598.245	0.0	36700.499	0.0
368.9869	26.00	-2.28	24574.655	4.0	51668.175	4.0
368.9916	22.00	-2.39	386.874	4.0	27480.047	3.0
368.9922	28.01	-3.84	72985.650	1.5	100078.780	1.5
368.9940	25.01	-3.75	39808.140	3.0	66901.140	2.0
368.9969	22.01	-3.69	39674.640	.5	66767.430	.5
369.0001	25.00	-2.11	30419.610	2.5	57512.160	1.5
369.0023	9.00	-1.65	102680.435	1.5	129772.830	2.5
369.0064	26.00	-3.58	20874.482	3.0	47966.571	3.0
369.0080	62.00	-.38	2258.411	0.0	29358.094	0.0
369.0128	23.00	-1.40	15270.420	1.5	42362.040	.5
369.0193	22.00	-2.88	8436.618	0.0	35527.760	1.0
369.0237	28.01	-3.93	109846.000	3.5	136936.620	3.5
369.0283	23.00	-.40	2112.320	.5	29202.800	1.5
369.0340	46.00	.12	11614.683	0.0	38712.457	0.0
369.0373	25.01	-2.05	43850.420	2.0	70940.240	2.0
369.0392	24.00	-3.83	27728.870	2.0	54818.550	2.0
369.0437	26.00	-4.90	26479.366	1.0	53568.720	2.0
369.0458	26.00	-1.39	25091.620	0.0	52180.820	1.0
369.0490	90.01	-.75	9678.902	0.0	36775.575	0.0
369.0528	28.00	-2.09	31441.665	2.0	58530.350	3.0
369.0560	70.01	-.40	34602.076	0.0	61698.235	0.0
369.0582	26.02	-2.42	117950.320	4.0	145038.610	3.0
369.0590	42.00	.49	20809.640	0.0	47905.579	0.0
369.0603	28.00	-4.41	26665.903	3.0	53754.036	2.0
369.0622	23.00	-2.91	16917.150	5.5	44005.140	4.5
369.0654	25.01	-4.94	39813.380	2.0	66901.140	2.0
369.0700	45.00	-.53	3226.301	0.0	30321.432	0.0
369.0707	23.01	-2.57	26839.820	3.0	53927.190	3.0
369.0714	27.00	-1.09	16467.900	4.5	43555.220	3.5
369.0723	26.00	-.57	28819.966	5.0	55907.220	5.0
369.0764	25.01	-4.31	71323.150	2.0	98410.100	2.0
369.0772	25.00	-2.88	34138.880	6.5	61225.770	5.5
369.0774	28.01	-4.22	101740.270	3.5	128827.150	3.5
369.0802	25.00	-1.30	34138.880	6.5	61225.550	6.5
369.0810	25.01	-2.11	52653.270	4.0	79739.880	5.0
369.0832	25.00	-2.18	30425.710	1.5	57512.160	1.5
369.0845	28.00	-.38	31786.210	3.0	58872.570	4.0
369.0875	20.02	-4.93	323655.060	2.0	350741.190	3.0
369.0895	25.00	-1.77	37737.220	3.5	64823.210	2.5
369.0930	62.01	-1.94	806.575	0.0	27900.618	0.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
369.0936	25.00	-4.17	38934.940	2.5	66020.630	2.5
369.0949	26.00	-2.47	28819.966	5.0	55905.560	4.0
369.1003	25.01	-3.26	52373.180	3.0	79458.380	2.0
369.1068	22.00	-2.52	8492.421	1.0	35577.140	2.0
369.1176	26.00	-2.28	21038.987	2.0	48122.913	3.0
369.1188	28.00	-2.33	31441.665	2.0	58525.507	1.0
369.1230	26.00	-7.72	12968.552	2.0	40052.080	2.0
369.1234	23.03	.27	257143.200	2.0	284226.700	3.0
369.1471	26.02	-3.67	199300.150	2.0	226381.910	3.0
369.1480	75.00	.39	16212.162	0.0	43301.568	0.0
369.1506	24.01	-3.55	47354.630	2.5	74436.140	2.5
369.1520	26.00	-4.97	27666.334	1.0	54747.740	1.0
369.1523	22.00	-4.20	6598.749	2.0	33680.130	3.0
369.1527	21.00	-6.81	11520.150	1.5	38601.500	1.5
369.1848	25.01	-1.97	52379.380	2.0	79456.380	2.0
369.1854	9.00	-1.85	102405.710	2.5	129484.660	1.5
369.1875	17.01	-.07	158786.400	3.0	185865.200	3.0
369.2000	8.04	-1.61	677333.000	0.0	704418.590	0.0
369.2052	28.01	-3.16	103653.030	3.5	130730.530	2.5
369.2078	25.00	-3.45	33825.490	2.5	60904.800	3.5
369.2080	42.00	-.81	18389.915	0.0	45474.919	0.0
369.2124	18.01	-2.72	159393.310	1.5	186470.280	1.5
369.2139	23.00	-3.90	16572.540	3.5	43649.400	2.5
369.2180	25.00	-3.47	23296.670	3.5	50373.230	2.5
369.2216	23.00	-.15	2220.130	2.5	29296.430	2.5
369.2217	22.00	-.50	19573.968	4.0	46650.260	3.0
369.2220	62.01	-1.27	2177.753	0.0	29261.730	0.0
369.2235	28.01	-4.15	106133.140	1.5	133209.300	2.5
369.2261	24.00	-4.40	27176.220	1.0	54252.190	2.0
369.2272	10.01	-2.19	280947.100	1.5	308022.990	.5
369.2283	18.01	-4.20	132630.650	1.5	159706.460	.5
369.2357	8.00	-3.61	76794.990	1.0	103870.252	0.0
369.2360	45.00	-.24	0.000	0.0	27082.950	0.0
369.2388	8.00	-3.14	76794.990	1.0	103870.028	1.0
369.2396	8.00	-2.92	76794.990	1.0	103869.968	2.0
369.2530	39.00	.64	17018.737	0.0	44100.440	0.0
369.2570	90.00	-.72	3629.588	0.0	30710.997	0.0
369.2640	42.01	.82	24519.886	0.0	51600.782	0.0
369.2640	68.00	.18	403.288	0.0	27484.184	0.0
369.2812	25.00	-2.31	17451.520	2.5	44523.450	3.5
369.2826	24.00	-4.71	24940.610	2.0	52014.440	2.0
369.2853	23.00	-1.82	14949.300	4.5	42020.930	3.5
369.2873	25.01	-1.86	55759.270	3.0	82830.750	4.0
369.2926	28.01	-3.14	94729.250	2.5	121800.340	1.5
369.3006	26.01	-4.50	49506.990	1.5	76577.500	.5
369.3019	26.00	-1.16	24338.766	3.0	51409.180	4.0
369.3050	73.00	-.86	12743.888	0.0	39821.778	0.0
369.3083	24.00	-.76	27816.880	5.0	54886.620	6.0
369.3097	22.01	-3.59	39926.830	2.5	66996.670	3.5
369.3100	27.00	-1.03	16778.160	2.5	43847.980	3.5
369.3122	26.00	-2.28	29313.008	6.0	56382.664	5.0
369.3143	30.02	.04	234866.900	1.0	261936.400	1.0
369.3170	10.02	-1.75	409845.080	2.0	436914.390	2.0
369.3183	24.01	-3.09	47354.630	2.5	74423.840	3.5
369.3229	28.01	-4.69	95017.710	4.5	122086.580	3.5
369.3255	27.00	-2.90	14036.280	1.5	41104.960	2.5
369.3263	22.00	-.68	20126.055	3.0	47194.680	4.0
369.3268	26.01	-1.38	72619.610	2.5	99686.200	3.5
369.3363	27.00	-1.42	16195.680	.5	43263.570	1.5
369.3370	41.00	-.80	4920.109	0.0	31995.652	0.0
369.3373	23.01	-5.31	12545.150	4.0	39612.970	5.0
369.3380	42.00	-.82	11372.710	0.0	38448.180	0.0
369.3389	30.02	.30	235452.500	2.0	262520.200	2.0
369.3391	10.01	-1.12	280173.010	4.5	307240.700	3.5
369.3420	25.00	-1.54	30419.610	2.5	57487.080	2.5
369.3420	58.01	-.20	10162.848	0.0	37236.025	0.0
369.3454	25.01	-4.72	39826.570	1.0	66893.790	1.0
369.3463	23.00	-1.02	10892.500	3.5	37959.660	2.5
369.3470	27.00	-.82	16470.600	1.5	43537.710	1.5
369.3504	10.02	-2.24	409847.530	3.0	436914.390	2.0
369.3558	24.00	-3.17	20519.600	6.0	47586.060	5.0
369.3667	25.00	.52	34138.880	6.5	61204.540	7.5
369.3686	27.00	-3.04	14036.280	1.5	41101.800	.5
369.3710	58.01	-.74	8227.067	0.0	35300.118	0.0
369.3778	26.00	-3.57	12560.933	3.0	39625.784	4.0
369.3850	22.00	-7.92	14105.680	3.0	41170.003	3.0
369.3919	23.00	-2.86	9636.960	1.5	36700.780	2.5
369.3931	28.00	-2.69	879.813	2.0	27943.543	1.0
369.3977	24.01	-2.40	47372.750	1.5	74436.140	2.5
369.3990	62.01	-.96	0.000	0.0	27070.999	0.0
369.3995	26.00	-.31	24506.902	2.0	51570.160	3.0
369.4036	28.01	-4.42	101740.270	3.5	128803.230	2.5
369.4084	25.00	-2.16	23296.670	3.5	50359.280	3.5
369.4090	22.00	-1.71	16267.510	5.0	43330.070	5.0
369.4107	20.01	-1.04	60611.280	1.5	87673.720	2.5
369.4116	24.00	-2.17	20523.690	4.0	47586.060	5.0
369.4151	24.00	-3.28	20523.940	5.0	47586.060	5.0
369.4157	25.00	-.33	34423.270	3.5	61485.340	4.5
369.4178	22.00	-6.21	6598.749	2.0	33660.671	1.0
369.4190	70.01	-.82	0.000	0.0	27069.534	0.0
369.4212	10.01	.09	219130.780	2.5	246192.450	2.5
369.4215	14.01	-3.34	97972.350	.5	125034.000	1.5
369.4253	25.00	-2.40	30425.710	1.5	57487.080	2.5
369.4273	22.00	-4.65	18695.230	4.0	45756.450	5.0
369.4304	16.05	-1.41	600170.000	2.5	627231.000	2.5
369.4304	16.05	-.10	600170.000	3.5	627231.000	2.5
369.4304	16.05	-.26	600170.000	2.5	627231.000	1.5
369.4321	22.00	-4.74	18145.400	2.0	45206.270	3.0
369.4352	20.01	-2.00	60611.280	1.5	87671.930	1.5
369.4445	22.00	-.96	11639.804	3.0	38699.767	2.0
369.4463	10.01	-2.39	280947.100	1.5	308006.930	.5
369.4520	73.01	.15	14357.039	0.0	41424.155	0.0
369.4554	10.02	-2.13	409855.230	1.0	436914.390	2.0
369.4597	23.00	-2.44	16728.750	4.5	43767.600	4.5
369.4641	23.00	-1.96	9636.960	1.5	36695.490	.5
369.4670	41.00	0.00	11453.368	0.0	38519.385	0.0
369.4682	27.00	.26	23152.570	3.5	50210.800	4.5
369.4805	25.00	-2.58	34423.270	3.5	61460.600	3.5
369.4810	66.01	-.14	806.575	0.0	27671.566	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
369.4835	22.00	-4.82	6598.749	2.0	33655.853	2.0
369.4910	58.01	-.69	2339.068	0.0	29403.327	0.0
369.4940	42.00	.77	16534.792	0.0	43598.831	0.0
369.4950	45.00	-.78	13389.148	0.0	40453.114	0.0
369.4967	25.00	-3.23	41230.300	3.5	68286.440	4.5
369.4975	24.01	-3.53	42898.120	2.5	69954.200	2.5
369.5044	26.00	-.56	24574.655	4.0	51630.230	5.0
369.5055	26.00	-2.29	20874.482	3.0	47929.981	4.0
369.5156	23.01	-1.80	20242.320	4.0	47297.080	5.0
369.5164	30.02	-1.12	234866.900	1.0	261921.600	2.0
369.5177	23.01	-4.33	25191.080	2.0	52245.680	2.0
369.5245	8.02	-.42	365723.900	1.0	392778.000	1.0
369.5245	10.01	-1.06	291202.030	3.5	318256.130	2.5
369.5292	26.02	-4.54	179207.570	5.0	206261.330	4.0
369.5326	23.00	-1.50	17136.440	6.5	44189.950	7.5
369.5340	28.01	-4.71	109148.050	4.5	136201.460	3.5
369.5358	29.00	-1.65	44926.239	0.0	71987.217	0.0
369.5362	8.02	-.39	338565.870	1.0	365619.120	2.0
369.5380	73.00	-1.10	11695.340	0.0	38756.156	0.0
369.5396	26.00	-1.14	32873.623	4.0	59926.620	5.0
369.5416	14.01	-3.77	97972.350	.5	125025.200	.5
369.5444	25.00	-4.34	37586.030	1.5	64638.680	.5
369.5508	26.00	-2.42	20641.110	4.0	47693.289	3.0
369.5512	26.00	-4.36	27559.568	2.0	54611.720	2.0
369.5520	45.00	.73	15889.531	0.0	42949.322	0.0
369.5593	24.00	-3.88	27935.260	4.0	54986.820	3.0
369.5612	26.00	-2.13	29371.860	3.0	56423.276	4.0
369.5720	25.01	-1.85	81051.620	3.0	108102.250	3.0
369.5722	22.00	-2.44	8602.340	2.0	35652.950	3.0
369.5739	21.00	-6.79	11520.150	1.5	38570.640	.5
369.5753	23.00	-3.52	137.380	2.5	27187.770	2.5
369.5764	26.00	-2.43	26224.961	3.0	53275.270	2.0
369.5841	26.01	-3.41	44915.070	3.5	71964.810	2.5
369.5860	23.00	-.25	2153.200	1.5	29202.800	1.5
369.5889	9.01	-4.65	243458.900	1.0	270508.290	2.0
369.5900	41.01	.11	14599.011	0.0	41656.020	0.0
369.5957	25.01	-2.05	43696.190	3.0	70745.080	3.0
369.5980	90.01	-.71	11050.080	0.0	38106.503	0.0
369.6035	26.00	-2.49	19552.474	1.0	46600.800	1.0
369.6040	42.00	.63	29843.282	0.0	56899.266	0.0
369.6079	23.00	-1.57	15270.420	1.5	42318.420	1.5
369.6085	25.00	-1.72	34423.270	3.5	61471.230	2.5
369.6093	25.01	-2.58	81054.350	2.0	108102.250	3.0
369.6120	58.01	-1.17	3952.218	0.0	31007.617	0.0
369.6121	21.00	-5.91	11610.240	3.5	38657.930	2.5
369.6199	26.02	-2.72	114351.920	3.0	141399.040	2.0
369.6290	28.00	-3.10	15609.861	2.0	42656.317	1.0
369.6363	23.00	-4.66	23608.800	1.5	50654.720	2.5
369.6370	22.01	-3.27	12628.770	1.5	39674.640	.5
369.6419	9.01	-4.40	243462.780	2.0	270508.290	2.0
369.6510	72.00	-1.42	2339.068	0.0	29391.612	0.0
369.6516	15.01	-4.13	103756.900	1.0	130801.700	1.0
369.6540	25.00	-1.15	23296.670	3.5	50341.300	4.5
369.6590	44.00	-.32	10566.135	0.0	37618.094	0.0
369.6627	24.00	-1.41	33040.100	2.0	60084.090	1.0
369.6645	28.00	-2.71	15609.861	2.0	42653.723	2.0
369.6645	21.00	-6.14	11557.640	2.5	38601.500	1.5
369.6650	90.01	-1.27	9356.272	0.0	36407.792	0.0
369.6741	24.01	-2.11	39684.000	3.5	66727.160	2.5
369.6890	22.00	-.59	16106.080	4.0	43148.150	3.0
369.6903	28.00	-.67	29668.918	3.0	56710.889	2.0
369.6930	64.00	-.94	0.000	0.0	27049.471	0.0
369.6977	26.00	-1.90	33765.291	2.0	60806.720	3.0
369.6995	17.01	-3.75	158723.700	1.0	185765.000	2.0
369.7030	90.01	-1.66	6129.972	0.0	33178.711	0.0
369.7113	21.01	-1.85	12074.000	0.0	39114.440	1.0
369.7124	10.01	-.99	254292.190	.5	281332.550	.5
369.7130	23.00	-1.38	14910.040	3.5	41950.350	2.5
369.7167	28.01	-2.84	104646.520	3.5	131686.560	4.5
369.7190	22.00	-4.45	6661.003	3.0	33700.874	4.0
369.7236	18.01	-3.24	179592.130	2.5	206631.670	2.5
369.7307	9.01	-4.26	243469.270	3.0	270508.290	2.0
369.7390	41.00	-.77	5887.999	0.0	32934.104	0.0
369.7402	26.02	-4.48	90483.590	3.0	117521.910	4.0
369.7446	17.01	-2.75	126219.000	3.0	153257.000	2.0
369.7460	40.01	-.61	3710.246	0.0	30755.839	0.0
369.7505	26.01	-2.57	72650.630	4.5	99688.200	3.5
369.7528	26.00	-.72	26623.726	2.0	53661.130	3.0
369.7660	58.01	-.47	7178.519	0.0	34222.650	0.0
369.7680	26.01	-2.75	72651.910	3.5	99688.200	3.5
369.7694	23.01	-3.70	30306.400	3.0	57342.590	2.0
369.7703	28.01	-4.20	67031.020	.5	94067.140	1.5
369.7710	75.00	.20	27020.269	0.0	54064.034	0.0
369.7720	10.03	-4.55	524676.000	1.5	551712.000	.5
369.7730	64.01	-.39	241.973	0.0	27285.592	0.0
369.7731	23.00	-2.38	9544.540	.5	36580.460	1.5
369.7760	44.00	-.93	8711.012	0.0	35754.411	0.0
369.7810	22.00	-7.20	8492.421	1.0	35527.760	1.0
369.7826	26.01	-4.41	44929.590	2.5	71964.810	2.5
369.7850	41.00	-.36	322.630	0.0	27365.371	0.0
369.7852	24.00	-4.67	27163.200	0.0	54198.230	1.0
369.7907	29.01	-3.59	121524.670	3.0	148559.300	2.0
369.7910	28.01	-3.05	67694.640	2.5	94729.250	2.5
369.7917	28.01	-3.32	109846.000	3.5	136880.560	4.5
369.7995	24.01	-1.01	38509.070	3.5	65543.060	3.5
369.8027	26.00	-1.68	17726.985	2.0	44760.739	1.0
369.8039	22.00	-5.13	12118.394	4.0	39152.057	5.0
369.8041	25.00	-2.54	35041.370	3.5	62075.020	2.5
369.8059	26.00	-1.31	26627.612	4.0	53661.130	3.0
369.8068	10.01	-2.67	280989.530	1.5	308022.990	.5
369.8092	25.00	-2.51	37789.930	2.5	64823.210	2.5
369.8100	77.00	-.10	18954.517	0.0	45995.430	0.0
369.8110	90.00	.06	9759.560	0.0	36800.400	0.0
369.8130	58.01	-1.15	4113.534	0.0	31154.228	0.0
369.8148	26.00	-4.93	24506.902	2.0	51539.770	2.0
369.8170	24.00	-2.02	27703.840	4.0	54736.550	4.0
369.8170	40.01	.33	8065.752	0.0	35106.153	0.0
369.8233	27.00	-2.89	13795.520	2.5	40827.770	1.5
369.8249	22.00	-.87	20006.032	2.0	47038.160	3.0
369.8260	45.00	-.41	10888.765	0.0	37928.508	0.0
369.8264	22.00	-4.56	21739.713	5.0	48771.730	5.0
369.8300	90.01	-1.08	11614.683	0.0	38654.134	0.0
369.8311	18.01	-2.25	179592.130	2.5	206623.800	3.5
369.8360	58.01	-.61	6452.602	0.0	33491.614	0.0
369.8400	72.01	-.21	17260.709	0.0	44299.428	0.0
369.8416	22.00	-2.47	11639.804	3.0	38670.710	4.0
369.8450	29.01	-4.90	114511.440	1.0	141542.100	2.0
369.8530	42.00	-.22	20164.380	0.0	47202.149	0.0
369.8590	70.01	-.23	35650.624	0.0	62687.954	0.0
369.8600	45.00	.33	15889.531	0.0	42926.788	0.0
369.8604	26.00	-.80	24335.764	2.0	51365.300	3.0
369.8658	24.00	-4.78	27223.050	2.0	54252.190	2.0
369.8660	58.01	-.97	2823.013	0.0	29859.832	0.0
369.8669	24.00	-4.57	21810.840	1.0	48839.900	1.0
369.8702	8.02	.04	338690.340	2.0	365719.160	3.0
369.8703	23.01	-4.29	26839.820	3.0	53868.630	2.0
369.8747	26.01	-3.77	49101.090	.5	76129.580	1.5
369.8830	76.00	-1.02	14760.326	0.0	41795.902	0.0
369.8906	18.02	-1.83	204727.470	1.0	231754.800	0.0
369.8923	14.00	-8.22	6298.850	2.0	33326.053	2.0
369.8956	25.00	-3.16	38934.940	2.5	65961.900	1.5
369.8973	25.02	-2.34	86051.500	2.5	113078.340	1.5
369.9015	26.00	-3.03	24338.766	3.0	51365.300	3.0
369.9084	24.01	-2.46	50687.630	2.5	77713.660	1.5
369.9097	29.00	-1.64	46136.101	0.0	73169.726	0.0
369.9129	24.00	-.99	33934.880	3.0	60960.580	4.0
369.9134	24.00	-3.61	25038.610	5.0	52064.270	4.0
369.9208	28.00	-2.75	29832.810	3.0	56857.933	4.0
369.9240	25.01	-2.83	81147.650	2.0	108172.540	1.0
369.9290	28.01	-4.14	72985.650	1.5	100010.170	.5
369.9314	28.01	-4.27	104646.520	3.5	131670.870	2.5
369.9396	26.00	-3.84	31686.342	2.0	58710.090	3.0
369.9420	74.00	-.13	19519.120	0.0	46550.384	0.0
369.9483	23.00	-1.27	11100.650	4.5	38123.760	4.5
369.9526	25.01	-2.15	81147.650	2.0	108170.450	2.0
369.9549	27.00	-3.71	15774.040	1.5	42796.670	1.5
369.9567	22.01	-3.50	40798.370	3.5	67820.870	4.5
369.9581	22.01	-4.56	40581.800	2.5	67604.200	3.5
369.9634	24.00	-4.74	27176.220	1.0	54198.230	1.0
369.9663	12.02	-2.06	534776.900	2.0	561798.700	3.0
369.9675	24.00	-3.67	39158.630	4.0	66180.340	5.0
369.9720	72.01	-.30	13389.148	0.0	40418.220	0.0
369.9730	64.01	-.26	2823.013	0.0	29852.012	0.0
369.9859	26.00	-2.59	26140.164	3.0	53160.530	3.0
369.9900	26.01	-4.03	36252.960	2.5	63273.030	2.5
369.9910	78.00	-1.18	13389.148	0.0	40418.832	0.0
369.9915	25.01	-4.24	71390.140	3.0	98410.100	2.0
369.9920	58.01	-.68	4839.451	0.0	31867.062	0.0
370.0010	42.00	-.10	20003.065	0.0	47030.019	0.0
370.0029	22.00	-4.78	6661.003	3.0	33680.130	3.0
370.0037	26.00	-4.05	27394.676	3.0	54413.740	3.0
370.0048	25.01	-3.99	43131.400	2.0	70150.390	1.0
370.0097	24.00	-1.59	35884.400	5.0	62903.030	6.0
370.0104	25.00	-.68	37630.620	4.5	64649.200	3.5
370.0126	23.01	-1.12	20089.560	1.0	47107.980	1.0
370.0159	26.02	-3.25	117950.320	4.0	144968.500	4.0
370.0217	10.01	-2.39	281720.280	1.5	308738.030	1.5
370.0222	25.01	-4.26	43528.300	5.0	70546.020	4.0
370.0260	69.01	-.77	161.315	0.0	27186.443	0.0
370.0265	10.01	-2.03	280989.530	1.5	308006.930	.5
370.0296	24.01	-4.76	53271.070	2.5	80288.250	1.5
370.0297	25.00	-1.30	27201.540	2.5	54218.710	1.5
370.0335	23.01	-.40	20280.190	5.0	47297.080	5.0
370.0386	24.00	-3.21	23933.900	4.0	50950.420	3.0
370.0408	24.01	-4.55	20024.180	3.5	47040.540	2.5
370.0417	8.00	-4.94	102968.261	1.0	129984.553	0.0
370.0426	25.01	-4.71	55371.300	3.0	82387.530	3.0
370.0450	25.01	-4.33	55696.500	4.0	82712.550	3.0
370.0536	29.00	-.92	44926.239	0.0	71949.351	0.0
370.0580	92.01	-1.03	887.233	0.0	27910.024	0.0
370.0594	23.00	-1.69	11100.650	4.5	38115.650	3.5
370.0599	26.00	-3.01	26140.164	3.0	53155.130	4.0
370.0600	62.01	-1.12	3468.273	0.0	30490.918	0.0
370.0665	28.01	-2.09	108368.050	2.5	135382.530	1.5
370.0690	24.02	-1.89	70291.800	2.0	97306.100	2.0
370.0745	15.01	-1.64	111508.500	0.0	138522.400	1.0
370.0770	90.01	-.34	15163.614	0.0	42185.018	0.0
370.0870	21.01	-1.97	12101.450	1.0	39114.440	1.0
370.0910	45.00	-.14	1451.835	0.0	28472.216	0.0
370.0920	22.00	-2.34	11531.760	2.0	38544.380	3.0
370.0961	23.01	-1.27	20089.560	1.0	47101.880	2.0
370.0965	26.00	-3.82	22838.320	2.0	49850.610	3.0
370.0980	90.00	-1.09	5484.711	0.0	32504.581	0.0
370.0990	44.00	.17	17018.737	0.0	44038.534	0.0
370.1000	8.04	-1.13	677333.000	0.0	704352.724	0.0
370.1015	25.00	-3.63	38934.940	2.5	65946.870	2.5
370.1043	26.02	-4.25	186998.600	4.0	214016.320	5.0
370.1077	26.00	-2.28	24180.848	3.0	51192.320	4.0
370.1117	28.00	-1.86	15609.861	2.0	42621.048	3.0
370.1138	8.00	-3.51	102968.355	2.0	129979.384	1.0
370.1145	22.00	-3.38	8492.421	1.0	35503.400	0.0
370.1150	72.01	.33	17260.709	0.0	44279.338	0.0
370.1225	10.00	-2.49	135888.717	1.0	162899.113	2.0
370.1307	23.03	-.58	258208.800	1.0	285298.600	1.0
370.1340	73.00	-1.61	11130.738	0.0	38147.980	0.0
370.1360	69.01	-.89	0.000	0.0	27017.096	0.0
370.1400	25.01	-3.67	43536.900	4.0	70546.020	4.0
370.1459	27.00	-3.50	22475.360	4.5	49484.050	3.5
370.1520	92.01	-.17	5484.711	0.0	32500.640	0.0
370.1560	62.01	-1.72	2177.753	0.0	29193.390	0.0
370.1572	25.00	-4.32	34463.370	1.5	61471.230	2.5
370.1595	28.00	-2.75	28569.210	2.0	55576.905	3.0
370.1723	25.00	-1.82	17282.000	3.5	44288.760	4.5
370.1774	10.01	-4.32	276511.820	.5	303518.210	1.5
370.1777	10.01	.02	254165.010	1.5	281171.380	2.5
370.1810	57.01	.47	28149.475	0.0	55163.287	0.0
370.1841	28.02	-3.48	156853.400	3.0	183859.300	3.0
370.1850	10.01	-1.44	281171.380	2.5	308177.220	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
370.1918	24.01	-2.69	42898.120	2.5	69903.460	3.5
370.1978	28.01	-4.84	92792.080	3.5	119796.980	2.5
370.2001	18.01	-3.48	163506.450	3.5	190511.190	2.5
370.2026	26.00	-1.17	22946.810	1.0	49951.360	0.0
370.2030	42.00	-.05	16615.449	0.0	43627.656	0.0
370.2049	10.01	-4.29	322348.010	3.5	349352.400	4.5
370.2049	10.01	-.96	322348.010	4.5	349352.400	4.5
370.2056	28.01	-4.73	29070.930	1.5	56075.260	2.5
370.2105	13.02	-.34	143633.380	.5	170637.350	.5
370.2145	24.00	-3.03	24056.110	5.0	51059.790	4.0
370.2173	25.01	-2.67	43339.100	2.0	70342.580	3.0
370.2204	23.00	-3.10	17136.440	6.5	44139.690	5.5
370.2240	44.00	-1.62	7985.094	0.0	34995.769	0.0
370.2292	22.00	-.97	8436.618	0.0	35439.228	1.0
370.2320	74.00	-.72	14840.984	0.0	41851.075	0.0
370.2340	22.00	-4.86	18061.540	1.0	45063.600	2.0
370.2424	8.00	-3.80	102968.355	2.0	129970.000	2.0
370.2424	8.00	-2.90	102968.355	3.0	129970.000	2.0
370.2475	26.00	-4.35	12968.552	2.0	39969.830	3.0
370.2493	26.00	-1.24	17550.180	3.0	44551.325	3.0
370.2550	42.00	.31	20164.380	0.0	47172.793	0.0
370.2620	92.00	-.11	4194.191	0.0	31202.094	0.0
370.2653	24.00	-2.36	24286.540	1.0	51286.520	2.0
370.2682	26.00	-4.41	26874.534	5.0	53874.300	5.0
370.2687	8.02	-.37	300228.210	0.0	327227.940	1.0
370.2711	10.02	-2.25	409845.080	2.0	436844.630	3.0
370.2719	30.02	-.17	236560.000	0.0	263559.500	1.0
370.2719	30.02	-1.33	236560.000	0.0	263559.500	1.0
370.2784	25.01	-2.74	43528.300	5.0	70527.320	5.0
370.2790	58.01	-.91	3629.588	0.0	30636.251	0.0
370.2807	28.00	-4.56	28578.046	3.0	55576.905	3.0
370.2811	25.01	-2.24	62572.200	2.0	89571.030	3.0
370.2886	23.00	-3.09	9824.580	2.5	36822.860	3.5
370.2984	22.00	-2.68	12118.394	4.0	39115.958	4.0
370.2993	25.01	-1.68	86897.700	3.0	113895.200	2.0
370.3000	8.04	-1.60	677532.000	0.0	704537.131	0.0
370.3048	10.02	-1.64	409847.530	3.0	436844.630	3.0
370.3144	17.01	-3.10	158768.600	2.0	185765.000	2.0
370.3160	41.00	.09	12905.203	0.0	39909.167	0.0
370.3212	13.01	-.40	106918.200	1.0	133914.100	2.0
370.3240	75.00	-.39	13711.778	0.0	40715.159	0.0
370.3250	76.00	.04	17583.339	0.0	44586.647	0.0
370.3270	92.00	-.55	564.603	0.0	27567.765	0.0
370.3341	8.02	.32	338851.500	3.0	365846.460	4.0
370.3355	25.00	-2.81	33825.490	2.5	60820.350	2.5
370.3356	22.00	-5.85	6661.003	3.0	33655.853	2.0
370.3421	26.00	-3.25	27166.804	4.0	54161.182	3.0
370.3459	24.02	-4.22	131448.800	5.0	158442.900	4.0
370.3520	6.02	-.70	319719.000	0.0	346720.339	0.0
370.3528	30.02	.50	235452.500	2.0	262446.100	3.0
370.3550	26.00	-.90	22249.430	3.0	49242.872	3.0
370.3572	23.00	.30	2424.890	4.5	29418.170	3.5
370.3576	26.00	-1.84	22249.430	3.0	49242.680	2.0
370.3656	25.00	-2.20	35041.370	3.5	62034.040	3.5
370.3665	24.02	-4.69	69780.900	1.0	96773.500	1.0
370.3745	24.00	-4.06	21847.880	2.0	48839.900	1.0
370.3780	90.00	-.87	4920.109	0.0	31919.553	0.0
370.3815	26.00	-1.22	23051.744	0.0	50043.250	1.0
370.3830	23.01	-2.03	12621.570	5.0	39612.970	5.0
370.3844	17.01	-2.00	147053.700	2.0	174045.000	3.0
370.3894	29.01	-1.63	121524.670	3.0	148515.600	4.0
370.3910	41.00	.09	12905.203	0.0	39903.699	0.0
370.3926	12.02	-.15	562136.100	2.0	589126.600	1.0
370.3942	28.01	-4.37	104646.520	3.5	131637.100	3.5
370.3964	25.01	-4.68	43536.900	4.0	70527.320	5.0
370.3992	23.00	-3.17	9824.580	2.5	36814.800	1.5
370.4008	23.01	-3.08	25191.080	2.0	52181.180	1.0
370.4008	26.00	-1.35	24772.019	1.0	51762.120	2.0
370.4056	27.00	-.71	8460.810	2.5	35450.560	3.5
370.4063	30.02	-.58	237642.700	3.0	264632.400	3.0
370.4140	41.00	-.03	11453.368	0.0	38450.188	0.0
370.4194	28.00	-4.23	29832.810	3.0	56821.553	3.0
370.4257	28.00	-2.13	30979.789	4.0	57968.080	3.0
370.4273	24.01	-3.71	54444.190	3.5	81432.360	3.5
370.4293	22.00	-.74	11776.806	4.0	38764.832	3.0
370.4350	26.00	-2.58	26105.908	6.0	53093.517	6.0
370.4384	24.01	-4.72	38269.670	3.5	65257.030	3.5
370.4464	26.00	-.69	21715.735	5.0	48702.518	4.0
370.4485	24.00	-4.78	24299.890	2.0	51286.520	2.0
370.4540	57.00	-.57	1048.548	0.0	28042.453	0.0
370.4633	28.01	-3.95	107082.210	2.5	134067.760	1.5
370.4700	23.00	.03	2311.370	3.5	29296.430	2.5
370.4736	24.01	-3.43	39742.360	2.5	66727.160	2.5
370.4741	26.00	-3.96	27394.676	3.0	54379.440	3.0
370.4746	8.02	-.28	338565.870	1.0	365550.600	1.0
370.4798	26.00	-2.63	29798.960	4.0	56783.306	3.0
370.4840	75.00	-1.33	13711.778	0.0	40703.497	0.0
370.4850	69.01	-.88	8711.012	0.0	35702.658	0.0
370.4870	90.00	-1.13	2823.013	0.0	29814.513	0.0
370.4910	25.01	-3.24	62587.500	3.0	89571.030	3.0
370.4911	28.01	-4.06	94067.140	1.5	121050.660	2.5
370.4920	72.00	.09	18228.600	0.0	45219.736	0.0
370.4931	24.00	-2.91	27816.880	5.0	54800.260	6.0
370.4980	58.01	-.40	5726.684	0.0	32717.383	0.0
370.5000	2.00	-.86	169087.000	0.0	196077.553	0.0
370.5011	23.03	-.37	256739.900	0.0	283722.700	1.0
370.5020	75.00	-1.10	13711.778	0.0	40702.186	0.0
370.5028	23.00	-.43	2220.130	2.5	29202.800	1.5
370.5041	24.00	-2.00	24303.940	3.0	51286.520	2.0
370.5074	27.00	-3.73	29563.170	1.5	56545.510	2.5
370.5079	24.00	-1.46	27816.880	5.0	54799.180	5.0
370.5103	28.00	-4.88	3409.925	2.0	30392.052	1.0
370.5175	10.01	-4.96	249695.530	1.5	276677.130	.5
370.5252	26.00	-3.20	27394.676	3.0	54375.719	2.0
370.5282	25.01	-4.56	43536.900	4.0	70517.720	3.0
370.5348	23.02	-1.18	61578.740	.5	88559.080	1.5
370.5400	72.01	-.09	17583.339	0.0	44570.979	0.0
370.5407	24.01	-3.02	38563.150	4.5	65543.060	3.5
370.5410	42.00	-.23	20003.065	0.0	46990.632	0.0
370.5425	26.01	-4.31	72352.170	3.5	99331.950	4.5
370.5450	17.02	-.93	174093.800	1.5	201073.400	.5
370.5459	25.00	-2.17	38669.600	3.5	65649.130	2.5
370.5557	6.00	-2.76	61981.820	1.0	88960.640	0.0
370.5567	26.00	-1.39	415.932	3.0	27394.676	3.0
370.5588	17.01	-1.12	158786.400	3.0	185765.000	2.0
370.5619	10.01	-2.53	280262.330	3.5	307240.700	3.5
370.5656	22.00	-2.99	20209.444	2.0	47187.540	2.0
370.5660	23.00	-3.75	16728.750	4.5	43706.820	3.5
370.5707	26.00	-3.92	22249.430	3.0	49227.160	3.0
370.5746	10.01	-1.96	280797.260	2.5	307774.710	1.5
370.5779	30.02	-.12	238336.200	2.0	265313.400	2.0
370.5807	23.00	-2.48	16917.150	5.5	43894.150	5.5
370.5820	57.01	-.84	6129.972	0.0	33114.553	0.0
370.5924	9.00	-2.14	102405.710	2.5	129381.860	2.5
370.5931	12.02	-1.79	582074.400	2.0	609050.500	2.0
370.5983	25.00	-1.60	37737.220	3.5	64712.940	2.5
370.6023	28.01	-3.84	94067.140	1.5	121042.570	1.5
370.6024	20.01	-.49	25191.510	.5	52166.930	.5
370.6047	25.00	-1.16	34250.520	5.5	61225.770	5.5
370.6078	25.00	.46	34250.520	5.5	61225.550	6.5
370.6102	23.00	-2.93	9636.960	1.5	36611.810	2.5
370.6109	22.00	-6.73	8602.340	2.0	35577.140	2.0
370.6136	15.01	.50	104051.100	3.0	131025.700	4.0
370.6201	22.01	-.34	12628.770	1.5	39602.900	1.5
370.6334	9.02	-3.58	442147.190	2.5	469120.350	1.5
370.6448	9.02	-4.61	442147.190	2.5	469119.520	2.5
370.6502	10.01	-3.25	291968.140	.5	318940.080	1.5
370.6560	76.00	.45	23148.708	0.0	50127.902	0.0
370.6630	40.00	-1.45	1209.863	0.0	28188.547	0.0
370.6631	12.02	-.65	582074.400	2.0	609045.400	3.0
370.6653	28.01	-4.17	107082.210	2.5	134053.050	2.5
370.6659	12.02	-4.63	582074.400	2.0	609045.200	3.0
370.6671	25.00	-1.51	27248.000	1.5	54218.710	1.5
370.6741	12.02	.19	561798.700	3.0	588768.900	2.0
370.6750	62.01	-.86	3871.561	0.0	30849.372	0.0
370.6770	90.00	.12	8065.752	0.0	35043.417	0.0
370.6795	24.00	-1.91	24277.060	0.0	51246.870	1.0
370.6802	9.02	-4.18	464491.890	3.5	491461.650	4.5
370.6887	25.01	-2.73	43528.300	5.0	70497.440	4.0
370.6905	24.00	-.86	35934.020	6.0	62903.030	6.0
370.6914	23.00	-2.86	14949.300	4.5	41918.240	5.5
370.6927	18.01	-2.82	132737.610	.5	159706.460	.5
370.6940	58.01	-.90	4113.534	0.0	31089.962	0.0
370.7011	27.00	-2.57	17233.680	3.5	44201.920	2.5
370.7038	26.00	-4.50	24180.848	3.0	51148.892	2.0
370.7041	26.00	-2.61	24180.848	3.0	51148.870	3.0
370.7117	24.01	-2.49	42986.730	1.5	69954.200	2.5
370.7121	24.00	-.32	35862.820	4.0	62830.260	5.0
370.7145	28.00	-2.70	30619.440	2.0	57586.700	2.0
370.7167	27.00	-3.80	28345.860	4.5	55312.960	4.5
370.7170	42.00	-.04	20164.380	0.0	47139.134	0.0
370.7170	62.01	-1.66	2661.698	0.0	29636.452	0.0
370.7199	8.02	-.01	300310.310	1.0	327277.180	2.0
370.7221	24.00	-4.97	31028.330	2.0	57995.040	1.0
370.7299	26.00	-2.47	26874.534	5.0	53840.680	6.0
370.7305	17.02	-.59	182076.000	1.5	209042.100	.5
370.7335	26.00	-2.75	24338.766	3.0	51304.650	4.0
370.7386	10.01	-2.75	281171.380	2.5	308136.890	1.5
370.7390	58.01	-1.01	4113.534	0.0	31086.688	0.0
370.7420	66.01	-.87	4274.849	0.0	31247.784	0.0
370.7459	27.00	-1.60	16470.600	1.5	43435.580	.5
370.7459	26.00	-1.38	20641.110	4.0	47606.092	5.0
370.7514	24.01	-3.74	40415.340	.5	67379.920	1.5
370.7528	22.00	-.46	16267.510	5.0	43231.990	4.0
370.7557	26.00	-3.03	31307.235	4.0	58271.500	5.0
370.7562	24.01	-2.85	47354.630	2.5	74318.860	2.5
370.7741	28.00	-3.87	13521.352	2.0	40484.282	2.0
370.7752	26.01	-2.74	72130.440	4.5	99093.290	5.5
370.7755	28.01	-3.27	74283.330	.5	101246.160	.5
370.7800	41.00	-1.58	1532.493	0.0	28502.664	0.0
370.7823	26.00	-2.46	704.003	2.0	27666.334	1.0
370.7922	26.00	-.57	17550.180	3.0	44511.795	2.0
370.7922	26.02	-3.94	109570.840	2.0	136532.450	2.0
370.7930	74.00	-1.21	2903.671	0.0	29872.896	0.0
370.7950	92.00	-.09	7017.204	0.0	33986.284	0.0
370.7998	10.01	-3.35	276276.850	1.5	303237.910	1.5
370.8069	25.01	-1.72	43536.900	4.0	70497.440	4.0
370.8098	24.00	-2.58	24286.540	1.0	51246.870	1.0
370.8130	30.02	-1.35	230606.000	0.0	257566.100	1.0
370.8130	21.01	-1.75	12154.340	2.0	39114.440	1.0
370.8138	25.00	-2.04	35114.980	2.5	62075.020	2.5
370.8174	26.00	-4.22	20874.482	3.0	47834.260	3.0
370.8181	24.00	-1.63	35870.530	4.0	62830.260	5.0
370.8364	25.01	-1.83	86936.800	2.0	113895.200	2.0
370.8403	22.00	-4.97	6742.757	4.0	33700.874	4.0
370.8410	62.01	-1.30	322.630	0.0	27288.365	0.0
370.8433	23.03	-.64	257143.200	2.0	284101.100	3.0
370.8444	26.00	-3.96	27166.804	4.0	54124.620	4.0
370.8449	10.01	-1.59	291495.040	2.5	318452.820	1.5
370.8511	29.01	-3.05	121524.670	3.0	148482.000	3.0
370.8543	28.01	-2.47	66571.340	2.5	93528.440	3.5
370.8560	42.00	.26	23551.996	0.0	50516.640	0.0
370.8594	26.00	-4.98	19788.248	4.0	46744.975	3.0
370.8605	26.00	-2.17	20874.482	3.0	47831.132	2.0
370.8625	12.02	-1.54	535179.600	2.0	562136.100	2.0
370.8628	22.00	-1.25	19573.968	4.0	46530.450	4.0
370.8650	62.01	-.87	1451.835	0.0	28415.825	0.0
370.8764	25.02	-3.19	109841.120	3.5	136796.610	2.5
370.8816	27.00	-.71	16470.600	1.5	43425.710	2.5
370.8856	25.00	-1.76	37630.620	4.5	64585.440	4.5
370.8887	25.01	-2.17	81147.650	2.0	108102.250	3.0
370.8894	25.01	-2.68	62564.700	1.0	89519.250	2.0
370.9006	28.00	-3.60	29320.782	3.0	56274.516	2.0
370.9020	26.00	-4.68	24506.902	2.0	51460.530	3.0
370.9130	64.01	-1.14	6533.259	0.0	33493.759	0.0
370.9140	76.00	-.91	11292.053	0.0	38252.480	0.0
370.9218	24.01	-3.36	20512.750	5.5	47464.940	4.5
370.9237	26.00	-2.16	33412.706	3.0	60364.760	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
370.9248	26.00	-.63	7376.762	4.0	34328.733	3.0
370.9250	41.01	-.01	11292.053	0.0	38251.681	0.0
370.9260	40.01	-.01	6371.944	0.0	33331.499	0.0
370.9290	58.01	.08	4113.534	0.0	31072.871	0.0
370.9335	23.01	-2.23	20156.640	0.0	47107.980	1.0
370.9451	23.00	-3.30	14910.040	3.5	41860.540	4.5
370.9526	26.00	-.95	24118.815	4.0	51068.770	5.0
370.9535	8.02	-.63	338565.870	1.0	365515.760	0.0
370.9538	25.01	-3.30	81220.580	3.0	108170.450	2.0
370.9567	27.00	-3.30	17233.680	3.5	44183.340	4.5
370.9621	10.01	-.33	219648.440	1.5	246597.710	.5
370.9652	25.00	-2.41	30411.740	.5	57360.780	1.5
370.9663	26.00	-1.61	20641.110	4.0	47590.070	4.0
370.9712	24.02	-2.89	131118.100	3.0	158066.700	3.0
370.9750	24.00	-.96	35813.730	3.0	62762.060	4.0
370.9827	25.00	-.95	38669.600	3.5	65617.370	3.5
370.9830	10.01	-4.55	280947.100	1.5	307894.840	2.5
370.9899	10.01	-4.24	280473.580	1.5	307420.820	2.5
370.9909	18.01	-1.70	159393.310	1.5	186340.480	1.5
370.9926	25.01	-3.78	62572.200	2.0	89519.250	2.0
370.9930	58.01	-.32	967.890	0.0	27922.576	0.0
370.9930	75.00	-.68	14115.066	0.0	41069.752	0.0
370.9935	24.00	-1.92	24299.890	2.0	51246.870	1.0
370.9959	22.00	-.49	8492.421	1.0	35439.228	1.0
370.9986	24.01	-5.90	20518.330	3.5	47464.940	4.5
371.0010	28.01	-4.49	74300.930	1.5	101247.370	2.5
371.0055	24.01	-4.50	47372.750	1.5	74318.860	2.5
371.0090	24.00	-1.15	35884.400	5.0	62830.260	5.0
371.0140	42.00	-.44	18389.915	0.0	45343.076	0.0
371.0143	26.01	-3.85	38164.240	2.5	65109.710	3.5
371.0196	24.01	-5.64	20519.850	4.5	47464.940	4.5
371.0300	39.01	.02	1371.178	0.0	28323.176	0.0
371.0330	70.01	-.57	28633.420	0.0	55585.201	0.0
371.0415	23.00	-1.95	9636.960	1.5	36580.460	1.5
371.0420	23.00	-5.42	14548.830	2.5	41492.290	3.5
371.0445	2.01	-2.04	411477.918	0.0	438428.863	0.0
371.0450	22.01	-5.43	15265.600	3.5	42208.840	2.5
371.0450	41.00	-.44	10808.108	0.0	37759.017	0.0
371.0452	22.00	-3.25	22081.198	2.0	49024.430	3.0
371.0479	24.00	-4.51	27728.870	2.0	54671.900	1.0
371.0525	15.01	-.71	104051.100	3.0	130993.800	3.0
371.0584	24.00	-2.90	23163.270	0.0	50105.540	1.0
371.0602	28.00	-2.60	29320.782	3.0	56262.920	3.0
371.0610	28.01	-2.95	100389.520	2.5	127331.600	2.5
371.0617	24.01	-4.00	38315.000	2.5	65257.030	3.5
371.0646	27.00	-3.79	24326.110	3.5	51267.930	4.5
371.0704	25.00	-1.41	38934.940	2.5	65876.340	3.5
371.0736	25.00	-1.57	30419.610	2.5	57360.780	1.5
371.0760	68.00	-1.63	5081.424	0.0	32030.081	0.0
371.0772	23.03	-.36	256781.800	1.0	283722.700	1.0
371.0786	28.00	-2.90	30163.140	2.0	57103.946	3.0
371.0868	22.00	-4.70	16961.420	3.0	43901.630	4.0
371.0870	63.01	-1.45	10566.135	0.0	37513.994	0.0
371.0870	62.01	-1.64	1451.835	0.0	28399.694	0.0
371.1004	25.01	-2.19	44138.960	1.0	71078.180	1.0
371.1055	23.01	-7.61	20242.320	4.0	47181.170	3.0
371.1058	23.00	-2.47	9824.580	2.5	36763.410	2.5
371.1067	11.01	-1.16	266285.360	0.0	293224.120	1.0
371.1100	59.01	-1.41	403.288	0.0	27349.476	0.0
371.1109	25.00	-3.55	38934.940	2.5	65873.400	2.5
371.1128	23.01	-1.07	20089.560	1.0	47027.880	0.0
371.1224	26.00	-1.47	20874.482	3.0	47812.104	4.0
371.1238	28.01	-4.62	95332.530	2.5	122270.050	3.5
371.1259	22.00	-4.70	6742.757	4.0	33680.130	3.0
371.1300	26.00	-1.66	17726.985	2.0	44664.061	2.0
371.1300	90.01	-1.00	6613.917	0.0	33558.653	0.0
371.1305	28.00	-4.40	31031.042	3.0	57968.080	3.0
371.1329	25.00	-1.97	27281.850	.5	54218.710	1.5
371.1340	41.00	-1.09	0.000	0.0	26944.446	0.0
371.1405	26.00	-.76	24772.019	1.0	51708.330	2.0
371.1419	26.01	-4.55	59663.450	1.5	86599.660	2.5
371.1482	24.00	-3.28	33934.880	3.0	60870.630	4.0
371.1496	25.01	-3.52	81236.890	1.0	108172.540	1.0
371.1510	42.00	-1.66	10888.765	0.0	37831.977	0.0
371.1526	24.00	-2.15	39158.630	4.0	66094.060	4.0
371.1533	25.00	-3.73	33825.490	2.5	60760.870	1.5
371.1540	62.01	-1.10	1935.780	0.0	28878.774	0.0
371.1576	25.00	-1.70	30425.710	1.5	57360.780	1.5
371.1620	90.00	-.70	6291.287	0.0	33233.700	0.0
371.1646	27.00	-1.94	16195.680	.5	43130.240	.5
371.1696	25.01	-2.05	86961.000	1.0	113895.200	2.0
371.1743	23.01	-1.89	20363.220	6.0	47297.080	5.0
371.1763	28.00	-3.84	29832.810	3.0	56766.523	4.0
371.1765	27.01	-5.03	22414.500	3.0	49348.200	4.0
371.1780	41.00	-1.19	5887.999	0.0	32829.251	0.0
371.1784	25.01	-3.78	81236.890	1.0	108170.450	2.0
371.1832	23.00	-2.07	9544.540	.5	36477.750	.5
371.1883	9.02	-4.29	360435.080	1.5	387367.920	2.5
371.1920	26.00	-3.31	19788.248	4.0	46720.824	4.0
371.1973	26.01	-2.73	47674.780	1.5	74606.970	2.5
371.2009	29.00	-1.24	46136.101	0.0	73075.691	0.0
371.2035	6.00	-2.37	61981.820	1.0	88913.560	2.0
371.2066	26.00	-3.46	27559.568	2.0	54491.080	3.0
371.2068	27.01	-4.18	21624.400	5.0	48555.900	5.0
371.2151	12.02	-.63	564289.800	1.0	591220.700	1.0
371.2175	27.00	-1.98	16467.900	4.5	43398.620	3.5
371.2300	44.00	.08	16938.079	0.0	43875.557	0.0
371.2386	26.01	-5.59	18360.650	1.5	45289.840	1.5
371.2443	8.02	-.17	338690.340	2.0	365619.120	2.0
371.2510	24.00	-4.80	31364.330	3.0	58292.620	4.0
371.2534	23.01	-2.06	22273.540	1.0	49201.660	2.0
371.2597	25.01	-3.96	79592.140	6.0	106519.800	7.0
371.2608	26.00	-3.69	21038.987	2.0	47966.571	3.0
371.2700	64.01	.06	3064.986	0.0	29999.562	0.0
371.2713	27.00	-4.53	25937.590	4.5	52864.410	4.5
371.2724	25.00	-4.45	41789.480	4.5	68716.220	4.5
371.2739	9.00	-2.61	102680.435	1.5	129607.070	.5
371.2746	8.01	-.68	185235.360	.5	212161.940	1.5
371.2760	62.01	-1.24	1935.780	0.0	28869.921	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
371.2776	26.00	-4.11	26874.534	5.0	53800.900	5.0
371.2840	76.00	-.60	15324.929	0.0	42258.489	0.0
371.2888	28.01	-3.09	107142.210	1.5	134067.760	1.5
371.2906	22.00	-3.58	8602.340	2.0	35527.760	1.0
371.2912	24.00	-3.94	25106.340	3.0	52031.720	3.0
371.2920	24.01	-2.22	21824.250	.5	48749.570	.5
371.2950	42.00	-.68	19841.750	0.0	46774.512	0.0
371.2999	24.01	-1.50	21824.820	1.5	48749.570	.5
371.3010	41.00	.04	967.890	0.0	27900.217	0.0
371.3013	18.01	-2.93	172213.800	1.5	199138.450	1.5
371.3020	45.00	-.82	3387.616	0.0	30319.871	0.0
371.3080	10.01	.26	224087.020	1.5	251011.180	2.5
371.3123	13.02	-.04	143713.500	1.5	170637.350	.5
371.3239	25.00	-2.94	37789.930	2.5	64712.940	2.5
371.3240	10.03	-1.99	643672.000	1.5	670595.000	2.5
371.3255	27.00	-4.28	28345.860	4.5	55268.750	3.5
371.3312	26.01	-1.78	72650.630	4.5	99573.110	4.5
371.3337	28.00	-2.67	15734.018	1.0	42656.317	1.0
371.3383	22.01	-2.83	40074.710	3.5	66996.670	3.5
371.3430	45.00	-.48	16050.847	0.0	42980.128	0.0
371.3431	22.00	-4.81	19322.988	2.0	46244.600	2.0
371.3450	63.01	-1.32	10001.532	0.0	36930.668	0.0
371.3470	42.00	-.06	20003.065	0.0	46932.056	0.0
371.3488	26.01	-1.51	72651.910	3.5	99573.110	4.5
371.3537	23.00	-.53	15078.250	.5	41999.100	1.5
371.3540	57.01	-1.20	1371.178	0.0	28299.661	0.0
371.3541	27.00	-2.78	23184.230	2.5	50105.050	1.5
371.3558	12.02	-1.03	564300.000	0.0	591220.700	1.0
371.3560	92.00	-.45	0.000	0.0	26928.338	0.0
371.3570	64.00	.38	161.315	0.0	27089.581	0.0
371.3644	25.01	-2.70	43311.000	1.0	70231.070	2.0
371.3668	30.02	.54	238336.200	2.0	265256.100	3.0
371.3694	28.00	-2.30	15734.018	1.0	42653.723	2.0
371.3699	24.00	-4.31	27816.880	5.0	54736.550	4.0
371.3717	22.00	-1.23	11531.760	2.0	38451.298	2.0
371.3730	76.00	-.16	15324.929	0.0	42252.035	0.0
371.3750	17.01	-.93	147125.700	3.0	174045.000	3.0
371.3783	25.00	-.94	35114.980	2.5	62034.040	3.5
371.3812	24.01	-4.71	47354.630	2.5	74273.480	1.5
371.3820	41.00	-1.24	645.260	0.0	27571.713	0.0
371.3923	24.01	-3.76	45730.740	2.5	72648.790	3.5
371.3949	23.00	-2.94	553.020	4.5	27470.880	3.5
371.3980	8.02	-.60	300310.310	1.0	327227.940	1.0
371.3990	58.01	-1.65	967.890	0.0	27893.111	0.0
371.4012	23.00	-1.16	15000.840	5.5	41918.240	5.5
371.4046	23.00	-3.99	15103.770	4.5	42020.930	3.5
371.4130	40.00	-1.12	1209.863	0.0	28134.069	0.0
371.4240	74.00	-.63	16857.422	0.0	43780.830	0.0
371.4363	9.01	-4.91	243458.900	1.0	270373.760	1.0
371.4391	24.00	-3.74	31377.960	4.0	58292.620	4.0
371.4457	23.00	-2.80	14514.750	1.5	41428.930	2.5
371.4491	25.00	-3.25	33825.490	2.5	60739.420	3.5
371.4550	42.00	.03	21454.900	0.0	48376.061	0.0
371.4699	8.00	-4.89	102865.518	4.0	129777.940	5.0
371.4734	18.01	-2.95	132481.140	2.5	159392.310	1.5
371.4743	22.00	-1.20	20126.055	3.0	47038.160	3.0
371.4760	92.01	-1.24	2258.411	0.0	29178.050	0.0
371.4760	25.00	-2.02	37737.220	3.5	64649.200	3.5
371.4774	27.01	-2.57	25317.720	1.0	52229.600	2.0
371.4780	25.01	-1.54	59537.400	4.0	86449.240	4.0
371.4780	40.01	-.86	4194.191	0.0	31113.686	0.0
371.4830	45.00	-1.42	9114.300	0.0	36033.432	0.0
371.4863	23.00	-1.59	14949.300	4.5	41860.540	4.5
371.4870	57.01	-1.34	5162.081	0.0	32080.923	0.0
371.4896	9.02	-3.90	360348.280	.5	387259.280	1.5
371.4898	9.01	-4.40	243462.780	2.0	270373.760	1.0
371.4900	63.01	-1.29	10243.505	0.0	37162.130	0.0
371.4909	12.02	-3.11	582134.800	4.0	609045.700	4.0
371.4918	28.01	-2.64	107142.210	1.5	134053.050	2.5
371.4951	12.02	-4.06	582134.800	4.0	609045.400	3.0
371.4976	22.01	-3.57	40027.280	1.5	66937.700	2.5
371.4978	12.02	-4.68	582134.800	4.0	609045.200	3.0
371.5020	75.00	-1.15	17099.394	0.0	44017.149	0.0
371.5027	8.02	.21	300440.850	2.0	327350.900	3.0
371.5038	25.00	-1.35	35165.050	1.5	62075.020	2.5
371.5050	74.00	-.21	20325.695	0.0	47243.233	0.0
371.5057	24.00	-4.69	27223.050	2.0	54132.880	3.0
371.5071	28.01	-3.73	77736.790	4.5	104646.520	3.5
371.5159	24.01	-1.53	25033.950	3.5	51943.040	4.5
371.5163	2.01	-2.00	411477.918	0.0	438394.637	0.0
371.5201	25.01	-4.02	55696.500	4.0	82605.290	4.0
371.5400	24.01	-1.37	39742.360	2.5	66649.710	1.5
371.5458	10.01	-1.58	292033.150	2.5	318940.080	1.5
371.5470	58.01	-.59	6291.287	0.0	33205.782	0.0
371.5473	23.01	-.30	12706.150	6.0	39612.970	5.0
371.5497	28.00	-.79	30922.763	5.0	57829.405	5.0
371.5530	57.01	-1.36	2581.041	0.0	29495.102	0.0
371.5560	44.00	-1.20	8952.985	0.0	35866.828	0.0
371.5650	42.00	-.06	16615.449	0.0	43528.641	0.0
371.5681	10.01	-3.16	280989.530	1.5	307894.840	2.5
371.5720	26.00	-4.05	31805.059	3.0	58710.090	3.0
371.5730	8.02	-3.55	297557.500	1.0	324462.460	2.0
371.5783	22.00	-1.12	11639.804	3.0	38544.380	3.0
371.5893	15.01	-1.90	76764.960	2.0	103668.740	3.0
371.5913	26.02	-3.79	124854.040	3.0	151757.670	2.0
371.5914	26.00	-1.36	18378.187	2.0	45281.816	2.0
371.5920	64.00	-.92	161.315	0.0	27072.551	0.0
371.5926	25.00	-3.70	41789.480	4.5	68693.020	5.5
371.6080	74.01	.15	15082.956	0.0	41993.033	0.0
371.6180	44.00	-1.21	6452.602	0.0	33361.955	0.0
371.6210	41.00	-1.58	645.260	0.0	27554.396	0.0
371.6268	26.01	-4.68	33901.320	3.5	60402.380	2.5
371.6314	24.01	-3.36	47372.750	1.5	74273.480	1.5
371.6360	64.01	-.55	241.973	0.0	27150.023	0.0
371.6370	58.01	-.33	0.000	0.0	26907.977	0.0
371.6396	21.01	-1.84	12101.450	1.0	39001.590	0.0
371.6434	26.00	-.17	23711.443	4.0	50611.303	3.0
371.6436	8.01	-4.75	234454.450	2.5	261354.300	2.5
371.6439	18.02	-1.20	204727.470	1.0	231627.300	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
371.6447	26.00	-4.87	27166.804	4.0	54066.570	4.0
371.6478	26.00	-2.34	17927.378	1.0	44826.920	0.0
371.6520	24.00	-2.42	35862.820	4.0	62762.060	4.0
371.6523	24.00	-2.78	31393.400	5.0	58292.620	4.0
371.6539	15.01	-2.37	104051.100	3.0	130950.200	2.0
371.6719	19.01	-1.81	163237.000	1.0	190134.800	1.0
371.6789	27.00	-3.00	23207.760	1.5	50105.050	1.5
371.6870	42.00	-.05	20164.380	0.0	47068.738	0.0
371.6883	28.01	-4.65	94283.940	4.5	121180.550	5.5
371.6926	30.02	-1.91	235623.900	3.0	262520.200	2.0
371.6930	58.01	-.53	7178.519	0.0	34082.442	0.0
371.6934	24.00	-3.85	35934.020	6.0	62830.260	5.0
371.6940	22.00	-4.47	17075.310	4.0	43971.513	5.0
371.6990	41.00	.45	11130.738	0.0	38034.227	0.0
371.7000	8.04	-.95	677532.000	0.0	704435.417	0.0
371.7000	44.00	-.38	8469.040	0.0	35372.457	0.0
371.7037	15.01	-2.30	104054.700	1.0	130950.200	2.0
371.7100	74.00	-.39	17583.339	0.0	44486.032	0.0
371.7153	25.01	-2.65	43850.420	2.0	70745.080	3.0
371.7173	18.01	-.57	158730.210	2.5	185624.730	3.5
371.7177	26.00	-3.41	26874.534	5.0	53769.020	4.0
371.7212	24.00	-1.49	33762.740	6.0	60656.970	7.0
371.7236	26.02	-2.82	109570.840	2.0	136464.900	1.0
371.7241	25.00	-3.01	37789.930	2.5	64683.950	1.5
371.7257	22.00	-1.07	11776.806	4.0	38670.710	4.0
371.7280	75.00	-.12	17180.052	0.0	44081.442	0.0
371.7352	27.00	-3.21	20500.710	1.5	47393.930	2.5
371.7393	22.00	-1.14	0.000	2.0	26892.926	3.0
371.7393	26.02	-2.58	117950.320	4.0	144843.240	5.0
371.7414	27.00	-4.93	25269.250	3.5	52162.020	3.5
371.7452	15.03	-1.60	293233.500	1.0	320126.000	2.0
371.7475	24.00	-.80	33113.270	4.0	60005.600	5.0
371.7480	64.00	.42	483.945	0.0	27383.888	0.0
371.7503	6.00	-3.61	61981.820	1.0	88873.950	2.0
371.7525	25.01	-2.53	43339.100	2.0	70231.070	2.0
371.7536	23.00	-2.67	17136.440	6.5	44028.330	6.5
371.7540	41.00	-.14	10808.108	0.0	37707.617	0.0
371.7585	24.00	-1.55	35870.530	4.0	62762.060	4.0
371.7631	15.01	-1.37	104102.600	2.0	130993.600	3.0
371.7750	24.00	-1.56	24286.540	1.0	51176.880	0.0
371.7770	16.02	-.19	147146.000	2.0	174036.190	1.0
371.7770	16.02	-.54	147146.000	2.0	174036.190	1.0
371.7800	72.00	-.88	2339.068	0.0	29236.696	0.0
371.7830	26.00	-3.21	27559.568	2.0	54449.330	1.0
371.7844	22.01	-3.63	39926.830	2.5	66816.490	1.5
371.7897	28.00	-3.86	32973.414	4.0	59862.690	5.0
371.7920	69.00	.23	0.000	0.0	26896.759	0.0
371.7949	17.01	-1.37	146333.800	2.0	173222.700	3.0
371.8090	28.01	-3.90	100332.090	4.5	127219.970	3.5
371.8108	23.00	-3.53	14548.830	2.5	41436.580	3.5
371.8111	28.00	-1.69	30922.763	5.0	57810.494	4.0
371.8120	39.00	.13	16696.107	0.0	43591.420	0.0
371.8142	26.00	-3.96	31937.308	1.0	58824.810	2.0
371.8154	23.01	-1.42	13542.680	3.0	40430.100	4.0
371.8170	90.01	-1.52	9194.957	0.0	36089.908	0.0
371.8183	27.00	-4.79	25269.250	3.5	52156.460	4.5
371.8190	58.01	-.67	1371.178	0.0	28265.984	0.0
371.8198	15.03	-.43	293238.900	2.0	320126.000	2.0
371.8207	18.01	.31	173347.830	1.5	200234.860	2.5
371.8228	24.00	-3.54	25177.390	4.0	52064.270	4.0
371.8290	18.02	-1.28	225402.590	3.0	252289.020	3.0
371.8340	76.00	-1.09	11292.053	0.0	38185.774	0.0
371.8380	58.01	-.32	4113.534	0.0	31006.966	0.0
371.8409	26.00	-2.62	22249.430	3.0	49135.003	3.0
371.8480	42.00	.27	26616.982	0.0	53509.691	0.0
371.8541	24.00	-1.74	33934.880	3.0	60819.500	3.0
371.8648	24.00	-1.04	33935.650	2.0	60819.500	3.0
371.8722	22.00	-3.80	15975.590	3.0	42858.900	3.0
371.8747	25.00	-1.45	35689.980	1.5	62573.110	1.5
371.8840	40.01	-1.51	2823.013	0.0	29713.119	0.0
371.8880	62.01	-.68	2984.328	0.0	29874.144	0.0
371.8905	25.01	-4.73	46903.260	2.0	73785.250	2.0
371.8910	46.00	-.69	10001.532	0.0	36891.131	0.0
371.8921	25.00	.32	34343.900	4.5	61225.770	5.5
371.8949	25.01	-3.77	81220.580	3.0	108102.250	3.0
371.9160	63.00	.13	14437.696	0.0	41325.488	0.0
371.9166	23.00	-7.18	14548.830	2.5	41428.930	2.5
371.9263	15.03	.32	293246.600	3.0	320126.000	2.0
371.9277	25.00	-2.15	38008.700	5.5	64888.000	4.5
371.9280	72.01	-.93	4839.451	0.0	31726.375	0.0
371.9290	92.00	-.89	564.603	0.0	27451.455	0.0
371.9330	44.00	.46	17018.737	0.0	43905.300	0.0
371.9400	74.00	-.39	17018.737	0.0	43904.794	0.0
371.9414	25.01	-4.85	39808.140	3.0	66686.450	3.0
371.9440	90.00	-.64	0.000	0.0	26885.768	0.0
371.9446	28.00	-2.72	29832.810	3.0	56710.889	2.0
371.9485	25.01	-3.25	62587.500	3.0	89465.300	4.0
371.9504	24.00	-3.42	35884.400	5.0	62762.060	4.0
371.9519	25.01	-4.88	46903.260	2.0	73780.810	3.0
371.9520	76.00	-.27	14760.326	0.0	41645.515	0.0
371.9706	23.00	-2.18	9824.580	2.5	36700.780	2.5
371.9710	69.01	-1.53	8872.327	0.0	35756.143	0.0
371.9800	58.01	-.83	2500.383	0.0	29383.549	0.0
371.9858	12.02	-.78	534923.600	3.0	561798.700	3.0
371.9876	24.01	-3.36	38509.070	3.5	65384.040	4.5
371.9908	23.00	-3.62	14514.750	1.5	41389.490	1.5
371.9937	26.00	-.49	0.000	4.0	26874.534	5.0
371.9960	90.01	-.38	10082.190	0.0	36964.199	0.0
372.0064	22.00	-3.34	21588.496	4.0	48462.110	5.0
372.0084	27.00	-3.80	24326.110	3.5	51199.580	3.5
372.0130	76.00	-.98	8630.355	0.0	35511.136	0.0
372.0171	26.01	-4.51	20516.980	2.5	47389.820	1.5
372.0250	42.00	.34	25568.434	0.0	52448.348	0.0
372.0287	30.02	.63	235623.900	3.0	262495.900	4.0
372.0294	23.00	-2.79	9544.540	.5	36416.490	1.5
372.0310	90.01	-.66	9598.245	0.0	36477.725	0.0
372.0376	22.00	-.35	16458.710	6.0	43330.070	5.0
372.0409	2.01	-1.95	411477.918	0.0	438356.683	0.0
372.0426	18.01	-1.14	155351.030	1.5	182222.030	1.5
372.0454	17.02	.35	179076.100	1.5	205946.900	2.5
372.0460	41.01	-.07	13631.121	0.0	40509.518	0.0
372.0502	23.00	-3.84	16917.150	5.5	43787.600	4.5
372.0541	26.02	-4.74	199577.710	2.0	226447.880	2.0
372.0644	9.02	-3.67	442694.580	1.5	469564.010	.5
372.0672	26.01	-6.78	16369.390	3.5	43238.610	2.5
372.0717	10.01	-4.02	281025.940	2.5	307894.840	2.5
372.0755	25.01	-3.09	44521.520	4.0	71390.140	3.0
372.0771	29.00	-4.01	13227.833	0.0	40103.983	0.0
372.0783	25.01	-3.92	39808.140	3.0	66676.560	2.0
372.0794	8.00	-4.65	105441.657	3.0	132310.000	2.0
372.0805	8.00	-4.38	105441.736	2.0	132310.000	1.0
372.0805	8.00	-4.85	105441.736	3.0	132310.000	2.0
372.0869	27.02	-3.62	76518.900	5.5	103386.700	4.5
372.0889	8.02	-.27	338851.500	3.0	365719.160	3.0
372.0899	23.00	-.28	15270.420	1.5	42138.000	2.5
372.0906	25.00	-1.65	34343.900	4.5	61211.430	4.5
372.0980	9.02	-4.37	442694.580	1.5	469561.580	1.5
372.0994	15.01	-4.55	102799.200	1.0	129666.100	2.0
372.1001	28.00	-1.60	30922.763	5.0	57789.611	4.0
372.1030	62.00	-.50	1451.835	0.0	28326.114	0.0
372.1170	6.00	-4.62	60352.630	1.0	87218.260	2.0
372.1178	26.00	-1.55	24335.764	2.0	51201.330	2.0
372.1263	26.00	-2.87	26874.534	5.0	53739.488	5.0
372.1274	26.00	-1.17	17550.180	3.0	44415.057	4.0
372.1340	19.01	-.69	188154.400	2.0	215018.800	1.0
372.1347	23.00	-3.45	323.420	3.5	27167.770	2.5
372.1396	26.00	-3.05	20037.815	0.0	46901.808	1.0
372.1438	23.00	-3.12	9544.540	.5	36408.230	1.5
372.1450	68.00	-1.12	5323.396	0.0	32194.642	0.0
372.1488	26.01	-3.65	73054.970	2.5	99918.300	1.5
372.1509	25.01	-4.38	39813.380	2.0	66676.560	2.0
372.1520	41.00	-.19	12905.203	0.0	39775.944	0.0
372.1535	22.01	-3.36	40074.710	3.5	66937.700	2.5
372.1555	26.00	-2.90	27394.676	3.0	54257.520	2.0
372.1562	25.00	-4.16	35769.970	3.5	62632.770	3.5
372.1572	28.00	-2.07	29320.782	3.0	56183.510	4.0
372.1589	15.01	-2.12	104051.100	3.0	130913.700	3.0
372.1594	26.00	-1.33	24338.766	3.0	51201.330	2.0
372.1611	22.00	-3.86	13981.750	1.0	40844.190	1.0
372.1617	17.02	-4.53	179076.100	1.5	205938.500	1.5
372.1634	22.00	-1.19	17995.750	0.0	44858.030	1.0
372.1643	22.01	-1.13	4628.610	2.5	31490.820	3.5
372.1666	29.00	-1.74	44442.294	0.0	71311.981	0.0
372.1800	4.02	-.20	956496.000	0.0	983364.719	0.0
372.1820	10.01	-.67	254165.010	1.5	281025.940	2.5
372.1820	90.01	-1.16	1774.465	0.0	28643.040	0.0
372.1873	28.00	-4.93	29013.228	2.0	55873.780	2.0
372.1894	15.01	-3.76	103941.300	0.0	130801.700	1.0
372.1913	8.02	-.76	338690.340	2.0	365550.600	1.0
372.1944	23.00	-3.39	10892.500	3.5	37752.540	2.5
372.1960	76.00	-.01	24116.599	0.0	50984.163	0.0
372.1966	25.00	-3.24	41031.480	4.5	67891.360	3.5
372.1991	23.00	-.53	15000.840	5.5	41860.540	4.5
372.2024	25.01	-4.76	52653.270	4.0	79512.730	3.0
372.2026	26.00	-2.63	22249.430	3.0	49108.876	4.0
372.2042	18.01	-2.02	183675.570	3.5	210534.900	4.5
372.2044	22.00	-3.60	21469.494	3.0	48328.810	4.0
372.2051	25.00	-1.84	37789.930	2.5	64649.200	3.5
372.2070	64.01	.35	13792.436	0.0	40659.206	0.0
372.2100	58.01	-1.00	5484.711	0.0	32351.265	0.0
372.2110	90.01	-1.25	4032.876	0.0	30899.358	0.0
372.2141	23.01	-1.98	12545.150	4.0	39403.770	4.0
372.2153	23.00	-2.53	18198.080	2.5	45056.610	3.5
372.2239	22.00	-4.01	6842.964	5.0	33700.874	4.0
372.2242	26.00	-3.92	19552.474	1.0	46410.366	1.0
372.2250	74.00	-.14	19519.120	0.0	46384.591	0.0
372.2290	58.01	-.98	2500.383	0.0	29365.565	0.0
372.2320	41.00	-.02	13066.518	0.0	39931.484	0.0
372.2329	24.00	-3.35	24093.160	2.0	50950.420	3.0
372.2393	24.01	-4.88	38563.150	4.5	65419.950	5.5
372.2476	26.02	-3.35	105929.160	3.0	132785.360	4.0
372.2486	28.00	-2.45	1713.080	1.0	28569.210	2.0
372.2534	28.01	-4.37	100475.820	3.5	127331.600	2.5
372.2564	26.00	-1.35	704.003	2.0	27559.568	2.0
372.2569	24.00	-4.08	23163.270	0.0	50018.800	1.0
372.2570	22.00	-1.12	170.132	3.0	27025.652	4.0
372.2577	23.00	-2.66	18302.270	3.5	45157.740	4.5
372.2601	23.00	.16	15062.940	6.5	41916.240	5.5
372.2687	28.00	-2.16	30912.838	1.0	57767.520	1.0
372.2752	24.01	-4.71	53566.220	3.5	80420.430	2.5
372.2760	58.01	-1.10	2581.041	0.0	29442.832	0.0
372.2790	51.00	-1.27	16292.819	0.0	43154.393	0.0
372.2816	26.02	-4.63	124903.920	2.0	151757.670	2.0
372.2978	26.02	-4.61	199595.300	3.0	226447.880	2.0
372.3060	23.01	-2.18	19902.600	0.0	46754.590	1.0
372.3064	27.00	-4.83	25269.250	3.5	52121.210	4.5
372.3069	28.00	-4.34	29320.782	3.0	56172.704	3.0
372.3070	73.00	-2.46	1935.780	0.0	28795.334	0.0
372.3124	18.01	-3.91	183675.570	3.5	210527.100	2.5
372.3183	18.02	-1.92	225402.590	3.0	252253.690	2.0
372.3291	24.00	-2.23	39158.630	4.0	66006.950	3.0
372.3305	23.00	-1.78	15078.250	.5	41928.470	.5
372.3307	25.01	-2.07	81322.330	1.0	108172.540	1.0
372.3337	25.01	-4.54	39826.570	1.0	66676.560	2.0
372.3352	24.01	-3.69	39877.280	3.5	66727.160	2.5
372.3359	25.01	-2.22	43696.190	3.0	70546.020	4.0
372.3389	28.00	-.49	30979.789	4.0	57829.405	5.0
372.3562	23.00	-1.75	14910.040	3.5	41756.410	3.5
372.3583	25.00	-2.20	37737.220	3.5	64585.440	4.5
372.3597	25.01	-2.71	81322.330	1.0	108170.450	2.0
372.3599	22.01	-1.56	12628.770	1.5	39476.870	2.5
372.3659	28.01	-3.17	107082.210	2.5	133929.680	3.5
372.3660	58.01	-1.30	4274.849	0.0	31130.147	0.0
372.3660	90.01	-2.02	4113.534	0.0	30968.832	0.0
372.3669	15.01	-2.83	104102.600	2.0	130950.200	2.0
372.3690	64.01	-.25	13792.436	0.0	40647.518	0.0
372.3691	24.00	-3.42	31355.210	2.0	58202.650	3.0
372.3716	25.00	-3.14	35725.850	2.5	62573.110	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
372.3719	25.00	-3.09	34938.700	4.5	61785.940	3.5
372.3791	29.01	-2.31	110365.980	2.0	137212.700	1.0
372.3807	17.01	-4.34	147198.400	4.0	174045.000	3.0
372.3834	9.02	-4.54	464321.840	2.5	491168.250	2.5
372.3888	25.01	-4.58	55759.270	3.0	82605.290	4.0
372.3913	26.01	-4.77	18360.650	1.5	45206.490	.5
372.4018	26.02	-4.31	160037.900	2.0	186882.980	3.0
372.4064	22.01	-1.35	12758.150	2.5	39602.900	1.5
372.4129	29.01	-2.88	120092.200	2.0	146936.480	2.0
372.4164	27.00	-4.39	24326.110	3.5	51170.140	4.5
372.4219	28.00	-1.30	31786.210	3.0	58629.840	2.0
372.4220	70.01	-.38	31779.063	0.0	58630.323	0.0
372.4260	28.00	-1.12	31786.210	3.0	58629.550	3.0
372.4373	26.00	-2.38	27394.676	3.0	54237.200	4.0
372.4380	26.00	-.67	18378.187	2.0	45220.662	3.0
372.4420	66.01	-.18	4274.849	0.0	31124.667	0.0
372.4518	18.01	-1.19	173393.380	2.5	200234.860	2.5
372.4526	9.02	-2.94	442278.930	2.5	469120.350	1.5
372.4570	22.00	.36	12118.394	4.0	38959.499	4.0
372.4613	23.00	-2.77	9636.960	1.5	36477.750	.5
372.4631	23.00	-2.71	14548.830	2.5	41389.490	1.5
372.4633	28.01	-3.48	100490.950	1.5	127331.600	2.5
372.4640	58.01	-.68	4920.109	0.0	31768.341	0.0
372.4642	9.02	-3.63	442278.930	2.5	469119.520	2.5
372.4737	28.00	-3.62	13521.352	2.0	40361.254	3.0
372.4808	25.01	-2.47	43311.000	1.0	70150.390	1.0
372.4814	28.00	-.24	30922.763	5.0	57762.106	6.0
372.4834	27.01	-4.06	24074.600	2.0	50913.800	2.0
372.4900	62.01	-1.36	322.630	0.0	27168.988	0.0
372.4940	45.00	-1.54	11856.655	0.0	38702.725	0.0
372.4940	63.01	-.23	0.000	0.0	26846.070	0.0
372.4956	24.00	-3.54	31364.330	3.0	58202.650	3.0
372.4970	44.00	-.83	7985.094	0.0	34830.948	0.0
372.4977	23.01	-2.62	20343.000	2.0	47181.170	3.0
372.4990	92.01	-1.13	1693.808	0.0	28539.518	0.0
372.5050	57.01	-2.15	0.000	0.0	26845.277	0.0
372.5070	10.01	-4.96	249839.630	.5	276677.130	.5
372.5155	22.00	-.27	8602.340	2.0	35439.228	1.0
372.5220	41.00	-.62	9436.930	0.0	36280.982	0.0
372.5233	8.02	-.73	300440.850	2.0	327277.180	2.0
372.5293	22.00	-4.44	17215.440	5.0	44051.333	6.0
372.5294	10.01	-1.98	280473.580	1.5	307309.460	.5
372.5299	26.01	-2.59	36126.410	1.5	62962.260	1.5
372.5380	77.00	.12	18954.517	0.0	45797.416	0.0
372.5435	25.01	-4.48	39808.140	3.0	66643.010	4.0
372.5458	17.02	-.62	217850.200	2.5	244684.900	3.5
372.5483	26.00	-1.35	24574.655	4.0	51409.180	4.0
372.5490	44.00	-.88	11695.340	0.0	38537.447	0.0
372.5546	25.00	-3.37	23549.200	2.5	50383.270	1.5
372.5560	42.00	.30	20245.038	0.0	47086.640	0.0
372.5567	28.01	-3.14	108548.610	1.5	135382.530	1.5
372.5574	22.00	-.77	22081.198	2.0	48915.070	2.0
372.5645	26.00	-2.54	17927.378	1.0	44760.739	1.0
372.5680	58.01	-.11	5887.999	0.0	32728.737	0.0
372.5718	8.00	-4.72	106785.172	2.0	133618.000	2.0
372.5718	8.00	-4.33	106785.172	3.0	133618.000	2.0
372.5724	8.00	-4.76	106785.213	2.0	133618.000	2.0
372.5724	8.00	-3.86	106785.213	3.0	133618.000	2.0
372.5760	75.00	1.58	23471.338	0.0	50311.499	0.0
372.5764	17.02	-1.45	195268.200	1.5	222100.700	1.5
372.5909	26.01	-2.69	72261.830	5.5	99093.290	5.5
372.5917	25.01	-3.89	39813.380	2.0	66644.780	1.0
372.5968	28.01	-4.53	29593.460	.5	56424.490	1.5
372.6000	8.04	-1.62	677532.000	0.0	704370.433	0.0
372.6013	28.00	-.77	30979.789	4.0	57810.494	4.0
372.6049	28.01	-4.15	100389.520	2.5	127219.970	3.5
372.6100	44.00	.18	12098.628	0.0	38936.340	0.0
372.6111	15.03	-.91	293233.500	1.0	320063.500	1.0
372.6214	28.01	-3.60	109148.050	4.5	135977.310	4.5
372.6220	42.00	.17	20164.380	0.0	47001.228	0.0
372.6240	41.00	-.16	80.658	0.0	26917.362	0.0
372.6266	2.01	-1.90	411477.918	0.0	438314.435	0.0
372.6320	24.02	-4.00	70291.800	2.0	97120.300	3.0
372.6443	10.01	-3.15	280947.100	1.5	307774.710	1.5
372.6461	27.00	-4.81	24733.280	2.5	51560.760	2.5
372.6470	27.00	-3.25	16467.900	4.5	43295.320	4.5
372.6490	72.00	-.74	10404.820	0.0	37239.724	0.0
372.6556	15.01	-2.17	102799.200	1.0	129626.000	1.0
372.6570	64.00	-.97	161.315	0.0	26995.643	0.0
372.6585	26.00	-3.07	27559.568	2.0	54386.160	1.0
372.6653	27.00	-1.49	13795.520	2.5	40621.620	1.5
372.6654	27.00	-3.49	25937.590	4.5	52763.680	3.5
372.6661	9.02	-4.21	442294.310	1.5	469120.350	1.5
372.6699	28.01	-3.69	67880.160	2.5	94705.930	3.5
372.6702	27.00	-4.74	25269.250	3.5	52095.000	3.5
372.6720	90.01	-1.42	4113.534	0.0	30946.781	0.0
372.6777	9.02	-4.09	442294.310	1.5	469119.520	2.5
372.6789	6.00	-3.89	60393.140	2.0	87218.260	2.0
372.6800	62.01	-1.58	1451.835	0.0	28284.506	0.0
372.6838	10.02	-1.76	410134.720	1.0	436959.490	1.0
372.6849	24.00	-1.56	31377.960	4.0	58202.650	3.0
372.6860	25.00	-1.11	35689.980	1.5	62514.590	2.5
372.6861	15.03	-.43	293238.900	2.0	320063.500	1.0
372.6873	10.01	-.41	254165.010	1.5	280989.530	1.5
372.6898	26.00	-1.50	17726.985	2.0	44551.325	3.0
372.6903	23.00	-3.70	9636.960	1.5	36461.260	2.5
372.6919	26.00	-2.97	24506.902	2.0	51331.090	2.0
372.6930	44.00	.03	1129.205	0.0	27960.941	0.0
372.6941	25.00	-2.09	23549.200	2.5	50373.230	2.5
372.6960	58.01	-1.11	967.890	0.0	27799.410	0.0
372.7021	26.00	-1.61	26406.490	1.0	53229.940	1.0
372.7032	26.01	-2.01	47674.780	1.5	74498.150	1.5
372.7054	22.00	-3.07	7255.369	2.0	34078.580	3.0
372.7078	27.01	-3.69	25861.460	0.0	52684.500	1.0
372.7080	22.00	-3.86	19421.576	3.0	46244.600	2.0
372.7085	26.00	-4.14	23711.443	4.0	50534.435	3.0
372.7105	10.01	-.02	224699.270	.5	251522.120	1.5
372.7148	25.01	-2.58	81279.710	4.0	108102.250	3.0
372.7169	28.00	-2.88	29888.505	2.0	56710.889	2.0
372.7195	30.02	-1.75	235623.900	3.0	262446.100	3.0
372.7230	41.00	-.13	10969.423	0.0	37798.999	0.0
372.7288	25.01	-3.24	43696.190	3.0	70517.720	3.0
372.7326	8.01	-.35	185340.680	1.5	212161.940	1.5
372.7348	23.01	-.23	13609.000	4.0	40430.100	4.0
372.7377	24.01	-1.58	38563.150	4.5	65384.040	4.5
372.7380	62.01	-1.98	2661.698	0.0	29490.194	0.0
372.7383	26.00	-4.84	26339.682	2.0	53160.530	3.0
372.7391	28.01	-3.14	107082.210	2.5	133903.000	1.5
372.7518	26.00	-2.23	27559.568	2.0	54379.440	3.0
372.7570	15.03	-.60	293233.500	1.0	320053.000	1.0
372.7621	26.00	-.59	7728.058	3.0	34547.192	2.0
372.7667	26.00	-1.39	20874.482	3.0	47693.289	3.0
372.7679	28.01	-3.71	66571.340	2.5	93390.060	2.5
372.7749	25.01	-4.42	39826.570	1.0	66644.780	1.0
372.7801	26.00	-.87	24180.848	3.0	50998.686	2.0
372.7900	90.00	-1.01	2823.013	0.0	29647.767	0.0
372.7962	23.00	-4.47	23935.150	2.5	50751.830	3.5
372.7979	25.00	-1.77	30411.740	.5	57228.300	.5
372.8020	58.01	-.08	5646.026	0.0	32469.916	0.0
372.8030	44.00	-.02	0.000	0.0	26823.818	0.0
372.8036	26.00	-2.57	27559.568	2.0	54375.719	2.0
372.8075	23.00	-1.59	15664.750	1.5	42480.620	.5
372.8096	22.00	-3.64	14028.470	2.0	40844.190	1.0
372.8096	22.00	-3.57	14028.470	2.0	40844.190	3.0
372.8180	58.01	-1.10	2581.041	0.0	29403.780	0.0
372.8246	24.00	-1.79	28637.000	3.0	55451.640	3.0
372.8269	23.00	-4.41	15103.770	4.5	41918.240	5.5
372.8300	42.00	.55	23551.996	0.0	50373.872	0.0
372.8321	15.03	-.13	293238.900	2.0	320053.000	1.0
372.8335	23.01	-.52	20242.320	4.0	47056.320	4.0
372.8402	26.01	-5.66	15844.710	4.5	42658.230	3.5
372.8420	58.01	.11	5404.054	0.0	32225.067	0.0
372.8470	62.01	-.18	5242.739	0.0	32063.392	0.0
372.8488	8.02	.31	374662.500	2.0	401475.400	3.0
372.8512	9.02	-3.43	442748.850	2.5	469561.580	1.5
372.8524	28.01	-2.80	107142.210	1.5	133954.850	.5
372.8547	6.00	-3.51	61981.820	1.0	88794.300	2.0
372.8609	28.01	-4.58	109148.050	4.5	135960.080	4.5
372.8648	29.01	-2.83	118071.340	1.0	144883.090	2.0
372.8670	26.00	-3.67	20641.110	4.0	47452.702	4.0
372.8683	22.00	-2.92	11639.804	3.0	38451.298	2.0
372.8712	25.01	-2.80	43339.100	2.0	70150.390	1.0
372.8738	15.01	-1.84	104102.600	2.0	130913.700	3.0
372.8776	25.00	-1.87	38008.700	5.5	64819.530	5.5
372.8816	9.02	-3.91	464321.840	2.5	491132.380	3.5
372.8822	8.02	.48	374798.600	3.0	401609.100	4.0
372.8830	27.00	-3.29	21215.900	.5	48026.340	.5
372.8833	24.00	-2.20	31352.420	1.0	58162.840	2.0
372.8842	28.01	-2.93	66579.710	1.5	93390.060	2.5
372.8845	27.00	-3.42	29735.180	3.5	56545.510	2.5
372.8880	25.00	-1.36	23549.200	2.5	50359.280	3.5
372.8916	28.00	-1.48	30979.789	4.0	57789.611	4.0
372.8919	22.00	-3.71	17423.853	2.0	44233.650	3.0
372.8949	24.00	-4.05	27223.050	2.0	54032.630	2.0
372.8951	23.01	-7.38	20242.320	4.0	47051.890	3.0
372.8961	24.01	-4.23	21822.860	2.5	48632.360	3.5
372.9000	58.01	-1.25	4194.191	0.0	31011.032	0.0
372.9015	23.00	-.65	14949.300	4.5	41758.410	3.5
372.9026	6.00	-3.57	61981.820	1.0	88790.850	1.0
372.9073	8.00	-3.80	102928.355	4.0	129737.052	3.0
372.9100	72.00	.59	20809.640	0.0	47625.762	0.0
372.9175	28.01	-3.08	109148.050	4.5	135956.010	5.5
372.9210	26.01	-3.58	73016.330	3.5	99824.040	2.5
372.9220	76.00	-.45	17583.339	0.0	44398.598	0.0
372.9221	24.00	-1.65	31355.210	2.0	58162.840	2.0
372.9273	8.01	-4.42	234454.450	2.5	261261.700	1.5
372.9309	18.01	-.18	134241.650	2.5	161048.640	1.5
372.9322	8.01	-.51	232480.100	.5	259287.000	1.5
372.9341	18.01	-4.11	163299.470	2.5	190106.230	1.5
372.9492	25.01	-2.00	43536.900	4.0	70342.580	3.0
372.9539	25.00	-.69	34938.700	4.5	61744.040	5.5
372.9663	25.02	-3.60	192172.890	2.5	218977.340	3.5
372.9678	10.01	-3.14	281332.550	.5	308136.890	1.5
372.9694	9.00	-3.35	102680.435	1.5	129484.660	1.5
372.9695	25.02	-4.61	192012.750	1.5	218816.970	2.5
372.9725	8.02	.14	374575.000	1.0	401379.000	2.0
372.9740	63.01	-1.50	11050.080	0.0	37861.600	0.0
372.9761	25.02	-2.61	192392.200	3.5	219195.950	4.5
372.9787	24.00	-3.90	31364.330	3.0	58167.890	4.0
372.9807	22.00	-.27	0.000	2.0	26803.417	2.0
372.9824	15.01	-2.09	103340.010	2.0	130143.300	3.0
372.9920	58.01	-1.19	3306.958	0.0	30117.184	0.0
372.9922	25.00	-1.89	30425.710	1.5	57228.300	.5
372.9976	18.01	-2.75	183675.570	3.5	210477.770	3.5
373.0010	28.00	-.83	31786.210	3.0	58588.168	3.0
373.0104	25.01	-2.63	44138.960	1.0	70940.240	2.0
373.0108	25.01	-2.10	43696.190	3.0	70497.440	4.0
373.0164	10.01	-2.55	280268.960	2.5	307069.810	1.5
373.0200	23.00	-1.47	8578.520	2.5	35379.110	3.5
373.0259	29.01	-2.73	108335.430	2.0	135135.600	1.0
373.0262	25.00	-1.67	38120.180	4.5	64920.330	3.5
373.0303	24.00	-4.92	27163.200	0.0	53963.050	1.0
373.0310	30.02	-.59	238205.500	1.0	265005.300	2.0
373.0330	58.01	.10	11614.683	0.0	38421.963	0.0
373.0366	24.02	-4.26	131267.300	4.0	158066.700	3.0
373.0370	90.00	-.53	6291.287	0.0	33098.279	0.0
373.0388	26.00	-.53	24574.655	4.0	51373.894	5.0
373.0412	20.02	-4.20	347344.370	5.0	374143.440	4.0
373.0430	44.00	.05	2016.438	0.0	28822.999	0.0
373.0430	74.00	-.13	19680.435	0.0	46486.996	0.0
373.0462	25.01	-4.18	39826.570	1.0	66625.280	0.0
373.0475	27.00	-.49	15184.040	2.5	41982.660	1.5
373.0490	24.00	-2.11	31364.330	3.0	58162.840	2.0
373.0520	21.01	-4.81	30815.650	1.0	57613.940	2.0
373.0560	42.00	-.54	20003.065	0.0	46808.692	0.0
373.0600	23.00	-3.71	18258.890	2.5	45056.610	3.5
373.0672	23.03	-.55	257143.200	2.0	283940.400	2.0
373.0685	23.01	-4.19	20622.990	3.0	47420.100	4.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
373.0702	24.00	-3.64	24093.160	2.0	50890.150	2.0
373.0730	76.00	-.77	13953.751	0.0	40758.157	0.0
373.0740	62.00	-.65	2258.411	0.0	29062.745	0.0
373.0741	28.00	-3.73	2216.519	2.0	29013.228	2.0
373.0771	22.00	-.77	18061.540	1.0	44858.030	1.0
373.0791	28.01	-4.39	109148.050	4.5	135944.400	3.5
373.0800	24.00	-1.73	0.000	3.0	26796.280	2.0
373.0810	69.01	-1.32	8872.327	0.0	35676.158	0.0
373.0840	64.01	-.19	3064.986	0.0	29868.601	0.0
373.0855	22.00	-3.70	11776.806	4.0	38572.692	5.0
373.0941	26.00	-1.61	21038.987	2.0	47834.260	3.0
373.0980	10.01	-4.20	276276.850	1.5	303071.840	2.5
373.0987	20.02	-2.98	347344.370	5.0	374139.310	5.0
373.0999	25.00	-1.01	34138.880	6.5	60933.730	5.5
373.1005	23.00	-2.56	18126.270	1.5	44921.080	2.5
373.1020	73.00	-2.20	0.000	0.0	26802.322	0.0
373.1044	20.02	-4.69	347344.370	5.0	374138.900	4.0
373.1079	24.01	-4.87	38362.560	1.5	65156.840	2.5
373.1103	29.01	-3.85	120092.200	2.0	146886.310	1.0
373.1146	26.00	-3.13	29798.960	4.0	56592.760	4.0
373.1247	26.00	-3.07	26105.908	6.0	52898.980	5.0
373.1260	40.01	.48	13953.751	0.0	40754.349	0.0
373.1260	62.01	-.60	806.575	0.0	27607.173	0.0
373.1261	27.00	-1.55	16470.600	1.5	43263.570	1.5
373.1320	24.00	-4.51	31355.210	2.0	58147.760	3.0
373.1376	26.00	-1.20	21038.987	2.0	47831.132	2.0
373.1450	92.00	-1.03	0.000	0.0	26799.234	0.0
373.1467	27.00	-2.57	14036.280	1.5	40827.770	1.5
373.1585	26.00	-2.64	24574.655	4.0	51365.300	3.0
373.1621	28.01	-4.91	71770.830	2.5	98561.220	2.5
373.1622	23.01	-1.04	20089.560	1.0	46879.940	2.0
373.1658	22.00	-3.53	18695.230	4.0	45485.350	5.0
373.1685	24.00	-1.22	31377.960	4.0	58167.890	4.0
373.1785	22.01	-3.94	40027.280	1.5	66816.490	1.5
373.1795	18.01	-2.19	183675.570	3.5	210464.710	2.5
373.1828	13.01	-1.55	105424.300	0.0	132213.200	1.0
373.1831	28.00	-3.70	27943.543	1.0	54732.425	2.0
373.1850	25.00	-1.26	35725.850	2.5	62514.590	2.5
373.1853	24.01	-4.14	54444.190	3.5	81232.910	2.5
373.1870	75.00	-.63	16534.792	0.0	43331.009	0.0
373.1880	58.01	-.33	8872.327	0.0	35668.473	0.0
373.1917	24.00	-3.52	21847.880	2.0	48636.140	3.0
373.1931	25.00	.19	34423.270	3.5	61211.430	4.5
373.1977	23.01	-1.01	19902.600	0.0	46690.430	1.0
373.1997	25.00	-2.74	41031.480	4.5	67819.170	4.5
373.2001	25.01	-4.66	51553.060	5.0	78340.720	6.0
373.2023	24.00	-1.72	0.000	3.0	26787.500	3.0
373.2023	12.02	-2.17	536152.000	1.0	562939.500	2.0
373.2030	44.00	-.44	13550.463	0.0	40345.532	0.0
373.2030	41.00	-.28	10969.423	0.0	37764.492	0.0
373.2061	23.00	-1.98	9824.580	2.5	36611.810	2.5
373.2081	8.02	-2.04	300440.850	2.0	327227.940	1.0
373.2117	24.00	-4.63	27176.220	1.0	53963.050	1.0
373.2147	26.02	-3.68	199595.300	3.0	226381.910	3.0
373.2200	63.00	-.22	13953.751	0.0	40747.599	0.0
373.2260	92.00	-.18	3710.246	0.0	30503.663	0.0
373.2280	75.00	-.82	14921.641	0.0	41714.915	0.0
373.2320	64.00	-.33	1693.808	0.0	28486.795	0.0
373.2333	23.00	-4.12	18372.460	3.5	45157.740	4.5
373.2347	10.01	-3.29	280989.530	1.5	307774.710	1.5
373.2350	6.00	-3.36	61981.820	1.0	88766.980	1.0
373.2358	24.02	-3.18	70291.800	2.0	97076.900	1.0
373.2392	27.00	-.21	15184.040	2.5	41968.890	2.5
373.2398	26.00	-.55	17726.985	2.0	44511.795	2.0
373.2450	64.01	-1.32	564.603	0.0	27356.656	0.0
373.2460	58.01	-1.18	2339.068	0.0	29131.050	0.0
373.2512	25.01	-4.44	73911.310	1.0	100695.300	1.0
373.2569	25.00	-4.14	41932.640	3.5	68716.220	4.5
373.2590	24.00	-3.50	31364.330	3.0	58147.760	3.0
373.2608	30.02	-1.30	235452.500	2.0	262235.800	3.0
373.2651	26.00	-3.00	27666.334	1.0	54449.330	1.0
373.2670	64.00	-.55	483.945	0.0	27274.419	0.0
373.2703	25.01	-4.43	79739.880	5.0	106522.500	6.0
373.2735	25.02	-1.92	94697.850	3.5	121480.240	3.5
373.2762	23.01	-.38	12621.570	5.0	39403.770	4.0
373.2762	27.01	-7.12	19189.900	4.0	45972.100	3.0
373.2778	10.01	-2.04	254165.010	1.5	280947.100	1.5
373.2799	23.02	-1.91	61777.150	1.5	88559.080	1.5
373.2804	28.00	-4.57	29481.020	4.0	56262.920	3.0
373.2833	2.01	-1.85	411477.918	0.0	438267.223	0.0
373.2889	25.01	-4.55	73911.310	1.0	100692.600	2.0
373.3030	42.00	.24	21454.900	0.0	48242.791	0.0
373.3050	44.00	-.99	9114.300	0.0	35902.047	0.0
373.3068	28.01	-3.99	107082.210	2.5	133862.210	1.5
373.3114	10.02	-2.57	410134.720	1.0	436914.390	2.0
373.3134	23.00	-5.12	9636.960	1.5	36416.490	1.5
373.3145	28.00	-1.94	31031.042	3.0	57810.494	4.0
373.3193	26.00	-2.63	20641.110	4.0	47420.215	5.0
373.3198	25.00	-2.37	37630.620	4.5	64409.690	3.5
373.3304	22.00	-4.86	22081.198	2.0	48859.510	1.0
373.3305	26.02	-3.45	199603.610	4.0	226381.910	3.0
373.3319	26.00	-1.47	888.132	1.0	27666.334	1.0
373.3320	41.00	.46	18228.600	0.0	45014.410	0.0
373.3354	18.01	-2.75	159393.310	1.5	186171.260	.5
373.3358	26.02	-4.12	89697.520	3.0	116475.440	3.0
373.3400	42.00	.05	21212.928	0.0	47998.164	0.0
373.3424	24.00	-1.40	24282.340	4.0	51059.790	4.0
373.3478	27.00	-.28	16778.160	2.5	43555.220	3.5
373.3520	58.01	-.78	4194.191	0.0	30978.566	0.0
373.3562	28.01	-4.08	93390.060	2.5	120166.520	1.5
373.3586	22.01	-3.84	42068.850	1.5	68845.140	2.5
373.3608	23.01	-1.91	20280.190	5.0	47056.320	4.0
373.3620	41.00	-1.65	1129.205	0.0	27912.863	0.0
373.3651	25.00	-.59	34938.700	4.5	61714.520	4.5
373.3779	17.01	-.53	146469.000	3.0	173243.900	4.0
373.3790	72.00	-.96	4516.821	0.0	31299.259	0.0
373.3793	13.01	-1.07	105438.400	1.0	132213.200	1.0
373.3837	24.00	-1.96	31393.400	5.0	58167.890	4.0
373.3929	28.00	-2.98	29500.690	1.0	56274.516	2.0
373.4120	69.01	-1.09	161.315	0.0	26941.386	0.0
373.4135	27.00	-.53	16470.600	1.5	43242.950	2.5
373.4145	25.00	-4.28	34938.700	4.5	61710.980	3.5
373.4180	29.00	-1.12	44442.294	0.0	71221.935	0.0
373.4258	24.00	-1.03	33906.650	1.0	60678.120	1.0
373.4262	18.01	-1.29	183675.570	3.5	210447.010	3.5
373.4286	23.00	-4.69	9636.960	1.5	36408.230	1.5
373.4295	15.01	-.99	102799.200	1.0	129570.400	1.0
373.4335	22.01	-4.57	41996.740	.5	68767.660	1.5
373.4370	42.00	-.05	20164.380	0.0	46942.659	0.0
373.4478	26.02	-4.66	89697.520	3.0	116467.410	4.0
373.4491	24.00	-3.02	31377.960	4.0	58147.760	3.0
373.4506	6.00	-3.20	60333.430	0.0	87103.120	1.0
373.4538	24.00	-2.50	28682.180	2.0	55451.640	3.0
373.4561	13.01	-1.18	121480.300	3.0	148249.600	4.0
373.4590	68.00	-1.36	0.000	0.0	26776.701	0.0
373.4590	90.01	-1.74	4436.164	0.0	31212.865	0.0
373.4593	26.01	-4.68	73054.970	2.5	99824.040	2.5
373.4630	13.01	-2.61	121480.300	3.0	148249.100	3.0
373.4645	8.00	-4.85	102968.355	3.0	129737.052	3.0
373.4664	16.01	-3.72	113461.220	1.5	140229.780	2.5
373.4686	13.01	-3.79	121480.300	3.0	148248.700	2.0
373.4700	70.00	-.12	17905.969	0.0	44681.881	0.0
373.4714	13.01	-1.71	121480.900	2.0	148249.100	3.0
373.4767	25.00	-2.30	38120.180	4.5	64888.000	4.5
373.4770	13.01	-2.24	121480.900	2.0	148248.700	2.0
373.4795	8.02	-1.11	338851.500	3.0	365619.120	2.0
373.4801	22.00	-7.96	11776.806	4.0	38544.380	3.0
373.4812	13.01	-1.51	121481.200	1.0	148248.700	2.0
373.4866	26.00	.40	6928.266	5.0	33695.378	5.0
373.4924	9.00	-3.66	102840.376	.5	129607.070	.5
373.4937	10.01	-.80	219648.440	1.5	246415.040	1.5
373.4950	26.00	-2.36	27394.676	3.0	54161.182	3.0
373.4954	10.02	-2.29	409845.080	2.0	436611.560	3.0
373.5010	75.00	-.99	11695.340	0.0	38469.030	0.0
373.5140	25.01	-4.35	59537.400	4.0	86302.550	3.0
373.5163	23.01	-.97	20343.000	2.0	47107.980	1.0
373.5187	24.00	-2.61	33762.740	6.0	60527.550	6.0
373.5250	24.00	-.28	37233.500	5.0	63997.660	6.0
373.5280	45.00	.24	13389.148	0.0	40160.903	0.0
373.5296	10.02	-3.41	409847.530	3.0	436611.560	3.0
373.5310	75.00	.88	23471.338	0.0	50242.878	0.0
373.5317	26.00	.11	23711.443	4.0	50475.320	4.0
373.5325	18.01	-3.40	159706.460	.5	186470.280	1.5
373.5327	28.00	-1.50	30979.789	4.0	57743.596	3.0
373.5392	28.01	-2.13	91800.050	4.5	118563.390	3.5
373.5450	18.01	-.80	183675.570	3.5	210438.500	4.5
373.5487	18.01	-2.89	132630.650	1.5	159393.310	1.5
373.5574	27.00	-3.03	21215.900	.5	47977.940	.5
373.5620	42.00	.40	25729.749	0.0	52499.067	0.0
373.5700	26.00	-4.73	19552.474	1.0	46313.610	2.0
373.5707	10.01	-2.09	291495.040	2.5	318256.130	2.5
373.5748	28.01	-3.29	107142.210	1.5	133903.000	1.5
373.5778	6.00	-2.93	60352.630	1.0	87113.210	2.0
373.5803	12.02	-3.36	582290.100	3.0	609050.500	2.0
373.5813	20.02	-3.69	347383.510	4.0	374143.840	3.0
373.5817	8.01	-1.17	232526.700	1.5	259287.000	1.5
373.5850	57.01	-2.42	1371.178	0.0	28138.848	0.0
373.5869	20.02	-2.74	347383.510	4.0	374143.440	4.0
373.5879	24.01	-2.67	47354.630	2.5	74114.480	3.5
373.5910	42.00	0.00	20245.038	0.0	47012.278	0.0
373.5921	27.00	-.64	16778.160	2.5	43537.710	1.5
373.5929	8.01	-.26	232526.700	1.5	259286.200	2.5
373.5949	26.00	-1.15	33412.706	3.0	60172.060	4.0
373.5980	62.01	-.56	2177.753	0.0	28944.492	0.0
373.5997	23.00	-2.75	18085.820	.5	44844.830	1.5
373.6015	23.01	-.78	20343.000	2.0	47101.880	2.0
373.6062	22.00	-3.86	22081.198	2.0	48839.740	3.0
373.6170	42.00	-.53	20164.380	0.0	46929.757	0.0
373.6178	23.00	-4.17	17136.440	6.5	43894.150	5.5
373.6220	74.01	.42	17905.969	0.0	44670.988	0.0
373.6280	4.00	-2.10	42565.000	0.0	69329.589	0.0
373.6310	23.00	-3.45	15103.770	4.5	41860.540	4.5
373.6363	8.00	-4.84	105441.657	4.0	132198.046	4.0
373.6363	8.00	-3.97	105441.657	5.0	132198.046	4.0
373.6434	23.00	-2.72	9824.580	2.5	36580.460	1.5
373.6438	24.00	-2.00	24303.940	3.0	51059.790	4.0
373.6440	64.00	-.75	1693.808	0.0	28457.251	0.0
373.6445	20.02	-1.36	347383.510	4.0	374139.310	5.0
373.6473	12.02	-1.33	582290.100	3.0	609045.700	4.0
373.6515	12.02	-2.46	582290.100	3.0	609045.400	3.0
373.6520	24.01	-3.56	25033.950	3.5	51789.210	3.5
373.6543	12.02	-3.48	582290.100	3.0	609045.200	3.0
373.6573	28.00	-1.24	30922.763	5.0	57677.649	5.0
373.6649	23.00	-2.38	18302.270	3.5	45056.610	3.5
373.6713	26.02	-4.90	160037.900	2.0	186791.780	2.0
373.6720	25.02	-4.27	191915.430	.5	218669.260	1.5
373.6739	17.01	-1.53	146469.000	3.0	173222.700	3.0
373.6760	73.00	-.73	11695.340	0.0	38456.491	0.0
373.6779	24.01	-4.16	54678.950	4.5	81432.360	3.5
373.6806	28.00	-1.63	3409.925	2.0	30163.140	2.0
373.6840	75.00	-.34	24600.544	0.0	51361.122	0.0
373.6861	22.00	-3.05	16106.080	4.0	42858.900	3.0
373.6892	25.00	-.17	34138.880	6.5	60891.480	6.5
373.6901	20.01	-.18	25414.400	1.5	52166.930	.5
373.6988	23.00	-5.07	10892.500	3.5	37644.410	4.5
373.7133	26.00	-.64	415.932	3.0	27166.804	4.0
373.7157	28.01	-4.13	101144.630	3.5	127895.330	3.5
373.7186	6.00	-3.43	60352.630	1.0	87103.120	1.0
373.7245	20.02	-3.15	359156.830	1.0	385906.900	2.0
373.7245	9.02	-4.52	442370.280	.5	469120.350	1.5
373.7270	45.00	-.14	11856.655	0.0	38614.154	0.0
373.7390	40.00	-1.26	5000.766	0.0	31757.406	0.0
373.7400	44.00	-.50	8952.985	0.0	35709.554	0.0
373.7417	23.00	-1.26	8476.200	1.5	35225.040	2.5
373.7427	10.01	-1.76	281025.940	2.5	307774.710	1.5
373.7433	24.00	-4.72	35897.870	2.0	62646.600	2.0
373.7480	62.01	-1.16	2984.328	0.0	29740.324	0.0
373.7520	58.01	-.88	4436.164	0.0	31191.874	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
373.7540	24.01	-1.93	38509.070	3.5	65257.030	3.5
373.7574	28.01	-4.91	95332.530	2.5	122080.250	2.5
373.7672	23.00	-3.57	18174.060	1.5	44921.080	2.5
373.7674	15.01	-3.29	104054.700	1.0	130801.700	1.0
373.7740	44.00	-1.16	9436.930	0.0	36191.065	0.0
373.7740	58.01	-.42	6855.889	0.0	33610.024	0.0
373.7741	23.00	-2.26	15571.900	2.5	42318.420	1.5
373.7848	26.00	-4.48	19390.165	6.0	46135.920	5.0
373.7880	72.01	.16	18793.202	0.0	45546.335	0.0
373.7884	13.01	-.85	105467.700	2.0	132213.200	1.0
373.7888	18.01	.47	173393.380	2.5	200138.850	3.5
373.7910	42.00	-.14	16696.107	0.0	43449.025	0.0
373.8001	23.00	-.88	14910.040	3.5	41654.700	2.5
373.8007	25.00	-2.87	35769.970	3.5	62514.590	2.5
373.8014	25.00	-2.07	35041.370	3.5	61785.940	3.5
373.8050	92.01	-.42	5726.684	0.0	32478.600	0.0
373.8073	28.01	-3.04	100475.820	3.5	127219.970	3.5
373.8074	28.00	-3.45	31786.210	3.0	58530.350	3.0
373.8110	40.01	-1.44	4436.164	0.0	31187.651	0.0
373.8182	27.00	-3.99	28777.270	3.5	55520.640	3.5
373.8184	28.01	-4.16	109846.000	3.5	136589.350	3.5
373.8307	24.00	-2.19	33935.650	2.0	60678.120	1.0
373.8308	26.00	-.15	26351.049	5.0	53093.517	6.0
373.8349	24.01	-1.70	25047.040	2.5	51789.210	3.5
373.8420	41.00	.07	10162.848	0.0	36912.116	0.0
373.8436	22.01	-3.45	42208.840	2.5	68950.390	3.5
373.8481	24.00	-3.47	31987.060	4.0	58728.290	4.0
373.8503	26.00	-1.58	29356.780	2.0	56097.850	3.0
373.8530	77.00	-1.45	6291.287	0.0	33039.768	0.0
373.8540	10.02	-1.59	409847.530	3.0	436588.340	4.0
373.8555	26.01	-4.59	73751.340	4.5	100492.040	3.5
373.8562	24.01	-4.01	42898.120	2.5	69638.770	1.5
373.8609	22.00	-2.25	21588.496	4.0	48328.810	4.0
373.8610	39.00	.09	16454.134	0.0	43202.043	0.0
373.8630	44.00	-.74	13631.121	0.0	40378.887	0.0
373.8632	22.01	-4.40	40027.280	1.5	66767.430	.5
373.8636	29.01	-1.94	118142.970	3.0	144883.090	2.0
373.8688	10.01	-4.32	281998.280	2.5	308738.030	1.5
373.8721	23.00	-2.29	15270.420	1.5	42009.930	2.5
373.8740	22.00	-2.76	21469.494	3.0	48208.870	3.0
373.8779	17.01	-.35	138623.000	1.0	165362.100	0.0
373.8832	24.00	-4.83	26787.500	3.0	53526.220	4.0
373.8840	90.01	-1.02	8388.382	0.0	35134.646	0.0
373.8846	28.01	-4.00	100592.980	3.5	127331.600	2.5
373.8861	22.00	-3.73	14105.680	3.0	40844.190	3.0
373.8910	44.00	-.03	16131.504	0.0	42877.267	0.0
373.9040	72.00	-.81	10485.478	0.0	37230.311	0.0
373.9114	19.01	-1.13	162507.000	2.0	189243.700	1.0
373.9117	26.00	-3.02	17927.378	1.0	44664.061	2.0
373.9221	28.00	-2.66	1332.153	3.0	28068.091	4.0
373.9239	21.01	-3.47	30815.650	1.0	57551.460	1.0
373.9316	26.00	-2.14	17550.180	3.0	44285.436	2.0
373.9370	28.01	-3.72	104081.040	4.5	130815.910	3.5
373.9375	20.01	-1.94	60533.020	.5	87267.860	.5
373.9394	8.01	-4.75	248185.300	2.5	274920.000	2.5
373.9412	25.00	-2.35	41230.300	3.5	67964.870	2.5
373.9440	27.00	-2.58	15184.040	2.5	41918.410	3.5
373.9460	44.00	.24	13631.121	0.0	40372.950	0.0
373.9480	74.00	-.79	18147.942	0.0	44889.628	0.0
373.9591	22.01	-2.01	20891.880	3.5	47625.170	2.5
373.9600	9.02	-4.99	464728.420	4.5	491461.650	4.5
373.9609	29.01	-4.75	114511.440	1.0	141244.600	1.0
373.9760	64.00	-.16	967.890	0.0	27707.574	0.0
373.9786	28.00	-.99	31786.210	3.0	58518.110	4.0
373.9796	9.02	-3.27	464728.420	4.5	491460.250	5.5
373.9800	41.00	-.10	645.260	0.0	27384.658	0.0
373.9876	8.00	-4.58	102968.261	5.0	129699.521	4.0
373.9909	8.01	-.45	212161.940	1.5	238892.960	2.5
373.9934	26.01	-2.46	73187.460	.5	99918.300	1.5
373.9950	82.00	.72	21293.585	0.0	48031.910	0.0
373.9968	30.02	.04	237506.800	1.0	264237.400	1.0
374.0038	8.01	-1.82	248009.100	1.5	274739.200	2.5
374.0052	26.00	-2.70	24574.655	4.0	51304.650	4.0
374.0088	18.01	-5.00	183797.360	2.5	210527.100	2.5
374.0100	75.00	-.12	14115.066	0.0	40852.319	0.0
374.0112	25.00	-4.67	25285.430	4.5	52015.000	3.5
374.0130	58.01	-.36	10001.532	0.0	36738.571	0.0
374.0172	26.01	-2.92	73189.160	1.5	99918.300	1.5
374.0184	27.00	-1.43	16470.600	1.5	43199.650	2.5
374.0214	25.01	-2.50	52383.720	4.0	79112.560	5.0
374.0232	2.01	-1.80	411477.918	0.0	438214.227	0.0
374.0236	23.00	-1.41	15270.420	1.5	41999.100	1.5
374.0284	29.01	-2.66	108014.660	3.0	134743.000	4.0
374.0316	26.00	-1.77	27543.000	1.0	54271.110	1.0
374.0394	28.01	-3.80	107082.210	2.5	133809.760	3.5
374.0410	75.00	.12	23471.338	0.0	50206.375	0.0
374.0501	20.02	-1.79	347417.050	3.0	374143.840	3.0
374.0523	28.01	-4.76	89100.490	3.5	115827.120	3.5
374.0557	20.02	-.36	347417.050	3.0	374143.440	4.0
374.0599	10.01	-3.49	276511.820	.5	303237.910	1.5
374.0613	26.00	-3.60	29371.860	3.0	56097.850	3.0
374.0713	22.00	-3.21	7255.369	2.0	33980.639	2.0
374.0730	41.01	.73	12985.861	0.0	39718.611	0.0
374.0760	42.00	-.77	18228.600	0.0	44961.136	0.0
374.0789	6.00	-3.27	60352.630	1.0	87077.360	0.0
374.0792	23.00	-3.65	18120.120	.5	44844.830	1.5
374.0966	10.01	-2.99	281171.380	2.5	307894.840	2.5
374.1000	24.00	-1.77	33906.650	1.0	60629.870	2.0
374.1006	25.00	-.46	38008.700	5.5	64731.880	6.5
374.1010	58.01	-1.28	2581.041	0.0	29311.790	0.0
374.1031	23.00	-2.95	18198.080	2.5	44921.080	2.5
374.1034	25.01	-4.85	55696.500	4.0	82419.480	3.0
374.1060	22.00	-.13	170.132	3.0	26892.926	3.0
374.1116	22.00	-1.95	21739.713	5.0	48462.110	5.0
374.1190	90.01	-1.00	1451.835	0.0	28181.298	0.0
374.1242	29.00	-.90	44442.294	0.0	71171.386	0.0
374.1261	25.00	-3.41	41031.480	4.5	67752.840	5.5
374.1310	63.01	-.63	11050.080	0.0	37778.686	0.0
374.1411	28.01	-4.26	104081.040	4.5	130801.330	4.5
374.1427	27.00	-4.55	25739.930	2.5	52460.100	2.5
374.1441	6.00	-2.49	60393.140	2.0	87113.210	2.0
374.1444	10.01	-1.25	280700.770	3.5	307420.820	2.5
374.1476	26.00	-3.01	27666.334	1.0	54386.160	1.0
374.1497	23.00	-2.02	18438.070	4.5	45157.740	4.5
374.1555	26.01	-4.50	18360.650	1.5	45079.910	2.5
374.1569	26.02	-4.81	88923.070	6.0	115642.230	7.0
374.1578	9.02	-1.36	440069.510	1.5	466788.600	2.5
374.1631	22.01	-.25	12758.150	2.5	39476.870	2.5
374.1653	23.00	-4.42	18126.270	1.5	44844.830	1.5
374.1710	74.00	-.59	14840.984	0.0	41566.732	0.0
374.1717	17.02	-1.15	174613.900	2.5	201332.000	1.5
374.1730	58.01	-.72	7178.519	0.0	33904.125	0.0
374.1780	41.00	-1.19	0.000	0.0	26725.248	0.0
374.1941	8.02	-.59	374662.500	2.0	401379.000	2.0
374.1990	27.00	-4.56	24326.110	3.5	51042.260	2.5
374.2031	25.00	-4.86	23296.670	3.5	50014.530	2.5
374.2065	18.01	-2.03	183797.360	2.5	210512.980	1.5
374.2069	26.00	-2.66	20874.482	3.0	47590.070	4.0
374.2079	28.01	-4.86	107142.210	1.5	133857.730	.5
374.2112	28.01	-3.83	73893.730	1.5	100609.010	2.5
374.2135	26.00	-3.38	31805.059	3.0	58520.180	4.0
374.2150	29.01	-2.30	110084.290	1.0	136799.300	2.0
374.2168	24.01	-7.67	20512.620	2.5	47227.500	3.5
374.2185	28.01	-4.23	95332.530	2.5	122047.290	3.5
374.2260	75.01	.32	17099.394	0.0	43821.215	0.0
374.2265	25.00	-.99	38934.940	2.5	65649.130	2.5
374.2280	44.00	-.19	2661.698	0.0	29383.376	0.0
374.2280	42.00	.41	20245.038	0.0	46966.716	0.0
374.2385	28.01	-4.31	78955.450	1.5	105668.780	2.5
374.2390	41.00	-.38	0.000	0.0	26720.892	0.0
374.2484	22.00	-.71	18145.400	2.0	44858.030	1.0
374.2494	28.00	-1.65	31031.042	3.0	57743.596	3.0
374.2608	26.00	-3.46	23711.443	4.0	50423.185	4.0
374.2615	25.01	-3.28	47073.560	3.0	73785.250	2.0
374.2625	29.01	-3.78	110365.980	2.0	137077.600	3.0
374.2650	68.00	-.22	5081.424	0.0	31800.460	0.0
374.2659	24.00	-4.48	31352.420	1.0	58063.800	2.0
374.2680	74.00	.08	22342.133	0.0	49060.955	0.0
374.2780	44.00	.78	15405.586	0.0	42123.694	0.0
374.2795	23.00	-3.93	14949.300	4.5	41659.710	5.5
374.2817	22.00	-3.39	17369.590	1.0	44079.840	2.0
374.2839	24.01	-2.72	63802.410	.5	90512.500	1.5
374.2855	6.00	-2.90	60393.140	2.0	87103.120	1.0
374.2891	25.02	-4.21	85173.880	1.5	111883.600	2.5
374.2938	26.00	-2.32	27666.334	1.0	54375.719	2.0
374.2964	24.00	-.76	20519.600	6.0	47228.800	5.0
374.2968	24.01	-4.76	20518.330	3.5	47227.500	3.5
374.2982	25.00	-2.96	35769.970	3.5	62479.040	4.5
374.3001	18.01	-.58	172816.210	.5	199525.150	1.5
374.3008	23.01	-3.02	20343.000	2.0	47051.890	3.0
374.3024	25.02	-2.68	94771.470	2.5	121460.240	3.5
374.3050	24.00	-3.54	31355.210	2.0	58063.800	2.0
374.3057	24.01	-4.17	38509.070	3.5	65217.610	4.5
374.3181	24.01	-3.47	20519.850	4.5	47227.500	3.5
374.3203	26.00	-2.65	27166.804	4.0	53874.300	5.0
374.3237	25.01	-4.52	47073.560	3.0	73780.810	3.0
374.3364	26.00	-.73	7985.783	2.0	34692.130	1.0
374.3424	25.01	-1.65	41204.340	5.0	67910.260	4.0
374.3467	26.00	.37	28819.966	5.0	55525.580	5.0
374.3470	64.01	.04	1129.205	0.0	27842.388	0.0
374.3502	25.00	-1.00	34250.520	5.5	60955.880	4.5
374.3510	90.01	-1.37	10485.478	0.0	37198.376	0.0
374.3522	24.00	-4.43	21856.940	3.0	48562.160	4.0
374.3537	24.00	-.87	20523.690	4.0	47228.800	5.0
374.3537	24.00	-1.05	33762.740	6.0	60467.850	5.0
374.3560	63.01	-1.30	9840.217	0.0	36552.758	0.0
374.3572	24.00	.05	20523.940	5.0	47228.800	5.0
374.3574	28.00	-4.48	28068.091	4.0	54772.940	3.0
374.3598	23.01	-1.42	13490.840	2.0	40195.520	3.0
374.3637	28.02	-3.32	157154.900	2.0	183859.300	3.0
374.3779	26.00	-.79	21999.132	4.0	48702.518	4.0
374.3810	42.00	-.25	20003.065	0.0	46713.822	0.0
374.3868	26.01	-4.09	36126.410	1.5	62829.160	.5
374.3870	62.01	-.63	2661.698	0.0	29372.027	0.0
374.3880	24.00	.39	20519.600	6.0	47222.270	6.0
374.3901	27.00	-2.80	14399.280	.5	41101.800	.5
374.3905	28.00	-3.79	29481.020	4.0	56183.510	4.0
374.3990	72.00	-.15	18228.600	0.0	44938.073	0.0
374.4000	41.00	0.00	10808.108	0.0	37517.510	0.0
374.4054	9.00	-3.79	102680.435	1.5	129381.860	2.5
374.4070	69.00	.03	0.000	0.0	26708.902	0.0
374.4094	26.00	-3.51	24506.902	2.0	51208.040	1.0
374.4100	42.00	-.53	20245.038	0.0	46953.726	0.0
374.4131	23.01	-2.80	30641.710	3.0	57342.590	2.0
374.4166	25.00	-.61	35725.850	2.5	62426.480	3.5
374.4170	45.00	-.14	11856.655	0.0	38564.844	0.0
374.4220	44.00	-.54	8711.012	0.0	35418.844	0.0
374.4268	18.01	-2.29	179931.770	1.5	206631.670	2.5
374.4328	24.00	-3.16	31364.330	3.0	58063.800	2.0
374.4345	25.00	-1.05	38120.180	4.5	64819.530	5.5
374.4381	15.01	-2.89	104102.600	2.0	130801.700	1.0
374.4391	25.01	-4.61	79458.380	2.0	106157.400	3.0
374.4400	44.00	.54	16131.504	0.0	42838.052	0.0
374.4421	22.01	-4.36	42068.850	1.5	68767.660	1.5
374.4444	8.00	-4.31	102968.261	5.0	129666.907	4.0
374.4465	11.02	-4.29	444748.100	1.5	471446.600	1.5
374.4488	24.00	-.69	20523.940	5.0	47222.270	6.0
374.4541	26.00	-3.29	27559.568	2.0	54257.520	2.0
374.4554	28.00	-.39	30979.789	4.0	57677.649	5.0
374.4627	10.01	-.33	254292.190	.5	280989.530	1.5
374.4634	23.00	-3.40	15664.750	1.5	42362.040	.5
374.4642	26.01	-4.24	71432.750	7.5	98129.980	6.5
374.4740	90.01	-1.50	8388.382	0.0	35092.506	0.0
374.4756	28.01	-3.59	71770.830	2.5	98467.250	3.5
374.4830	64.00	.02	1693.808	0.0	28397.290	0.0
374.4944	20.02	-1.41	324110.240	4.0	350805.320	4.0
374.4957	24.00	-.90	33934.880	3.0	60629.870	2.0
374.4980	72.01	.40	22987.393	0.0	49689.805	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
374.5024	27.00	-1.49	23152.570	3.5	49847.080	2.5
374.5039	12.02	-.35	564289.800	1.0	590984.200	0.0
374.5053	30.02	-.46	237047.800	2.0	263742.100	2.0
374.5053	30.02	-1.62	237047.800	2.0	263742.100	2.0
374.5065	24.00	-1.08	33935.650	2.0	60629.870	2.0
374.5112	24.01	-3.08	38563.150	4.5	65257.030	3.5
374.5128	24.00	.14	37233.500	5.0	63927.270	5.0
374.5173	22.00	-2.13	17540.205	3.0	44233.650	3.0
374.5200	28.00	-2.94	28068.091	4.0	54761.346	4.0
374.5225	24.00	-4.82	33934.880	3.0	60627.960	4.0
374.5306	25.02	-3.51	192012.750	1.5	218705.250	2.5
374.5354	26.01	-3.67	36252.960	2.5	62945.120	3.5
374.5356	29.00	-1.11	44442.294	0.0	71142.026	0.0
374.5440	75.00	-.55	14518.354	0.0	41217.487	0.0
374.5460	62.00	.49	1451.835	0.0	28150.825	0.0
374.5472	26.00	-.27	26224.961	3.0	52916.278	2.0
374.5480	42.00	-.27	18147.942	0.0	44846.790	0.0
374.5491	27.00	-.81	7442.410	3.5	34133.590	3.5
374.5540	26.00	-4.66	32133.977	2.0	58824.610	2.0
374.5562	26.00	-.84	704.003	2.0	27394.676	3.0
374.5590	44.00	.88	12098.628	0.0	38796.692	0.0
374.5595	10.01	-2.46	281332.550	.5	308022.990	.5
374.5752	23.00	-2.88	14910.040	3.5	41599.360	4.5
374.5811	23.01	-.47	12545.150	4.0	39234.050	3.0
374.5818	22.00	-4.17	13981.750	1.0	40670.600	2.0
374.5869	23.01	-3.08	13741.610	3.0	40430.100	4.0
374.5874	25.00	-3.95	34250.520	5.5	60938.970	4.5
374.5901	26.00	-1.41	978.076	0.0	27666.334	1.0
374.5906	27.00	-2.57	17233.680	3.5	43921.890	2.5
374.5980	40.01	.81	14115.066	0.0	40810.350	0.0
374.5980	90.01	-.87	7259.177	0.0	33954.461	0.0
374.6206	25.00	-2.86	35041.370	3.5	61727.460	2.5
374.6370	58.01	-1.13	4436.164	0.0	31128.669	0.0
374.6410	92.01	-.40	5484.711	0.0	32176.931	0.0
374.6420	9.01	-1.48	243458.900	1.0	270143.460	2.0
374.6443	18.01	-4.22	173347.830	1.5	200032.230	1.5
374.6468	28.01	-3.67	104081.040	4.5	130765.260	3.5
374.6468	10.01	-3.87	276276.850	1.5	302961.070	1.5
374.6470	76.00	-.42	14276.381	0.0	40968.174	0.0
374.6478	23.00	-2.90	18372.460	3.5	45056.610	3.5
374.6478	26.00	-1.59	17726.985	2.0	44411.137	1.0
374.6524	26.02	-3.76	89783.590	4.0	116467.410	4.0
374.6533	26.02	-3.12	124854.040	3.0	151537.800	4.0
374.6561	26.01	-3.67	18360.650	1.5	45044.210	1.5
374.6610	25.00	-.34	34250.520	5.5	60933.730	5.5
374.6625	24.00	-1.02	37244.170	4.0	63927.270	5.0
374.6709	20.00	-1.25	21849.634	2.0	48532.139	3.0
374.6720	25.00	-3.10	38934.940	2.5	65617.370	3.5
374.6767	25.02	-4.96	89898.080	.5	116580.170	1.5
374.6800	72.00	.22	14599.011	0.0	41288.453	0.0
374.6875	26.01	-2.33	72650.630	4.5	99331.950	4.5
374.6909	26.02	-3.97	199700.830	4.0	226381.910	3.0
374.6915	18.01	-1.18	159393.310	1.5	186074.350	2.5
374.6920	26.00	-.39	24180.848	3.0	50861.850	3.0
374.6926	24.00	-1.12	33934.880	3.0	60615.840	3.0
374.6940	26.02	-4.48	124854.040	3.0	151534.900	2.0
374.6965	9.01	-1.26	243462.780	2.0	270143.460	2.0
374.6982	26.01	-4.16	73143.480	3.5	99824.040	2.5
374.6994	26.00	-.16	24180.848	3.0	50861.320	2.0
374.7000	8.04	-.70	677847.000	0.0	704535.017	0.0
374.7003	18.01	-3.53	183797.360	2.5	210477.770	3.5
374.7034	24.00	-2.46	33935.650	2.0	60615.840	3.0
374.7048	26.02	-3.82	124854.040	3.0	151534.130	3.0
374.7055	26.01	-2.03	72651.910	3.5	99331.950	4.5
374.7071	23.00	-3.36	15270.420	1.5	41950.350	2.5
374.7142	23.00	-1.35	8412.940	.5	35092.360	1.5
374.7200	77.00	-.93	5726.684	0.0	32413.277	0.0
374.7246	24.00	-.26	33762.740	6.0	60441.420	6.0
374.7342	24.00	-1.94	32097.360	6.0	58775.360	6.0
374.7392	26.02	-1.94	114325.350	5.0	141002.990	4.0
374.7490	72.01	-.61	15002.299	0.0	41686.827	0.0
374.7511	8.02	-.59	374798.600	3.0	401475.400	3.0
374.7540	90.01	-.67	9114.300	0.0	35798.471	0.0
374.7550	39.01	-1.11	806.575	0.0	27490.675	0.0
374.7557	28.01	-4.08	104081.040	4.5	130757.510	4.5
374.7620	62.01	-1.09	2177.753	0.0	28861.355	0.0
374.7660	7.03	.05	473032.000	0.0	499715.317	0.0
374.7851	10.01	-2.45	281332.550	.5	308006.930	.5
374.7877	9.01	-1.11	243469.270	3.0	270143.460	2.0
374.7923	28.00	-4.54	30912.838	1.0	57586.700	2.0
374.7944	23.00	-.21	15571.900	2.5	42245.610	3.5
374.7970	23.00	-1.52	15078.250	.5	41751.780	1.5
374.7970	23.00	-.88	15078.250	.5	41751.780	.5
374.7988	22.01	-.62	20951.770	2.5	47625.170	2.5
374.8005	28.01	-3.59	109846.000	3.5	136519.280	4.5
374.8023	25.00	-1.02	35041.370	3.5	61714.520	4.5
374.8060	58.01	-.26	5726.684	0.0	32407.153	0.0
374.8086	27.00	-3.35	28777.270	3.5	55449.970	2.5
374.8119	25.00	-3.07	37737.220	3.5	64409.690	3.5
374.8164	26.00	-2.66	27394.676	3.0	54066.821	2.0
374.8171	24.00	-2.44	23512.000	1.0	50184.100	2.0
374.8190	29.01	-1.94	118142.970	3.0	144814.930	3.0
374.8200	26.00	-1.91	27394.676	3.0	54066.570	4.0
374.8203	26.01	-3.27	73016.330	3.5	99688.200	3.5
374.8220	45.00	.10	10243.505	0.0	36922.835	0.0
374.8245	29.01	-5.00	110363.400	2.0	137034.970	3.0
374.8264	26.00	-1.08	888.132	1.0	27559.568	2.0
374.8331	25.00	-1.78	35114.980	2.5	61785.940	3.5
374.8349	20.00	-1.86	20335.360	1.0	47006.194	2.0
374.8358	23.00	-2.99	18174.060	1.5	44844.830	1.5
374.8465	17.01	-1.83	119799.000	2.0	146469.000	3.0
374.8483	26.01	-1.59	38164.240	2.5	64834.120	1.5
374.8488	26.00	-1.47	28819.966	5.0	55489.810	6.0
374.8490	42.00	.69	26455.667	0.0	53133.076	0.0
374.8520	62.00	-.42	241.973	0.0	26919.168	0.0
374.8521	25.00	-.88	35041.370	3.5	61710.980	3.5
374.8543	23.01	-3.90	30673.140	2.0	57342.590	2.0
374.8550	41.00	-.30	8711.012	0.0	35387.994	0.0
374.8574	20.02	-2.43	324110.240	4.0	350779.470	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
374.8592	30.02	.07	238336.200	2.0	265065.300	2.0
374.8610	7.01	-1.74	411477.918	0.0	438154.473	0.0
374.8613	24.00	-1.05	20520.920	3.0	47189.870	4.0
374.8672	24.01	-2.43	21822.860	2.5	48491.390	2.5
374.8706	27.00	-3.08	27497.060	2.5	54165.350	1.5
374.8736	24.00	-2.53	24282.340	4.0	50950.420	3.0
374.8803	17.02	.09	178369.700	.5	205037.300	1.5
374.8823	22.00	-2.80	20795.599	5.0	47463.060	4.0
374.8838	18.01	-1.26	183797.360	2.5	210464.710	2.5
374.8845	25.01	-2.39	43850.420	2.0	70517.720	3.0
374.8859	24.00	-4.69	21847.880	2.0	48515.080	3.0
374.8872	24.01	-2.90	38362.560	1.5	65029.670	.5
374.8880	64.01	-.32	10969.423	0.0	37644.056	0.0
374.8909	26.00	-2.19	21715.735	5.0	48382.585	5.0
374.8948	24.01	-2.97	21824.820	1.5	48491.390	2.5
374.8961	26.00	.08	23711.443	4.0	50377.920	5.0
374.9003	24.00	-.13	20523.690	4.0	47189.870	4.0
374.9038	24.00	-.68	20523.940	5.0	47189.870	4.0
374.9042	28.00	-4.01	0.000	4.0	26665.903	3.0
374.9126	17.02	-3.96	221862.900	.5	248528.200	1.5
374.9164	23.01	-2.28	20089.560	1.0	46754.590	1.0
374.9169	26.02	-3.70	109570.840	2.0	136235.840	1.0
374.9184	24.00	-.38	33762.740	6.0	60427.630	5.0
374.9276	23.00	-2.33	11100.650	4.5	37764.890	5.5
374.9287	26.00	-2.58	27166.804	4.0	53830.960	3.0
374.9344	25.00	-2.23	23719.520	1.5	50383.270	1.5
374.9380	23.00	-2.55	10892.500	3.5	37556.000	3.5
374.9395	23.00	-.67	8715.720	3.5	35379.110	3.5
374.9436	18.01	-2.67	179592.130	2.5	206255.230	2.5
374.9444	26.02	-2.68	114339.950	4.0	141002.990	4.0
374.9471	27.00	-2.43	23184.230	2.5	49847.080	2.5
374.9486	8.01	-.12	185499.200	2.5	212161.940	1.5
374.9487	26.00	.25	7376.762	4.0	34039.495	4.0
374.9564	23.00	-2.88	18258.890	2.5	44921.060	2.5
374.9690	25.01	-4.05	41204.340	5.0	67865.630	4.0
374.9723	25.00	-3.16	41230.300	3.5	67891.360	3.5
374.9740	29.01	-2.99	108014.660	3.0	134675.600	2.0
374.9742	29.01	-1.22	121981.680	2.0	148642.600	2.0
374.9842	25.01	-3.32	55759.270	3.0	82419.480	3.0
374.9845	27.00	-3.91	15774.040	1.5	42434.230	2.5
374.9890	39.00	0.00	16292.819	0.0	42960.268	0.0
374.9904	21.00	-8.04	11520.150	1.5	38179.920	1.5
374.9922	27.00	-.71	16470.600	1.5	43130.240	.5
374.9998	17.01	-1.09	119809.900	3.0	146469.000	3.0
375.0031	23.00	-3.17	15000.840	5.5	41659.710	5.5
375.0080	58.01	-.43	6533.259	0.0	33199.357	0.0
375.0146	23.00	-.95	15270.420	1.5	41928.470	.5
375.0263	24.00	-3.45	32097.360	6.0	58754.580	5.0
375.0291	20.00	-1.69	20349.260	2.0	47006.280	3.0
375.0303	20.00	-2.59	20349.260	2.0	47006.194	2.0
375.0333	28.00	-2.63	27580.411	5.0	54237.136	4.0
375.0353	20.01	-1.64	60611.280	1.5	87267.860	.5
375.0357	28.01	-2.90	94729.250	2.5	121385.800	1.5
375.0363	25.00	-1.31	35769.970	3.5	62426.480	3.5
375.0363	25.02	-3.46	192012.750	1.5	218669.260	1.5
375.0400	77.00	.45	32666.296	0.0	59330.119	0.0
375.0436	22.00	-2.30	17423.853	2.0	44079.840	2.0
375.0477	18.01	-3.07	132737.610	.5	159393.310	1.5
375.0511	25.01	-1.54	41190.470	6.0	67845.930	5.0
375.0556	24.01	-2.56	40415.340	.5	67070.480	1.5
375.0588	10.01	-2.85	254292.190	.5	280947.100	1.5
375.0626	23.00	-3.80	15103.770	4.5	41758.410	3.5
375.0627	24.01	-2.42	38269.670	3.5	64924.300	3.5
375.0630	41.00	-1.66	1129.205	0.0	27791.392	0.0
375.0640	40.01	-1.23	4436.164	0.0	31098.280	0.0
375.0651	24.01	-4.03	38563.150	4.5	65217.610	4.5
375.0710	28.01	-4.79	104147.290	5.5	130801.330	4.5
375.0757	25.00	-1.58	23719.520	1.5	50373.230	2.5
375.0762	23.00	-3.83	15664.750	1.5	42318.420	1.5
375.0795	18.01	-3.50	179592.130	2.5	206245.570	3.5
375.0799	23.00	-2.62	15264.830	5.5	41918.240	5.5
375.0853	24.00	-2.75	31049.330	6.0	57702.360	5.0
375.0870	9.02	-1.61	440069.510	1.5	466722.420	2.5
375.0879	23.01	-.40	13542.680	3.0	40195.520	3.0
375.0889	28.01	-3.37	107082.210	2.5	133734.980	3.5
375.0955	13.01	-2.49	121480.300	3.0	148132.600	3.0
375.0992	24.01	-3.10	42986.730	1.5	69638.770	1.5
375.1000	58.01	-.87	3548.931	0.0	30208.488	0.0
375.1040	13.01	-1.58	121480.900	2.0	148132.600	3.0
375.1054	18.01	-1.61	160239.350	1.5	186890.950	2.5
375.1060	26.00	-4.86	31322.603	3.0	57974.160	2.0
375.1062	26.00	-1.70	26623.726	2.0	53275.270	2.0
375.1072	25.01	-4.39	79512.730	3.0	106164.200	4.0
375.1077	26.00	-3.11	17726.985	2.0	44378.420	1.0
375.1092	26.02	-4.41	179676.890	2.0	206328.220	3.0
375.1100	64.00	-.94	161.315	0.0	26820.162	0.0
375.1147	10.01	-1.86	291801.880	1.5	318452.820	1.5
375.1180	92.00	.22	3710.246	0.0	30368.524	0.0
375.1200	42.00	.12	20003.065	0.0	46661.201	0.0
375.1204	24.00	-1.97	24299.890	2.0	50950.420	3.0
375.1220	23.01	-.98	20089.560	1.0	46739.980	2.0
375.1244	10.01	-1.09	219947.460	.5	246597.710	.5
375.1271	23.00	-1.15	14949.300	4.5	41599.360	4.5
375.1328	18.01	-1.00	183797.360	2.5	210447.010	3.5
375.1347	29.01	-1.32	121981.680	2.0	148631.200	3.0
375.1378	23.03	-2.58	257690.800	3.0	284340.100	4.0
375.1430	74.00	-.62	19115.832	0.0	45772.334	0.0
375.1450	58.01	.17	10162.848	0.0	36819.208	0.0
375.1464	10.01	-3.91	277325.600	1.5	303974.290	1.5
375.1566	28.01	-4.27	101247.370	2.5	127895.330	3.5
375.1570	62.01	-1.80	322.630	0.0	26978.137	0.0
375.1584	24.00	-2.22	21810.840	1.0	48458.670	2.0
375.1593	24.01	-3.31	38509.070	3.5	65156.840	2.5
375.1600	40.01	.22	7743.122	0.0	34398.416	0.0
375.1624	27.00	-1.57	16778.160	2.5	43425.710	2.5
375.1700	24.00	-3.94	31055.350	5.0	57702.360	5.0
375.1737	23.00	-2.54	18198.080	2.5	44844.830	1.5
375.1760	58.01	-1.59	2581.041	0.0	29235.198	0.0
375.1769	23.00	-.85	8578.520	2.5	35225.040	2.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
375.1775	24.00	-1.76	24303.940	3.0	50950.420	3.0
375.1777	22.00	-2.35	19421.576	3.0	46068.040	4.0
375.1780	22.00	-2.55	12118.394	4.0	38764.832	3.0
375.1787	25.01	-2.27	43696.190	3.0	70342.580	3.0
375.1810	69.00	-.45	0.000	0.0	26653.802	0.0
375.1842	27.01	-3.79	24967.800	1.0	50913.800	2.0
375.2017	25.01	-3.85	37811.570	1.0	64456.330	2.0
375.2028	25.01	-4.37	44745.460	2.0	71390.140	3.0
375.2084	23.00	-3.12	18513.460	4.5	45157.740	4.5
375.2084	9.00	-3.34	102840.376	.5	129484.660	1.5
375.2092	22.00	-1.18	20006.032	2.0	46650.260	3.0
375.2112	25.02	-2.45	192172.890	2.5	218816.970	2.5
375.2158	27.00	-3.36	28345.860	4.5	54989.620	3.5
375.2245	22.00	-1.48	22081.198	2.0	48724.340	2.0
375.2310	25.01	-4.04	37851.150	3.0	64493.830	4.0
375.2318	24.00	-3.69	31352.420	1.0	57995.040	1.0
375.2340	58.01	-.65	5646.026	0.0	32296.063	0.0
375.2387	22.00	-3.90	14028.470	2.0	40670.600	2.0
375.2407	26.00	-4.96	24506.902	2.0	51148.892	2.0
375.2410	26.00	-2.90	24506.902	2.0	51148.870	3.0
375.2412	26.02	-4.46	179682.940	1.0	206324.890	2.0
375.2463	25.01	-2.84	41204.340	5.0	67845.930	5.0
375.2520	76.00	-.52	2661.698	0.0	29310.457	0.0
375.2570	90.01	-.35	9194.957	0.0	35843.361	0.0
375.2667	27.00	-4.53	24627.790	4.5	51267.930	4.5
375.2670	60.01	-1.40	0.000	0.0	26647.694	0.0
375.2711	24.00	-3.42	31355.210	2.0	57995.040	1.0
375.2746	24.00	-3.93	35398.020	4.0	62037.600	5.0
375.2760	9.02	-3.71	464491.890	3.5	491131.370	4.5
375.2783	27.00	-2.67	23207.760	1.5	49847.080	2.5
375.2828	28.00	-3.00	16017.317	0.0	42656.317	1.0
375.2849	18.01	-4.25	173393.380	2.5	200032.230	1.5
375.2859	22.00	.06	386.874	4.0	27025.652	4.0
375.2864	9.02	-.99	440069.510	1.5	466708.250	1.5
375.2876	28.01	-3.80	89100.490	3.5	115739.150	4.5
375.2881	10.01	-4.76	302057.260	.5	328695.880	1.5
375.2979	22.00	-2.78	21469.494	3.0	48107.420	2.0
375.2983	24.02	-2.34	69510.600	0.0	96148.500	1.0
375.3110	10.01	-4.26	280262.330	3.5	306899.330	2.5
375.3136	26.00	-2.63	19390.165	6.0	46026.980	6.0
375.3155	23.00	-2.80	9824.580	2.5	36461.260	2.5
375.3155	23.00	-3.11	9824.580	2.5	36461.260	3.5
375.3179	26.02	-2.61	117950.320	4.0	144586.630	5.0
375.3180	41.00	-1.14	645.260	0.0	27289.332	0.0
375.3208	22.01	-4.01	42208.840	2.5	68845.140	2.5
375.3220	72.00	.15	17825.312	0.0	44469.101	0.0
375.3261	24.00	-.84	37205.880	3.0	63841.810	4.0
375.3266	23.00	-3.53	13801.530	1.5	40437.420	1.5
375.3279	24.01	-5.27	25033.950	3.5	51669.750	2.5
375.3317	25.00	-2.06	38669.600	3.5	65305.130	3.5
375.3320	77.00	-.75	16454.134	0.0	43097.213	0.0
375.3335	20.00	-1.53	20371.000	3.0	47006.400	4.0
375.3352	20.00	-2.59	20371.000	3.0	47006.280	3.0
375.3364	20.00	-4.13	20371.000	3.0	47006.194	2.0
375.3409	26.01	-2.29	73189.160	1.5	99824.040	2.5
375.3500	66.01	-.80	0.000	0.0	26641.801	0.0
375.3517	18.01	.05	173347.830	1.5	199981.940	1.5
375.3530	18.01	-1.74	159706.460	.5	186340.480	1.5
375.3540	44.00	.39	12743.888	0.0	39385.405	0.0
375.3613	26.00	-.63	17550.180	3.0	44183.607	2.0
375.3630	24.01	-2.98	38396.360	.5	65029.670	.5
375.3633	22.00	-1.13	170.132	3.0	26803.417	2.0
375.3641	26.01	-3.02	73054.970	2.5	99688.200	3.5
375.3702	12.02	-.32	562136.100	2.0	588768.900	2.0
375.3707	26.02	-4.56	124903.920	2.0	151536.680	1.0
375.3770	58.01	-.05	12663.231	0.0	39303.116	0.0
375.3779	10.01	-.23	254165.010	1.5	280797.260	2.5
375.3847	22.00	-4.74	22404.690	3.0	49036.460	4.0
375.3848	28.00	-3.70	28068.091	4.0	54699.852	3.0
375.3942	28.00	-3.87	27943.543	1.0	54574.640	1.0
375.3958	26.02	-4.40	124903.920	2.0	151534.900	2.0
375.3962	20.02	-2.90	324110.240	4.0	350741.190	3.0
375.4044	10.01	-3.45	280268.960	2.5	306899.330	2.5
375.4050	18.01	-.25	172816.210	.5	199446.540	.5
375.4067	26.02	-4.01	124903.920	2.0	151534.130	3.0
375.4096	10.01	-4.25	277344.290	2.5	303974.290	1.5
375.4120	45.00	-.16	13873.093	0.0	40510.494	0.0
375.4150	23.00	-1.78	15688.800	2.5	42318.420	1.5
375.4153	24.02	-4.07	70291.800	2.0	96921.400	2.0
375.4165	23.00	-3.92	23088.060	1.5	49717.570	2.5
375.4180	25.00	-2.40	31076.420	1.5	57705.830	.5
375.4196	26.02	-4.53	109570.840	2.0	136200.130	3.0
375.4216	10.00	-4.03	135888.717	1.0	162517.872	1.0
375.4223	23.00	-4.40	14910.040	3.5	41539.140	4.5
375.4270	45.00	.05	13873.093	0.0	40509.430	0.0
375.4342	25.01	-1.95	55759.270	3.0	82387.530	3.0
375.4343	27.00	-1.45	20500.710	1.5	47128.960	2.5
375.4385	22.00	-2.55	11531.760	2.0	38159.710	3.0
375.4415	24.00	-3.94	36034.220	3.0	62661.960	3.0
375.4460	25.01	-4.75	49291.310	3.0	75918.730	2.0
375.4490	26.00	-.19	24180.848	3.0	50808.053	4.0
375.4520	73.00	-1.82	3871.561	0.0	30506.124	0.0
375.4521	28.01	-3.87	100592.980	3.5	127219.970	3.5
375.4569	24.01	-1.92	25043.100	1.5	51669.750	2.5
375.4587	23.00	-2.46	13810.900	.5	40437.420	1.5
375.4590	90.01	-2.19	0.000	0.0	26634.067	0.0
375.4668	8.02	-.09	267375.650	1.0	294001.600	2.0
375.4703	27.01	-1.67	24886.500	2.0	51512.200	3.0
375.4769	25.01	-3.93	37847.900	2.0	64473.130	3.0
375.4790	40.00	-.14	14276.381	0.0	40909.029	0.0
375.4854	27.00	-5.00	26232.050	3.5	52856.680	3.5
375.4860	62.01	-1.66	1451.835	0.0	28083.986	0.0
375.4885	10.01	-2.19	252798.480	.5	279422.890	.5
375.4886	17.01	-.83	132162.000	3.0	158786.400	3.0
375.4898	26.00	-2.30	29798.960	4.0	56423.276	4.0
375.4990	24.00	-4.02	23933.900	4.0	50557.560	4.0
375.5005	10.01	-2.16	280797.260	2.5	307420.820	2.5
375.5006	28.01	-3.06	76402.030	2.5	103025.580	2.5
375.5041	30.02	.63	234384.000	3.0	261007.300	2.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
375.5041	30.02	-.53	234384.000	3.0	261007.300	2.0
375.5090	44.00	-.46	9114.300	0.0	35744.820	0.0
375.5100	42.00	.61	25649.091	0.0	52279.540	0.0
375.5110	73.00	-1.33	9194.957	0.0	35825.335	0.0
375.5124	24.01	-3.09	25047.040	2.5	51669.750	2.5
375.5147	25.01	-4.95	55371.300	3.0	81993.850	4.0
375.5185	21.00	-7.39	11557.640	2.5	38179.920	1.5
375.5191	22.00	-4.06	17540.205	3.0	44162.440	4.0
375.5280	41.00	-1.85	1532.493	0.0	28161.666	0.0
375.5280	62.01	-.81	2661.698	0.0	29290.871	0.0
375.5281	11.02	-2.89	444825.000	2.5	471446.600	1.5
375.5394	30.02	.06	238205.500	1.0	264826.300	1.0
375.5401	25.00	-2.61	31001.150	2.5	57621.900	1.5
375.5430	58.01	-.77	3306.958	0.0	29935.067	0.0
375.5442	27.00	-1.52	16778.160	2.5	43398.620	3.5
375.5454	22.00	-2.58	21588.496	4.0	48208.870	3.0
375.5477	26.02	-2.27	117950.320	4.0	144570.530	3.0
375.5507	10.03	-2.46	643975.000	2.5	670595.000	2.5
375.5540	42.00	-.34	21454.900	0.0	48082.229	0.0
375.5541	25.00	-4.84	37789.930	2.5	64409.690	3.5
375.5543	22.00	-3.17	22404.690	3.0	49024.430	3.0
375.5560	26.01	-2.52	38214.500	1.5	64834.120	1.5
375.5560	64.01	-.61	10001.532	0.0	36628.719	0.0
375.5580	45.00	-.86	5565.369	0.0	32192.415	0.0
375.5614	9.02	-.89	440202.480	2.5	466821.720	3.5
375.5620	75.00	-.80	17180.052	0.0	43806.814	0.0
375.5634	12.02	-1.90	535179.600	2.0	561798.700	3.0
375.5672	20.01	-2.36	56839.250	1.5	83458.080	2.5
375.5675	23.00	-2.52	18302.270	3.5	44921.080	2.5
375.5713	23.00	-2.68	18438.070	4.5	45056.610	3.5
375.5720	58.01	-.56	5565.369	0.0	32191.422	0.0
375.5770	41.00	.08	11130.738	0.0	37756.437	0.0
375.5840	42.00	-.18	23390.681	0.0	50015.883	0.0
375.5930	44.00	.44	12743.888	0.0	39368.452	0.0
375.6048	23.00	-1.14	8476.200	1.5	35092.360	1.5
375.6063	26.00	-2.20	17550.180	3.0	44166.240	3.0
375.6306	18.02	-.67	204727.470	1.0	231341.800	2.0
375.6311	27.00	-2.88	17233.680	3.5	43847.980	3.5
375.6410	62.00	.34	806.575	0.0	27427.737	0.0
375.6451	25.00	-1.20	34343.900	4.5	60957.210	3.5
375.6494	17.01	-1.78	132173.400	4.0	158786.400	3.0
375.6513	26.02	-4.40	179682.940	1.0	206295.810	1.0
375.6516	28.00	-4.61	22102.349	4.0	48715.200	4.0
375.6527	24.01	-2.91	39742.360	2.5	66355.130	1.5
375.6568	25.00	-1.04	35114.980	2.5	61727.460	2.5
375.6582	24.00	-3.45	36034.220	3.0	62646.600	2.0
375.6638	25.00	-.52	34343.900	4.5	60955.880	4.5
375.6641	28.01	-4.28	94705.930	3.5	121317.890	3.5
375.6650	30.02	.46	235623.900	3.0	262235.800	3.0
375.6700	71.00	-2.00	4113.534	0.0	30732.641	0.0
375.6806	24.00	-2.80	21847.880	2.0	48458.670	2.0
375.6860	69.01	-.94	8711.012	0.0	35328.986	0.0
375.6918	17.01	-.62	153257.000	2.0	179867.000	1.0
375.6929	26.00	-.84	28819.966	5.0	55429.890	5.0
375.7017	24.01	-3.07	38315.000	2.5	64924.300	3.5
375.7042	6.00	-3.55	60393.140	2.0	87002.260	3.0
375.7090	74.00	-2.22	6129.972	0.0	32746.316	0.0
375.7120	76.00	-.85	12663.231	0.0	39279.363	0.0
375.7140	25.01	-4.84	37847.900	2.0	64456.330	2.0
375.7157	24.00	-2.29	37233.500	5.0	63841.810	4.0
375.7158	24.00	-.78	20517.400	2.0	47125.700	3.0
375.7195	24.01	-2.31	42898.120	2.5	69506.160	3.5
375.7204	8.02	-.44	267257.290	0.0	293865.260	1.0
375.7220	58.01	-.32	7743.122	0.0	34358.545	0.0
375.7286	9.02	-3.29	442636.270	3.5	469243.660	4.5
375.7370	66.01	-.18	806.575	0.0	27420.936	0.0
375.7398	17.01	-2.10	132162.000	3.0	158768.600	2.0
375.7446	23.00	-2.75	10892.500	3.5	37498.760	2.5
375.7453	26.00	-.75	26623.726	2.0	53229.940	1.0
375.7466	22.00	-2.44	17369.590	1.0	43975.710	1.0
375.7483	24.00	-3.72	31352.420	1.0	57958.420	0.0
375.7518	25.01	-4.69	79913.350	4.0	106519.100	5.0
375.7540	28.00	-4.41	29668.918	3.0	56274.516	2.0
375.7624	24.02	-2.30	69780.900	1.0	96385.900	2.0
375.7655	24.00	-.16	20520.920	3.0	47125.700	3.0
375.7671	22.01	-.97	12628.770	1.5	39233.440	1.5
375.7750	73.00	-1.80	9920.875	0.0	36532.544	0.0
375.7774	26.01	-4.98	71964.810	2.5	98568.750	3.5
375.7790	40.01	.10	14599.011	0.0	41210.397	0.0
375.7802	28.01	-4.14	104147.290	5.5	130751.030	5.5
375.7820	24.00	-2.44	24286.540	1.0	50890.150	2.0
375.7827	18.01	-3.59	192556.840	2.5	219160.400	2.5
375.7832	6.00	-4.25	60352.630	1.0	86956.160	1.0
375.7834	10.01	-3.34	254165.010	1.5	280768.520	.5
375.7860	10.01	-1.93	281171.380	2.5	307774.710	1.5
375.7860	58.01	-.96	2500.383	0.0	29111.273	0.0
375.7897	24.01	-3.80	50667.330	3.5	77270.400	4.5
375.7920	74.00	-1.21	4758.794	0.0	31369.259	0.0
375.7940	64.00	.09	483.945	0.0	27094.269	0.0
375.7946	25.02	-4.53	85173.880	1.5	111776.600	1.5
375.8017	26.00	-2.13	27166.804	4.0	53769.020	4.0
375.8046	24.00	-.72	20523.690	4.0	47125.700	3.0
375.8073	27.00	-3.06	28345.860	4.5	54947.680	5.5
375.8086	24.00	-1.20	21856.940	3.0	48458.670	2.0
375.8102	26.00	-2.13	27559.568	2.0	54161.182	3.0
375.8113	10.01	-3.45	282375.330	1.5	308976.870	.5
375.8151	2.01	-1.68	411477.918	0.0	438086.748	0.0
375.8191	27.00	-3.96	16195.680	.5	42796.670	1.5
375.8207	23.01	-1.27	20089.560	1.0	46690.430	1.0
375.8219	23.01	-3.73	13594.730	2.0	40195.520	3.0
375.8230	28.01	-3.53	100619.260	4.5	127219.970	3.5
375.8235	26.00	.07	7728.058	3.0	34326.733	3.0
375.8310	64.01	-.19	3387.616	0.0	29995.320	0.0
375.8335	23.00	-1.29	8412.940	.5	35012.910	.5
375.8352	26.02	-4.57	179661.480	3.0	206261.330	4.0
375.8353	28.00	-4.03	28068.091	4.0	54667.928	4.0
375.8360	92.00	.19	4194.191	0.0	30801.541	0.0
375.8384	20.01	-2.21	56858.460	2.5	83458.080	3.5
375.8384	20.01	-3.51	56858.460	2.5	83458.080	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
375.8405	26.00	-1.19	33765.291	2.0	60364.760	3.0
375.8434	10.01	-4.29	302247.780	3.5	328847.050	4.5
375.8450	62.01	-1.39	0.000	0.0	26606.713	0.0
375.8460	90.00	-1.02	2500.383	0.0	29107.025	0.0
375.8480	18.01	-2.86	183985.940	1.5	210584.880	1.5
375.8520	42.00	.27	20003.065	0.0	46609.282	0.0
375.8540	23.00	-.04	15000.840	5.5	41599.360	4.5
375.8607	28.01	-4.10	68131.210	3.5	94729.250	2.5
375.8620	23.01	-3.38	20156.640	0.0	46754.590	1.0
375.8641	27.02	-3.68	83773.400	1.5	110371.200	2.5
375.8664	24.00	.02	37244.170	4.0	63841.810	4.0
375.8708	24.00	-3.48	7593.160	2.0	34190.490	2.0
375.8740	8.01	-1.73	248185.300	2.5	274782.400	3.5
375.8787	23.00	-1.32	15062.940	6.5	41659.710	5.5
375.8790	27.00	-1.00	29948.760	2.5	56545.510	2.5
375.8793	28.01	-3.21	108368.050	2.5	134964.780	1.5
375.8825	26.01	-4.81	73091.700	4.5	99688.200	3.5
375.8863	10.01	-2.28	280473.580	1.5	307069.810	1.5
375.8896	25.00	-1.09	35114.980	2.5	61710.980	3.5
375.8918	28.01	-3.32	94729.250	2.5	121325.090	2.5
375.8937	23.00	-2.68	15264.830	5.5	41860.540	4.5
375.9000	64.01	-.85	0.000	0.0	26602.820	0.0
375.9003	26.02	-4.37	88694.670	5.0	115289.910	5.0
375.9027	25.00	-3.26	34343.900	4.5	60938.970	4.5
375.9067	26.00	-3.60	22838.320	2.0	49433.108	2.0
375.9072	23.00	-4.55	23519.840	4.5	50114.590	5.5
375.9080	17.02	-.91	195268.200	1.5	221862.900	.5
375.9080	57.01	-.52	1935.780	0.0	28538.034	0.0
375.9148	26.00	-1.45	29313.008	6.0	55907.220	5.0
375.9178	28.00	-3.40	29668.918	3.0	56262.920	3.0
375.9243	24.00	-2.56	23512.000	1.0	50105.540	1.0
375.9289	22.01	.29	4897.600	3.5	31490.820	3.5
375.9313	28.01	-2.23	107142.210	1.5	133735.260	2.5
375.9365	25.00	-.94	38669.600	3.5	65262.280	4.5
375.9458	26.01	-2.00	38214.500	1.5	64806.520	.5
375.9474	23.00	-3.06	9824.580	2.5	36416.490	1.5
375.9492	29.00	-1.38	44442.294	0.0	71041.632	0.0
375.9508	28.00	-2.39	28068.091	4.0	54659.759	5.0
375.9545	25.00	-3.35	23296.670	3.5	49888.080	3.5
375.9550	23.00	-3.94	14910.040	3.5	41501.410	4.5
375.9550	41.00	-1.45	322.630	0.0	26921.558	0.0
375.9576	26.00	-1.89	27666.334	1.0	54257.520	2.0
375.9600	42.00	.03	26455.667	0.0	53054.241	0.0
375.9632	28.01	-4.35	75149.480	4.5	101740.270	3.5
375.9683	27.00	-1.45	20500.710	1.5	47091.140	.5
375.9707	24.00	-2.73	24299.890	2.0	50890.150	2.0
375.9750	73.00	-2.72	0.000	0.0	26597.513	0.0
375.9767	23.00	-3.64	14949.300	4.5	41539.140	4.5
375.9768	25.00	-3.55	34343.900	4.5	60933.730	5.5
375.9840	44.00	-.08	7420.492	0.0	34017.368	0.0
375.9872	22.00	-2.58	21739.713	5.0	48328.810	4.0
375.9877	8.02	.21	267632.590	2.0	294221.650	3.0
375.9904	25.00	-3.77	41230.300	3.5	67819.170	4.5
375.9922	28.01	-4.01	94705.930	3.5	121294.670	4.5
375.9948	18.01	-.92	173393.380	2.5	199981.940	1.5
375.9964	24.00	-4.58	26796.280	2.0	53384.720	3.0
376.0030	44.00	-1.12	3064.986	0.0	29660.518	0.0
376.0032	24.00	-3.11	26787.500	3.0	53375.460	4.0
376.0040	62.01	-1.14	2984.328	0.0	29579.790	0.0
376.0044	26.00	-.79	19390.165	6.0	45978.040	7.0
376.0069	28.01	-3.75	73903.250	.5	100490.950	1.5
376.0090	8.01	-4.69	234454.450	2.5	261042.000	2.5
376.0130	74.00	-1.27	3306.958	0.0	29901.783	0.0
376.0210	73.00	-1.83	9678.902	0.0	36273.161	0.0
376.0222	23.00	-3.94	23210.560	2.5	49797.180	3.5
376.0236	23.01	-1.17	13609.000	4.0	40195.520	3.0
376.0280	24.00	-2.74	24303.940	3.0	50890.150	2.0
376.0292	9.02	-.77	440202.480	2.5	466788.600	2.5
376.0303	22.00	-3.94	19421.576	3.0	46007.620	4.0
376.0318	23.00	-2.93	18258.890	2.5	44844.830	1.5
376.0332	23.01	-2.33	20522.140	1.0	47107.980	1.0
376.0332	18.02	-2.16	240291.660	2.0	266877.500	3.0
376.0400	45.00	-.55	5565.369	0.0	32158.285	0.0
376.0400	58.01	-1.47	2500.383	0.0	29093.299	0.0
376.0403	27.00	-1.57	14036.280	1.5	40621.620	1.5
376.0431	25.02	-2.57	192392.200	3.5	218977.340	3.5
376.0455	26.02	-4.69	90483.590	3.0	117068.560	3.0
376.0470	64.00	-.05	7501.149	0.0	34093.570	0.0
376.0533	26.00	-2.43	17927.378	1.0	44511.795	2.0
376.0622	22.00	-3.39	19573.968	4.0	46157.760	5.0
376.0640	41.00	-.67	11130.738	0.0	37721.957	0.0
376.0642	23.00	-1.58	9824.580	2.5	36408.230	1.5
376.0690	62.01	-.60	1451.835	0.0	28042.700	0.0
376.0690	58.01	-1.07	4436.164	0.0	31027.029	0.0
376.0694	24.00	-2.70	33934.880	3.0	60518.160	3.0
376.0694	24.00	-2.31	33934.880	3.0	60518.160	3.0
376.0710	64.01	-.56	3387.616	0.0	29978.340	0.0
376.0793	23.00	-2.48	10892.500	3.5	37475.080	3.5
376.0803	24.00	-1.43	33935.650	2.0	60518.160	3.0
376.0840	23.00	-1.24	14910.040	3.5	41492.290	3.5
376.0880	42.00	.45	25810.406	0.0	52399.928	0.0
376.0905	24.00	-3.70	27223.050	2.0	53804.840	3.0
376.0920	64.01	-.89	3387.616	0.0	29976.855	0.0
376.1034	25.00	-1.70	31124.950	.5	57705.830	.5
376.1053	26.00	-2.79	27166.804	4.0	53747.547	3.0
376.1102	8.02	-2.14	374798.600	3.0	401379.000	2.0
376.1120	63.01	-.83	10566.135	0.0	37153.960	0.0
376.1130	41.00	-.04	10969.423	0.0	37557.177	0.0
376.1167	24.01	-2.16	42898.120	2.5	69478.060	2.5
376.1195	23.01	-2.75	20522.140	1.0	47101.880	2.0
376.1229	23.03	-2.04	257143.200	2.0	283722.700	1.0
376.1239	6.00	-4.74	60333.430	0.0	86912.860	1.0
376.1260	23.00	-4.80	23353.090	3.5	49932.370	4.5
376.1324	22.01	.18	4628.610	2.5	31207.440	2.5
376.1330	69.01	-.73	0.000	0.0	26586.340	0.0
376.1374	24.00	-3.73	35398.020	4.0	61976.500	4.0
376.1391	24.00	-.48	31009.000	3.0	57587.360	4.0
376.1410	26.00	-2.27	20874.482	3.0	47452.702	4.0
376.1485	25.01	-3.74	44745.460	2.0	71323.150	2.0
376.1495	29.01	-1.99	121981.680	2.0	148559.300	2.0
376.1510	44.00	.38	13631.121	0.0	40216.189	0.0
376.1608	20.02	-1.24	245611.880	0.0	272188.700	1.0
376.1610	74.00	-.78	18873.860	0.0	45458.221	0.0
376.1620	25.00	-1.51	38008.700	5.5	64585.440	4.5
376.1678	24.01	-2.83	21822.860	2.5	48399.190	1.5
376.1709	26.00	-3.96	32133.977	2.0	58710.090	3.0
376.1730	27.00	-3.60	24627.790	4.5	51203.750	5.5
376.1760	42.00	-.01	20245.038	0.0	46828.339	0.0
376.1859	15.01	-3.32	76764.960	2.0	103340.010	2.0
376.1868	38.01	-.94	53286.310	0.0	79868.848	0.0
376.1875	28.01	-1.82	68154.310	1.5	94729.250	2.5
376.1875	24.01	-2.85	21824.250	.5	48399.190	1.5
376.1877	22.01	-.48	20891.880	3.5	47466.800	3.5
376.1910	69.01	-.83	0.000	0.0	26582.241	0.0
376.1955	24.01	-3.20	21824.820	1.5	48399.190	1.5
376.1962	22.00	-4.50	13981.750	1.0	40556.070	1.0
376.2000	8.04	-1.60	677847.000	0.0	704428.606	0.0
376.2053	28.01	-3.56	72985.650	1.5	99559.330	2.5
376.2090	42.00	-.11	21454.900	0.0	48035.870	0.0
376.2110	73.00	-1.38	10888.765	0.0	37469.593	0.0
376.2162	26.00	-4.68	27559.568	2.0	54132.480	1.0
376.2194	26.00	-1.69	27166.804	4.0	53739.488	5.0
376.2200	64.00	.08	967.890	0.0	27548.082	0.0
376.2247	6.00	-4.25	60393.140	2.0	86965.450	2.0
376.2347	27.02	-2.72	83799.600	2.5	110371.200	2.5
376.2431	14.03	.25	250008.020	2.5	276579.030	1.5
376.2432	24.00	-4.49	20517.400	2.0	47088.400	1.0
376.2448	14.03	-.71	250008.140	1.5	276579.030	1.5
376.2510	72.01	.62	31698.405	0.0	58276.407	0.0
376.2517	24.00	-1.41	28637.000	3.0	55207.400	4.0
376.2533	10.01	-4.83	302247.780	3.5	328818.070	3.5
376.2553	25.00	-2.70	33825.490	2.5	60395.640	1.5
376.2590	62.01	-.99	1935.780	0.0	28513.217	0.0
376.2629	24.00	-3.19	24093.160	2.0	50662.770	1.0
376.2631	8.01	-.66	212161.940	1.5	238731.540	1.5
376.2638	28.00	-1.44	22102.349	4.0	48671.900	3.0
376.2649	25.02	-2.75	94697.850	3.5	121267.320	2.5
376.2682	9.02	-3.38	440202.480	2.5	466771.720	3.5
376.2687	26.00	-2.70	27543.000	1.0	54112.203	2.0
376.2707	24.00	-1.68	33934.880	3.0	60503.940	4.0
376.2743	25.00	-.71	35725.850	2.5	62294.660	3.5
376.2880	90.01	-.84	6129.972	0.0	32705.361	0.0
376.2894	26.01	-1.88	48039.230	2.5	74606.970	2.5
376.2980	58.01	-.11	7259.177	0.0	33833.860	0.0
376.2999	9.03	-.09	586263.000	2.0	612830.000	2.0
376.3000	64.01	-1.34	1855.123	0.0	28429.665	0.0
376.3126	23.00	-2.25	15571.900	2.5	42138.000	2.5
376.3270	92.00	.35	6936.547	0.0	33509.182	0.0
376.3294	22.00	-4.48	14105.680	3.0	40670.600	2.0
376.3330	64.01	-1.03	3387.616	0.0	29959.827	0.0
376.3350	42.00	-.86	11775.998	0.0	38348.068	0.0
376.3367	25.00	-1.82	23818.870	.5	50383.270	1.5
376.3369	22.00	-4.49	0.000	2.0	26564.385	3.0
376.3407	23.01	-4.17	20617.050	2.0	47181.170	3.0
376.3421	28.01	-1.25	103663.500	1.5	130227.520	2.5
376.3488	26.01	-3.63	36126.410	1.5	62689.960	2.5
376.3490	41.00	-.89	80.658	0.0	26651.740	0.0
376.3505	18.01	-.64	157233.930	3.5	183797.360	2.5
376.3516	24.00	-1.72	30787.300	1.0	57350.650	2.0
376.3568	26.00	-1.70	20037.815	0.0	46600.800	1.0
376.3610	58.01	-1.03	4194.191	0.0	30764.425	0.0
376.3647	10.01	-4.11	276276.850	1.5	302839.280	2.5
376.3649	25.00	-1.42	35165.050	1.5	61727.460	2.5
376.3764	24.00	-2.55	24093.160	2.0	50654.760	2.0
376.3771	25.01	-1.46	41182.530	7.0	67744.080	6.0
376.3787	28.01	-4.75	77736.790	4.5	104298.230	4.5
376.3791	26.00	-.13	7985.783	2.0	34547.192	2.0
376.4053	26.02	-3.73	89907.850	4.0	116467.410	4.0
376.4053	26.02	-4.29	89907.850	5.0	116467.410	4.0
376.4090	26.01	-3.83	20830.520	2.5	47389.820	1.5
376.4120	41.00	-1.43	80.658	0.0	26647.292	0.0
376.4120	58.01	-.30	2823.013	0.0	29389.647	0.0
376.4147	25.00	-3.67	34343.900	4.5	60902.800	3.5
376.4198	24.00	-4.36	33934.880	3.0	60493.420	3.0
376.4210	26.00	-1.81	17726.985	2.0	44285.436	2.0
376.4249	23.01	-3.58	20622.990	3.0	47181.170	3.0
376.4307	24.00	-4.75	33935.650	2.0	60493.420	3.0
376.4310	74.00	-.24	19680.435	0.0	46245.729	0.0
376.4333	22.00	-7.07	6556.828	1.0	33114.412	2.0
376.4370	62.01	-.67	2661.698	0.0	29226.568	0.0
376.4390	40.00	-.90	0.000	0.0	26564.729	0.0
376.4416	17.02	-2.38	222100.700	1.5	248657.700	2.5
376.4440	42.00	-.15	21051.613	0.0	47615.989	0.0
376.4442	18.01	-1.92	179592.130	2.5	206148.940	3.5
376.4443	23.00	-2.28	15688.800	2.5	42245.610	3.5
376.4447	26.01	-3.03	73016.330	3.5	99573.110	4.5
376.4484	8.01	-4.63	234402.480	1.5	260959.000	1.5
376.4543	17.02	-4.36	216524.600	2.5	243080.700	1.5
376.4543	12.02	.04	564664.600	2.0	591220.700	1.0
376.4566	23.00	-1.71	15103.770	4.5	41659.710	5.5
376.4600	64.01	-.32	10001.532	0.0	36564.779	0.0
376.4606	28.00	-2.16	31031.042	3.0	57586.700	2.0
376.4706	10.01	-4.19	276276.850	1.5	302831.800	.5
376.4797	14.02	-2.05	207874.090	0.0	234428.400	1.0
376.4837	29.00	-1.76	44522.951	0.0	71084.526	0.0
376.4855	8.01	-2.81	248185.300	2.5	274739.200	2.5
376.4870	25.01	-2.79	62572.200	2.0	89126.000	3.0
376.4897	25.01	-2.80	41190.470	6.0	67744.080	6.0
376.4983	28.00	-2.92	29320.782	3.0	55873.780	2.0
376.5040	58.01	-.64	4436.164	0.0	30996.307	0.0
376.5050	72.00	.04	18147.942	0.0	44708.014	0.0
376.5080	22.00	-2.92	12118.394	4.0	38670.710	4.0
376.5080	41.00	-1.09	0.000	0.0	26559.861	0.0
376.5080	45.00	-.18	5646.026	0.0	32205.887	0.0
376.5109	23.00	-3.31	14949.300	4.5	41501.410	4.5
376.5145	22.00	-3.01	17423.853	2.0	43975.710	1.0
376.5157	28.01	-3.73	102742.740	1.5	129294.510	2.5
376.5220	42.00	-.46	16615.449	0.0	43174.322	0.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
376.5240	90.00	-.31	8711.012	0.0	35269.744	0.0
376.5241	26.02	-4.34	88923.070	6.0	115474.250	6.0
376.5269	18.01	-.12	155043.070	2.5	181594.050	2.5
376.5308	27.00	-2.49	28345.860	4.5	54896.570	3.5
376.5347	27.00	-2.38	13795.520	2.5	40345.950	2.5
376.5350	92.00	-.59	0.000	0.0	26557.956	0.0
376.5414	25.00	-4.95	23549.200	2.5	50099.160	1.5
376.5459	26.02	-4.51	179630.770	4.0	206180.410	3.0
376.5541	26.00	.56	26105.908	6.0	52654.971	7.0
376.5560	72.00	-1.39	6533.259	0.0	33089.734	0.0
376.5579	24.01	-2.20	25035.640	.5	51584.440	1.5
376.5596	28.01	-4.50	100309.290	5.5	126857.970	5.5
376.5604	23.00	-2.65	18372.460	3.5	44921.080	2.5
376.5688	24.00	-1.95	31009.000	3.0	57557.030	3.0
376.5702	26.00	-2.09	26351.049	5.0	52898.980	5.0
376.5728	28.00	-2.80	30163.140	2.0	56710.889	2.0
376.5881	27.01	-3.66	22009.230	4.0	48555.900	5.0
376.5885	25.00	-2.74	34938.700	4.5	61485.340	4.5
376.5890	58.01	-.86	5565.369	0.0	32119.517	0.0
376.5906	27.00	-4.44	24627.790	4.5	51174.280	5.5
376.5930	63.01	-1.35	10001.532	0.0	36555.398	0.0
376.6031	24.00	-3.54	23512.000	1.0	50057.610	2.0
376.6044	26.00	-2.10	20874.482	3.0	47420.000	2.0
376.6050	25.00	-1.59	31076.420	1.5	57621.900	1.5
376.6067	25.00	-2.41	41031.480	4.5	67576.840	4.5
376.6118	18.01	-.63	145668.800	1.5	172213.800	1.5
376.6130	41.00	-1.19	322.630	0.0	26875.086	0.0
376.6157	26.01	-2.90	73143.480	3.5	99688.200	3.5
376.6258	10.01	-.39	219648.440	1.5	246192.450	2.5
376.6285	26.00	-3.38	26224.961	3.0	52768.780	4.0
376.6294	23.00	-2.49	11100.650	4.5	37644.410	4.5
376.6300	76.00	-.91	11292.053	0.0	37843.310	0.0
376.6302	25.01	-4.47	55115.800	2.0	81659.500	3.0
376.6302	15.01	-3.75	103630.600	2.0	130174.300	2.0
376.6342	27.00	-4.40	26232.050	3.5	52775.470	4.5
376.6380	23.00	-2.44	18513.460	4.5	45056.610	3.5
376.6403	23.00	-.10	14949.300	4.5	41492.290	3.5
376.6440	22.00	-4.06	8492.421	1.0	35035.147	2.0
376.6480	75.00	-.89	14518.354	0.0	41068.342	0.0
376.6494	27.00	-3.64	24627.790	4.5	51170.140	4.5
376.6510	58.01	-.83	3629.588	0.0	30179.365	0.0
376.6558	25.00	-4.26	34938.700	4.5	61480.600	3.5
376.6637	24.01	-2.99	25043.100	1.5	51584.440	1.5
376.6657	26.00	-.56	24506.902	2.0	51048.100	1.0
376.6663	18.01	-2.17	183985.940	1.5	210527.100	2.5
376.6694	10.01	-2.86	280768.520	.5	307309.460	.5
376.6720	40.00	.61	12259.943	0.0	38808.240	0.0
376.6744	18.01	-3.20	161048.640	1.5	187589.230	2.5
376.6810	29.01	-2.02	121981.680	2.0	148521.800	1.0
376.6820	40.01	-.76	3226.301	0.0	29773.893	0.0
376.6829	25.01	-2.80	52373.180	3.0	78913.170	2.0
376.6837	10.01	-2.82	280700.770	3.5	307240.700	3.5
376.6840	9.02	-1.68	464921.740	3.5	491461.650	4.5
376.6864	25.01	-4.63	41204.340	5.0	67744.080	6.0
376.6879	22.00	-3.06	17540.205	3.0	44079.840	2.0
376.6890	92.00	.16	4355.506	0.0	30902.605	0.0
376.6913	10.01	-4.51	302307.750	2.5	328847.150	3.5
376.6920	72.01	.34	20003.065	0.0	46549.952	0.0
376.6988	15.01	-2.58	105224.830	0.0	131763.700	1.0
376.7040	25.01	-3.68	62587.500	3.0	89126.000	3.0
376.7040	64.01	-.41	3387.616	0.0	29933.657	0.0
376.7069	23.00	-2.06	15000.840	5.5	41539.140	4.5
376.7093	28.01	-4.22	101357.200	4.5	127895.330	3.5
376.7194	26.00	-.31	8154.713	1.0	34692.130	1.0
376.7196	24.01	-5.84	25047.040	2.5	51584.440	1.5
376.7262	23.01	-.80	20343.000	2.0	46879.940	2.0
376.7294	23.00	-1.29	8476.200	1.5	35012.910	.5
376.7350	26.02	-4.19	179759.490	2.0	206295.810	1.0
376.7350	44.00	.38	13631.121	0.0	40174.978	0.0
376.7360	62.01	-.89	3871.561	0.0	30415.348	0.0
376.7361	9.02	-2.67	442147.190	2.5	468683.430	2.5
376.7410	23.03	-.37	257690.800	3.0	284226.700	3.0
376.7435	9.02	-4.98	442147.190	2.5	468682.910	3.5
376.7436	24.00	-1.92	20519.600	6.0	47055.310	5.0
376.7439	27.00	-3.30	28777.270	3.5	55312.960	4.5
376.7440	25.01	-4.75	55696.500	4.0	82232.180	5.0
376.7526	28.00	-3.34	879.813	2.0	27414.893	2.0
376.7537	19.01	-.46	163237.000	1.0	189772.000	0.0
376.7541	28.01	-4.61	94705.930	3.5	121240.900	3.5
376.7544	24.00	-2.40	24093.160	2.0	50628.110	3.0
376.7554	25.01	-2.24	43696.190	3.0	70231.070	2.0
376.7566	17.01	-1.50	119799.000	2.0	146333.800	2.0
376.7622	20.00	-2.18	21849.634	2.0	48384.039	3.0
376.7680	24.00	-.82	20520.920	3.0	47054.910	4.0
376.7688	25.00	-.62	34423.270	3.5	60957.210	3.5
376.7709	23.01	-2.24	20156.640	0.0	46690.430	1.0
376.7709	25.01	-2.56	52379.380	2.0	78913.170	2.0
376.7717	28.01	-1.30	103663.500	1.5	130197.230	1.5
376.7722	26.00	-3.45	29371.360	3.0	55905.560	4.0
376.7727	22.00	-7.11	6556.828	1.0	33090.492	1.0
376.7730	42.00	-.37	21212.928	0.0	47754.108	0.0
376.7850	74.00	-.32	19115.832	0.0	45656.167	0.0
376.7880	40.01	-1.61	5646.026	0.0	32186.149	0.0
376.7912	25.02	-3.16	192172.890	2.5	218705.250	2.5
376.7943	25.01	-2.19	51553.060	5.0	78085.200	5.0
376.7959	24.00	-3.59	35398.020	4.0	61930.050	3.0
376.7962	24.00	-3.24	31055.350	5.0	57587.360	4.0
376.7977	17.01	-3.10	126725.100	1.0	153257.000	2.0
376.8000	58.01	-1.24	4436.164	0.0	30975.442	0.0
376.8017	24.00	-.90	20523.690	4.0	47055.310	5.0
376.8022	26.00	-1.42	17927.378	1.0	44458.960	0.0
376.8053	24.00	-.35	20523.940	5.0	47055.310	5.0
376.8074	24.00	-.48	20523.690	4.0	47054.910	4.0
376.8094	24.00	-2.85	20517.400	2.0	47048.480	3.0
376.8105	17.01	-1.25	119799.000	2.0	146330.000	1.0
376.8109	22.00	-4.84	21588.496	4.0	48119.470	5.0
376.8109	24.00	-1.38	20523.940	5.0	47054.910	4.0
376.8140	76.00	-.94	11292.053	0.0	37830.345	0.0
376.8153	25.00	-1.13	35769.970	3.5	62300.630	4.5
376.8175	25.00	-1.14	34938.700	4.5	61469.210	5.5
376.8226	25.02	-1.92	192665.800	4.5	219195.950	4.5
376.8237	24.00	-.16	20517.400	2.0	47047.470	2.0
376.8250	72.00	-.61	10404.820	0.0	36942.337	0.0
376.8349	24.01	-2.59	64061.820	1.5	90591.100	2.5
376.8386	25.00	-2.83	38120.180	4.5	64649.200	3.5
376.8390	64.01	.25	564.603	0.0	27101.135	0.0
376.8419	28.01	-1.69	104503.220	2.5	131032.010	2.5
376.8432	24.00	-.82	31028.330	2.0	57557.030	3.0
376.8437	28.01	-4.26	101357.200	4.5	127885.860	4.5
376.8450	74.00	-1.30	1613.150	0.0	28149.259	0.0
376.8485	22.00	-7.77	6556.828	1.0	33085.153	0.0
376.8543	24.01	-4.91	20512.620	2.5	47040.540	2.5
376.8588	22.00	-4.80	14028.470	2.0	40556.070	1.0
376.8594	24.00	-.99	20520.920	3.0	47048.480	3.0
376.8620	42.00	-.18	20164.380	0.0	46699.292	0.0
376.8667	18.01	-1.51	183985.940	1.5	210512.980	1.5
376.8680	77.00	-1.09	11775.998	0.0	38310.488	0.0
376.8703	15.01	-2.14	76813.220	1.0	103340.010	2.0
376.8737	24.00	-.82	20520.920	3.0	47047.470	2.0
376.8739	23.00	-2.82	14910.040	3.5	41436.580	3.5
376.8740	42.00	.39	27584.872	0.0	54118.939	0.0
376.8756	28.00	-1.82	31441.665	2.0	57968.080	3.0
376.8757	10.01	-2.39	252798.480	.5	279324.890	1.5
376.8760	58.01	.01	8307.725	0.0	34841.651	0.0
376.8832	28.01	-4.65	100332.090	4.5	126857.970	5.5
376.8987	24.00	-1.40	20523.690	4.0	47048.480	3.0
376.9001	25.00	-.47	35769.970	3.5	62294.660	3.5
376.9040	58.01	-1.32	1371.178	0.0	27903.133	0.0
376.9050	25.01	-2.15	59537.400	4.0	86061.750	3.0
376.9065	23.00	-2.15	13801.530	1.5	40325.770	2.5
376.9070	22.00	-.32	20126.055	3.0	46650.260	3.0
376.9080	2.01	-1.62	411477.918	0.0	438009.592	0.0
376.9114	17.01	-1.70	119809.900	3.0	146333.800	2.0
376.9150	41.00	-1.26	1129.205	0.0	27660.386	0.0
376.9210	74.00	-.61	14840.984	0.0	41371.742	0.0
376.9354	24.01	-3.77	20518.330	3.5	47040.540	2.5
376.9380	23.00	-4.05	23353.090	3.5	49875.120	4.5
376.9450	64.01	-.56	3387.616	0.0	29916.685	0.0
376.9459	28.01	-1.84	25036.380	2.5	51557.850	3.5
376.9470	23.00	-1.17	15724.220	3.5	42245.610	3.5
376.9542	28.01	-1.88	103663.500	1.5	130184.390	2.5
376.9603	24.00	-2.13	21810.840	1.0	48331.300	1.0
376.9637	27.00	-3.92	16467.900	4.5	42988.120	3.5
376.9650	60.01	-1.07	1613.150	0.0	28140.812	0.0
376.9677	9.02	-1.31	440202.480	2.5	466722.420	2.5
376.9681	22.00	-1.20	11639.804	3.0	38159.710	3.0
376.9700	59.01	-1.69	403.288	0.0	26930.598	0.0
376.9784	26.00	-2.54	26874.534	5.0	53393.715	4.0
376.9820	26.02	-3.85	179661.480	3.0	206180.410	3.0
376.9826	23.00	-.16	14910.040	3.5	41428.930	2.5
376.9870	74.00	-.55	15324.929	0.0	41851.043	0.0
376.9887	25.01	-3.92	44745.460	2.0	71263.920	1.0
376.9940	58.01	-.25	8307.725	0.0	34833.346	0.0
376.9970	45.00	.21	14276.381	0.0	40801.791	0.0
376.9978	26.00	-4.20	24180.848	3.0	50698.666	2.0
376.9980	41.00	.03	12421.258	0.0	38946.598	0.0
376.9998	28.01	-4.08	104298.230	4.5	130815.910	3.5
377.0000	42.00	.39	27584.872	0.0	54110.071	0.0
377.0050	90.00	-.49	5484.711	0.0	32009.558	0.0
377.0100	70.00	.26	17180.052	0.0	43704.547	0.0
377.0109	24.02	-2.48	71166.100	2.0	97683.000	3.0
377.0152	26.00	-3.95	21038.987	2.0	47555.584	1.0
377.0235	22.00	-3.84	15108.121	3.0	41624.130	4.0
377.0247	25.01	-3.90	65567.070	2.0	92083.000	3.0
377.0279	25.00	-1.81	34423.270	3.5	60938.970	4.5
377.0285	22.00	-7.34	6598.749	2.0	33114.412	2.0
377.0289	24.00	-2.69	28637.000	3.0	55152.630	2.0
377.0294	26.00	-1.18	21715.735	5.0	48231.330	5.0
377.0365	18.00	-4.89	94553.707	0.0	121068.804	1.0
377.0369	27.00	-2.52	28345.860	4.5	54860.930	4.5
377.0375	22.01	-1.98	20951.770	2.5	47466.800	3.5
377.0391	26.00	-2.59	19621.004	5.0	46135.920	5.0
377.0437	28.00	-2.11	29668.918	3.0	56183.510	4.0
377.0450	42.00	.14	16696.107	0.0	43218.140	0.0
377.0520	18.01	-.70	155708.020	.5	182222.030	1.5
377.0544	23.00	-1.19	8578.520	2.5	35092.360	1.5
377.0564	17.01	-3.39	126743.300	2.0	153257.000	2.0
377.0585	14.02	-2.36	207874.090	0.0	234387.640	1.0
377.0649	6.00	-4.55	71364.900	1.0	97878.000	2.0
377.0710	41.00	-.37	11130.738	0.0	37650.942	0.0
377.0730	62.01	-1.28	5242.739	0.0	31762.803	0.0
377.0730	77.00	-1.48	9759.560	0.0	36279.624	0.0
377.0759	8.00	-2.65	101155.422	1.0	127667.754	1.0
377.0820	22.01	-2.52	40425.800	1.5	66937.700	2.5
377.0848	30.02	-.70	237047.800	2.0	263559.500	1.0
377.0848	30.02	.46	237047.800	2.0	263559.500	1.0
377.0903	18.01	-3.96	179592.130	2.5	206103.450	1.5
377.0930	73.00	-2.04	5565.369	0.0	32084.026	0.0
377.0973	23.01	-.51	13490.840	2.0	40001.660	2.0
377.1015	28.01	-2.08	103663.500	1.5	130174.030	1.5
377.1019	22.00	-3.38	8436.618	0.0	34947.120	1.0
377.1036	22.00	-.52	22404.690	3.0	48915.070	2.0
377.1045	10.01	-3.21	302307.750	2.5	328818.070	3.5
377.1187	23.00	-1.34	8715.720	3.5	35225.040	2.5
377.1224	25.01	-2.31	62587.500	3.0	89096.560	4.0
377.1260	64.00	-.53	483.945	0.0	27000.282	0.0
377.1360	72.01	-1.12	12017.970	0.0	38533.604	0.0
377.1370	90.00	-1.14	0.000	0.0	26515.563	0.0
377.1481	26.00	-2.24	27559.568	2.0	54066.821	2.0
377.1515	23.00	-4.72	23210.560	2.5	49717.570	2.5
377.1545	24.00	-3.44	23512.000	1.0	50018.800	1.0
377.1555	26.00	-4.49	31307.235	4.0	57813.970	3.0
377.1610	58.01	-.49	4274.849	0.0	30788.725	0.0
377.1652	22.00	-1.09	386.874	4.0	26892.926	3.0
377.1676	23.00	-2.67	0.000	1.5	26505.880	2.5
377.1691	9.02	-1.44	440202.480	2.5	466708.250	1.5
377.1695	27.00	-2.47	28777.270	3.5	55283.020	2.5
377.1696	23.01	-3.33	20522.140	1.0	47027.880	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
377.1850	41.00	-.86	322.630	0.0	26834.819	0.0
377.1865	8.01	-4.93	234454.450	2.5	260959.000	1.5
377.1894	24.00	-4.76	20517.400	2.0	47021.750	1.0
377.1904	29.00	-1.02	46620.047	0.0	73131.856	0.0
377.1950	42.00	-.17	16615.449	0.0	43126.935	0.0
377.1974	28.00	-3.75	29668.918	3.0	56172.704	3.0
377.1988	24.00	-4.76	24897.550	4.0	51401.240	5.0
377.2012	26.02	-4.34	179676.890	2.0	206180.410	3.0
377.2016	27.00	-3.58	7442.410	3.5	33945.900	2.5
377.2036	26.02	-4.80	179757.980	4.0	206261.330	4.0
377.2072	28.01	-4.16	104298.230	4.5	130801.330	4.5
377.2169	24.00	-1.57	30858.820	2.0	57361.240	3.0
377.2240	90.01	-1.35	7743.122	0.0	34252.570	0.0
377.2307	24.00	-4.81	24056.110	5.0	50557.560	4.0
377.2420	74.00	-.12	20890.298	0.0	47398.481	0.0
377.2432	23.00	-1.48	15000.840	5.5	41501.410	4.5
377.2468	29.01	-1.08	121981.680	2.0	148482.000	3.0
377.2520	24.00	-4.13	27816.880	5.0	54316.830	6.0
377.2525	28.00	-3.05	1713.080	1.0	28212.997	0.0
377.2650	58.01	-.99	5726.684	0.0	32233.251	0.0
377.2758	23.00	-4.19	13801.530	1.5	40299.810	.5
377.2820	42.00	-.26	16615.449	0.0	43120.822	0.0
377.2926	8.02	-4.65	365723.900	1.0	392221.000	2.0
377.2947	25.00	-1.70	31124.950	.5	57621.900	1.5
377.2959	23.01	-1.01	20089.560	1.0	46586.430	0.0
377.2963	24.00	-3.37	26787.500	3.0	53284.340	3.0
377.3030	25.02	-3.01	192172.890	2.5	218669.260	1.5
377.3104	25.02	-2.21	94771.470	2.5	121267.320	2.5
377.3120	57.01	.75	26697.639	0.0	53200.904	0.0
377.3120	72.00	-.70	13953.751	0.0	40457.016	0.0
377.3141	23.00	-2.62	15103.770	4.5	41599.360	4.5
377.3150	14.03	-.01	250008.140	1.5	276503.670	.5
377.3150	41.00	-.26	10969.423	0.0	37472.477	0.0
377.3170	44.00	-1.04	10566.135	0.0	37069.049	0.0
377.3210	58.01	-1.38	1371.178	0.0	27873.811	0.0
377.3275	8.01	-4.96	248425.350	.5	274920.000	1.5
377.3322	22.00	-1.84	0.000	2.0	26494.322	2.0
377.3351	26.00	-1.83	24574.655	4.0	51068.770	5.0
377.3357	22.00	-1.88	19573.968	4.0	46068.040	4.0
377.3402	22.00	-4.42	21739.713	5.0	48233.470	6.0
377.3406	25.01	-3.51	65567.070	2.0	92060.800	1.0
377.3440	58.01	-.96	5404.054	0.0	31905.072	0.0
377.3440	92.00	.17	3710.246	0.0	30211.264	0.0
377.3450	64.00	.26	7581.807	0.0	34082.754	0.0
377.3551	25.01	-3.33	46903.260	2.0	73395.970	2.0
377.3564	6.00	-4.22	71385.380	2.0	97878.000	2.0
377.3567	12.02	-.27	562634.200	1.0	589126.800	1.0
377.3592	28.00	-2.75	29084.478	4.0	55576.905	3.0
377.3597	23.00	-3.31	18198.080	2.5	44690.470	3.5
377.3630	25.01	-2.65	43850.420	2.0	70342.580	3.0
377.3677	24.00	-2.30	30858.820	2.0	57350.650	2.0
377.3678	18.01	-4.31	184093.060	.5	210584.880	1.5
377.3683	26.00	-.47	24506.902	2.0	50998.686	2.0
377.3689	22.00	-7.52	6598.749	2.0	33090.492	1.0
377.3695	17.01	-1.73	119842.100	1.0	146333.800	2.0
377.3700	74.00	-.30	13711.778	0.0	40210.970	0.0
377.3726	27.00	-2.54	28777.270	3.5	55268.750	3.5
377.3740	90.01	-.78	10485.478	0.0	36984.389	0.0
377.3748	24.01	-2.03	42986.730	1.5	69478.060	2.5
377.3805	23.01	-4.49	20617.050	2.0	47107.980	1.0
377.3892	25.01	-3.05	44899.820	3.0	71390.140	3.0
377.3923	30.02	-.76	238336.200	2.0	264826.300	1.0
377.3934	22.00	-3.89	19322.988	2.0	45813.010	2.0
377.3944	23.01	-4.94	13511.710	1.0	40001.660	2.0
377.3993	8.02	-.54	267375.650	1.0	293865.260	1.0
377.4066	12.02	-.39	564731.600	1.0	591220.700	1.0
377.4093	23.00	-3.56	13810.900	.5	40299.810	.5
377.4100	63.00	.35	16534.792	0.0	43031.175	0.0
377.4175	38.01	-.82	53372.970	0.0	79868.827	0.0
377.4175	38.01	-2.12	53372.970	0.0	79868.827	0.0
377.4180	10.01	-2.10	292451.780	1.5	318940.080	1.5
377.4214	24.00	-3.39	26796.280	2.0	53284.340	3.0
377.4237	17.01	-1.47	119842.100	1.0	146330.000	1.0
377.4290	62.01	-1.32	2177.753	0.0	28672.802	0.0
377.4325	22.00	-3.31	170.132	3.0	26657.409	4.0
377.4325	23.00	-2.09	14949.300	4.5	41436.580	3.5
377.4330	39.01	-.16	967.890	0.0	27462.659	0.0
377.4400	76.00	-.03	18793.202	0.0	45287.479	0.0
377.4440	41.00	-1.08	5887.999	0.0	32381.995	0.0
377.4465	26.00	-4.42	22946.810	1.0	49433.108	2.0
377.4473	22.01	-2.70	40330.250	.5	66816.490	1.5
377.4516	18.01	-4.82	173393.380	2.5	199879.320	3.5
377.4526	16.02	-1.19	147550.320	1.0	174036.190	1.0
377.4591	27.00	-1.21	16778.160	2.5	43263.570	1.5
377.4617	22.00	-6.82	13981.750	1.0	40466.979	2.0
377.4620	76.00	-.49	15324.929	0.0	41817.662	0.0
377.4650	22.01	-2.77	4628.610	2.5	31113.610	3.5
377.4674	23.01	-2.47	20617.050	2.0	47101.880	2.0
377.4675	25.00	-1.65	31001.150	2.5	57485.970	2.5
377.4680	62.01	-1.79	0.000	0.0	26492.312	0.0
377.4696	10.01	-2.84	291968.140	.5	318452.820	1.5
377.4701	26.01	-3.82	60445.280	2.5	86929.920	3.5
377.4720	28.00	-3.01	30619.440	2.0	57103.946	3.0
377.4734	28.01	-4.38	94705.930	3.5	121190.340	4.5
377.4735	28.01	-4.89	78955.450	1.5	105439.850	1.5
377.4740	28.01	-2.42	103663.500	1.5	130147.870	.5
377.4807	30.02	-.22	235452.500	2.0	261936.400	1.0
377.4827	26.00	-1.07	17927.378	1.0	44411.137	1.0
377.4861	24.00	-4.57	26796.280	2.0	53279.800	2.0
377.4875	24.00	-2.21	21847.880	2.0	48331.300	1.0
377.4900	9.02	-2.74	442636.270	3.5	469119.520	2.5
377.4921	29.01	-1.87	120092.200	2.0	146575.300	2.0
377.5049	12.02	-2.05	536152.000	1.0	562634.200	1.0
377.5093	25.01	-2.82	46903.260	2.0	73385.150	1.0
377.5120	24.02	-4.93	70291.800	2.0	96773.500	1.0
377.5162	26.01	-3.43	73091.700	4.5	99573.110	4.5
377.5169	23.00	-1.44	15270.420	1.5	41751.780	.5
377.5169	23.00	-.77	15270.420	1.5	41751.780	1.5
377.5430	25.00	-4.51	34423.270	3.5	60902.800	3.5
377.5450	41.00	-.16	10969.423	0.0	37456.332	0.0
377.5521	23.01	-2.79	20622.990	3.0	47101.880	2.0
377.5537	18.01	-1.41	183985.940	1.5	210464.710	2.5
377.5565	28.00	-1.41	3409.925	2.0	29888.505	2.0
377.5578	26.00	-2.84	26874.534	5.0	53353.020	6.0
377.5650	42.00	-.52	19841.750	0.0	46327.256	0.0
377.5666	24.00	-4.67	26801.930	1.0	53279.800	2.0
377.5702	23.00	-2.28	18680.120	5.5	45157.740	4.5
377.5720	45.00	-.44	15889.531	0.0	42374.546	0.0
377.5720	81.00	-.67	0.000	0.0	26485.015	0.0
377.5773	22.00	-3.27	15108.121	3.0	41585.240	3.0
377.5846	26.00	-4.35	21999.132	4.0	48475.740	3.0
377.5886	10.01	-2.97	254292.190	.5	280768.520	.5
377.5910	90.01	-.70	14276.381	0.0	40760.063	0.0
377.5990	92.01	-1.42	887.233	0.0	27370.354	0.0
377.6034	22.01	-1.75	12758.150	2.5	39233.440	1.5
377.6041	24.00	-3.27	35501.260	3.0	61976.500	4.0
377.6048	9.02	-2.54	440069.510	1.5	466544.700	1.5
377.6091	23.00	-.66	15770.720	4.5	42245.610	3.5
377.6100	42.00	-.03	25568.434	0.0	52050.784	0.0
377.6138	15.01	-2.86	103668.740	3.0	130143.300	3.0
377.6141	26.02	-3.85	90423.680	2.0	116898.220	2.0
377.6189	17.01	-2.80	126782.800	3.0	153257.000	2.0
377.6205	16.01	-2.54	125485.320	.5	151959.410	1.5
377.6244	26.02	-4.78	179759.490	2.0	206233.310	2.0
377.6250	76.00	-.75	12905.203	0.0	39386.501	0.0
377.6301	25.00	-.80	41031.480	4.5	67504.900	5.5
377.6325	23.00	-2.26	15664.750	1.5	42138.000	2.5
377.6332	24.00	-2.71	28679.430	1.0	55152.630	2.0
377.6399	25.01	-4.33	65567.070	2.0	92039.800	2.0
377.6419	26.02	-4.46	179760.720	3.0	206233.310	2.0
377.6455	26.00	-.96	17550.180	3.0	44022.518	4.0
377.6533	25.00	-2.78	17052.290	4.5	43524.080	3.5
377.6535	28.01	-3.25	107142.210	1.5	133613.990	1.5
377.6549	22.00	-3.52	19421.576	3.0	45893.260	3.0
377.6550	42.00	-.41	20809.640	0.0	47288.834	0.0
377.6560	39.01	-1.04	967.890	0.0	27447.014	0.0
377.6600	41.00	-1.91	1129.205	0.0	27608.048	0.0
377.6610	58.01	-.66	3548.931	0.0	30027.704	0.0
377.6725	24.00	-1.85	28682.180	2.0	55152.630	2.0
377.6830	64.00	.21	7178.519	0.0	33655.750	0.0
377.6847	16.01	-.61	130134.080	2.5	156603.670	3.5
377.6867	23.00	-2.27	10892.500	3.5	37361.950	4.5
377.6882	10.01	-2.11	252953.540	1.5	279422.890	.5
377.6917	30.02	-2.48	235452.500	2.0	261921.600	2.0
377.6990	76.00	-.73	10082.190	0.0	36558.299	0.0
377.7033	24.00	-4.84	33906.650	1.0	60374.940	2.0
377.7068	26.00	-1.91	24118.815	4.0	50586.857	3.0
377.7074	27.00	-3.13	18389.570	1.5	44857.570	.5
377.7083	9.02	-2.57	440069.510	1.5	466537.450	.5
377.7100	73.00	-1.22	9194.957	0.0	35670.295	0.0
377.7111	27.00	-3.44	28845.220	5.5	55312.960	4.5
377.7134	10.01	-.41	219947.460	.5	246415.040	1.5
377.7161	23.00	-2.08	137.380	2.5	26604.770	3.5
377.7168	22.00	-2.20	15156.787	4.0	41624.130	4.0
377.7213	28.01	-4.71	104298.230	4.5	130765.260	3.5
377.7280	41.00	-1.61	2742.356	0.0	29216.433	0.0
377.7321	24.00	-1.78	20519.600	6.0	46985.870	5.0
377.7339	26.00	-2.12	27666.334	1.0	54132.480	1.0
377.7452	26.00	-1.80	20641.110	4.0	47106.463	4.0
377.7472	18.02	-2.25	240257.590	1.0	266722.800	2.0
377.7521	24.00	-3.97	28637.000	3.0	55101.870	3.0
377.7531	18.01	-2.89	159706.460	.5	186171.260	.5
377.7532	27.00	-1.13	16778.160	2.5	43242.950	2.5
377.7588	29.01	-2.44	120092.200	2.0	146556.600	3.0
377.7590	44.00	-.52	3064.986	0.0	29536.890	0.0
377.7591	8.01	-.98	212161.940	1.5	238626.320	.5
377.7640	72.00	-1.05	0.000	0.0	26471.554	0.0
377.7660	75.00	-.58	17099.394	0.0	43570.808	0.0
377.7670	41.00	-.01	15163.614	0.0	41634.957	0.0
377.7670	58.01	-1.13	1855.123	0.0	28326.466	0.0
377.7720	42.00	.41	28068.817	0.0	54539.810	0.0
377.7741	25.00	-3.63	23549.200	2.5	50012.530	2.5
377.7742	23.00	-4.35	23519.840	4.5	49983.160	5.5
377.7865	9.02	-.69	440359.260	3.5	466821.720	3.5
377.7905	24.00	-3.36	20523.690	4.0	46985.870	5.0
377.7941	24.00	-4.93	20523.940	5.0	46985.870	5.0
377.8057	28.00	-4.32	204.786	3.0	26665.903	3.0
377.8130	45.00	-.02	13389.148	0.0	39857.268	0.0
377.8144	15.01	-3.32	105303.190	1.0	131763.700	1.0
377.8285	25.01	-2.57	81713.020	0.0	108172.540	1.0
377.8311	26.00	-1.84	22838.320	2.0	49297.660	1.0
377.8318	25.01	-.87	52653.270	4.0	79112.560	5.0
377.8319	28.01	-4.36	104298.230	4.5	130757.510	4.5
377.8362	23.01	-1.22	13542.680	3.0	40001.660	2.0
377.8370	26.01	-3.33	48039.230	2.5	74498.150	1.5
377.8379	9.02	-2.33	442147.190	2.5	468606.050	3.5
377.8380	24.00	-4.50	36212.150	4.0	62671.000	4.0
377.8506	26.00	-1.17	26224.961	3.0	52684.930	2.0
377.8563	25.02	-3.61	191915.430	.5	218373.000	1.5
377.8590	74.00	-.22	19519.120	0.0	45984.018	0.0
377.8654	10.01	-2.62	281720.280	1.5	308177.220	1.5
377.8676	24.01	-2.33	40415.340	.5	66872.120	.5
377.8679	23.00	-.84	2311.370	3.5	28768.130	4.5
377.8680	74.00	-.40	18147.942	0.0	44612.210	0.0
377.8699	26.00	-3.75	17726.985	2.0	44183.607	2.0
377.8700	44.00	-.33	12743.888	0.0	39208.016	0.0
377.8880	23.00	-2.81	11100.650	4.5	37556.000	3.5
377.8904	16.02	-.29	146736.540	1.0	173191.730	2.0
377.8904	16.02	-1.63	146736.540	1.0	173191.730	2.0
377.8973	22.00	-2.88	8492.421	1.0	34947.120	1.0
377.9031	22.00	-2.42	12118.394	4.0	38572.692	5.0
377.9038	10.01	-4.02	291801.880	1.5	318256.130	2.5
377.9086	23.01	-4.67	13741.610	3.0	40195.520	3.0
377.9130	25.01	-4.91	49465.130	3.0	75918.730	2.0
377.9204	26.00	-1.16	22249.430	3.0	48702.518	4.0
377.9245	28.01	-3.50	104298.230	4.5	130751.030	5.5
377.9265	24.00	-3.41	24833.860	3.0	51286.520	2.0
377.9401	17.02	-4.51	179495.200	2.5	205946.900	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
377.9419	26.00	-2.28	20641.110	4.0	47092.693	3.0
377.9438	25.02	-2.59	192365.520	1.5	218816.970	2.5
377.9452	26.00	-.95	26406.490	1.0	52857.840	1.0
377.9496	26.00	-2.37	17927.378	1.0	44378.420	1.0
377.9548	24.01	-3.00	64061.820	1.5	90512.500	1.5
377.9560	62.01	-1.28	5242.739	0.0	31700.845	0.0
377.9575	26.01	-3.93	20516.980	2.5	46967.470	2.5
377.9610	24.01	-3.03	42898.120	2.5	69348.360	1.5
377.9610	58.01	-1.31	4436.164	0.0	30893.920	0.0
377.9622	23.00	-1.12	10892.500	3.5	37342.660	2.5
377.9672	24.00	-3.92	36212.150	4.0	62661.960	3.0
377.9759	23.00	-1.22	15688.800	2.5	42138.000	2.5
377.9770	42.00	-.09	16615.449	0.0	43072.085	0.0
377.9783	23.00	-2.50	15571.900	2.5	42020.930	3.5
377.9873	18.01	-2.43	192712.000	1.5	219160.400	2.5
378.0045	29.00	-1.90	44442.294	0.0	70897.006	0.0
378.0066	26.02	-4.13	88663.870	4.0	115110.920	4.0
378.0105	24.00	-3.93	20520.920	3.0	46967.700	2.0
378.0108	18.01	-2.51	192556.840	2.5	219003.600	2.5
378.0160	22.00	-4.99	21739.713	5.0	48186.110	4.0
378.0357	22.00	-1.10	11531.760	2.0	37976.780	2.0
378.0364	21.00	-3.88	18571.400	2.5	45016.370	3.5
378.0365	18.01	-3.73	192556.840	2.5	219001.800	1.5
378.0400	60.01	-.76	3710.246	0.0	30162.473	0.0
378.0489	23.00	-4.75	23353.090	3.5	49797.180	3.5
378.0516	28.00	-3.36	25753.578	4.0	52197.482	3.0
378.0540	40.00	-.73	0.000	0.0	26451.248	0.0
378.0582	10.01	-3.81	280797.260	2.5	307240.700	3.5
378.0602	17.02	-.42	179495.200	2.5	205938.500	1.5
378.0670	57.01	-1.37	5646.026	0.0	32096.364	0.0
378.0681	25.01	-3.73	81659.500	3.0	108102.250	3.0
378.0694	26.01	-4.39	72650.630	4.5	99093.290	5.5
378.0702	28.01	-4.25	109846.000	3.5	136288.600	2.5
378.0710	27.00	-4.27	30102.960	2.5	56545.510	2.5
378.0720	92.01	-1.23	887.233	0.0	27337.221	0.0
378.0765	10.01	-4.07	281332.550	.5	307774.710	1.5
378.0770	74.00	-1.15	2903.671	0.0	29353.310	0.0
378.0828	22.00	-4.63	19322.988	2.0	45764.710	1.0
378.0830	28.00	-4.83	29832.810	3.0	56274.516	2.0
378.0840	18.01	.13	157233.930	3.5	183675.570	3.5
378.0930	62.01	-1.06	2984.328	0.0	29432.847	0.0
378.0997	25.01	-2.39	81732.000	1.0	108172.540	1.0
378.1010	41.00	-.66	322.630	0.0	26770.590	0.0
378.1030	68.00	-.55	5323.396	0.0	31771.216	0.0
378.1066	24.00	-4.49	33934.880	3.0	60374.940	2.0
378.1100	58.01	-1.48	5081.424	0.0	31528.754	0.0
378.1150	69.00	-1.77	0.000	0.0	26446.980	0.0
378.1174	17.01	-.06	147605.700	3.0	174045.000	3.0
378.1176	24.00	-4.22	33935.650	2.0	60374.940	2.0
378.1180	44.00	1.05	19922.407	0.0	46369.178	0.0
378.1181	26.00	-3.98	17726.985	2.0	44166.240	3.0
378.1184	25.00	-1.52	35041.370	3.5	61480.600	3.5
378.1197	28.01	-4.16	104503.220	2.5	130942.360	1.5
378.1206	28.01	-2.21	104503.220	2.5	130942.300	1.5
378.1288	22.00	-4.20	14028.470	2.0	40466.979	2.0
378.1296	25.01	-2.17	81732.000	1.0	108170.450	2.0
378.1316	26.01	-4.25	72130.440	4.5	98568.750	3.5
378.1356	23.00	-.20	15571.900	2.5	42009.930	2.5
378.1375	26.02	-3.66	109570.840	2.0	136008.740	3.0
378.1380	41.01	-.02	13550.463	0.0	39995.835	0.0
378.1406	23.00	-2.97	0.000	1.5	26437.680	1.5
378.1478	22.01	-2.86	40330.250	.5	66767.430	.5
378.1503	26.01	-2.82	36252.960	2.5	62689.960	2.5
378.1590	42.00	-.55	11050.080	0.0	37493.983	0.0
378.1606	26.00	-2.93	27394.676	3.0	53830.960	3.0
378.1620	58.01	-.18	4194.191	0.0	30637.884	0.0
378.1635	23.00	-4.20	23353.090	3.5	49789.170	3.5
378.1687	2.01	-1.55	411477.918	0.0	437921.143	0.0
378.1737	23.00	-2.62	15103.770	4.5	41539.140	4.5
378.1750	92.00	-.47	3790.903	0.0	30233.687	0.0
378.1782	22.00	-3.73	22404.690	3.0	48839.740	3.0
378.1812	23.01	-4.87	20617.050	2.0	47051.890	3.0
378.1898	26.00	-2.25	29320.050	1.0	55754.290	2.0
378.1941	26.00	-1.01	29356.780	2.0	55790.720	3.0
378.1965	25.01	-4.37	55759.270	3.0	82193.040	2.0
378.1982	22.00	-3.47	19573.968	4.0	46007.620	4.0
378.2028	23.01	-6.35	20622.990	3.0	47056.320	4.0
378.2030	29.01	-2.28	110365.980	2.0	136799.300	2.0
378.2103	22.00	-2.37	8602.340	2.0	35035.147	2.0
378.2176	27.02	-2.05	83938.900	3.5	110371.200	2.5
378.2190	42.00	-.20	20003.065	0.0	46442.773	0.0
378.2200	76.00	-.61	4113.534	0.0	30553.172	0.0
378.2220	40.01	-1.23	6371.944	0.0	32811.442	0.0
378.2300	24.00	-1.58	21856.940	3.0	48288.370	4.0
378.2300	39.01	.53	29036.707	0.0	55475.646	0.0
378.2321	10.01	-3.13	280989.530	1.5	307420.820	2.5
378.2342	18.02	-2.84	240291.660	2.0	266722.800	2.0
378.2420	62.01	-1.55	4355.506	0.0	30793.606	0.0
378.2430	72.00	-1.98	5484.711	0.0	31922.742	0.0
378.2440	26.00	-1.11	24180.848	3.0	50611.303	3.0
378.2489	28.00	-3.94	29832.810	3.0	56262.920	3.0
378.2524	22.00	-3.84	17369.590	1.0	43799.455	2.0
378.2525	25.00	-3.58	35041.370	3.5	61471.230	2.5
378.2530	58.01	-.36	3952.218	0.0	30389.550	0.0
378.2556	23.00	-1.70	11100.650	4.5	37530.290	5.5
378.2558	26.01	-1.59	73143.480	3.5	99573.110	4.5
378.2591	16.01	-2.19	114279.110	3.5	140708.510	2.5
378.2600	9.02	-1.39	440359.260	3.5	466788.600	2.5
378.2604	26.00	-1.47	24772.019	1.0	51201.330	2.0
378.2662	23.01	-4.75	20622.990	3.0	47051.890	3.0
378.2678	24.00	-2.41	35501.260	3.0	61930.050	3.0
378.2721	27.00	-2.86	14399.280	.5	40827.770	1.5
378.2726	22.00	-2.50	15156.787	4.0	41585.240	3.0
378.2740	44.00	1.74	27100.927	0.0	53536.791	0.0
378.2780	72.01	-1.05	12017.970	0.0	38453.554	0.0
378.2817	9.02	-.83	440359.260	3.5	466787.080	4.5
378.2840	92.01	-.61	241.973	0.0	26677.138	0.0
378.2863	17.02	-3.08	222100.700	1.5	248528.200	1.5
378.2906	23.00	-1.90	15571.900	2.5	41999.100	1.5
378.2939	24.00	-1.45	33060.740	3.0	59487.710	4.0
378.3040	58.01	-.62	7178.519	0.0	33612.287	0.0
378.3050	64.00	.59	967.890	0.0	27401.588	0.0
378.3060	62.01	-1.85	1935.780	0.0	28369.408	0.0
378.3079	22.00	-3.05	12118.394	4.0	38544.380	3.0
378.3110	9.02	-2.65	442694.580	1.5	469120.350	1.5
378.3113	10.01	-2.98	280473.580	1.5	306899.330	2.5
378.3120	24.00	-3.06	23163.270	0.0	49588.970	1.0
378.3170	16.01	-.90	125485.320	.5	151910.670	1.5
378.3193	27.00	-3.92	24627.790	4.5	51052.980	3.5
378.3229	9.02	-3.60	442694.580	1.5	469119.520	2.5
378.3254	25.02	-3.05	192392.200	3.5	218816.970	2.5
378.3255	22.00	-2.76	7255.369	2.0	33680.130	3.0
378.3263	19.01	-.66	163237.000	1.0	189661.700	2.0
378.3290	90.01	-2.16	0.000	0.0	26432.021	0.0
378.3318	25.01	-4.91	79739.880	5.0	106164.200	4.0
378.3345	26.01	-3.23	18360.650	1.5	44784.780	2.5
378.3360	62.01	-1.75	1451.835	0.0	27883.367	0.0
378.3385	23.00	-2.30	13801.530	1.5	40225.380	1.5
378.3460	25.01	-3.57	44899.820	3.0	71323.150	2.0
378.3523	28.00	-1.50	3409.925	2.0	29832.810	3.0
378.3560	69.01	-1.00	8872.327	0.0	35302.462	0.0
378.3580	58.01	-.50	5646.026	0.0	32076.021	0.0
378.3589	26.02	-4.41	179757.980	4.0	206180.410	3.0
378.3637	27.00	-4.38	25739.930	2.5	52162.020	3.5
378.3723	27.00	-2.67	16778.160	2.5	43199.650	2.5
378.3730	74.00	-.46	19115.832	0.0	45544.779	0.0
378.3750	24.02	-2.06	70291.800	2.0	96713.100	3.0
378.3840	41.00	-.18	10808.108	0.0	37236.287	0.0
378.3840	92.01	-.58	5726.684	0.0	32154.863	0.0
378.3948	18.01	-4.72	184093.060	.5	210512.980	1.5
378.3951	30.02	-.49	234866.900	1.0	261286.800	1.0
378.3981	24.00	-1.33	28682.180	2.0	55101.870	3.0
378.3981	26.02	-4.48	179760.720	3.0	206180.410	3.0
378.3984	10.01	-1.51	292033.150	2.5	318452.820	1.5
378.4100	26.00	-3.78	29371.860	3.0	55790.720	3.0
378.4227	25.00	-1.71	34250.520	5.5	60668.490	4.5
378.4250	73.00	-2.39	5968.656	0.0	32393.971	0.0
378.4262	26.00	-3.39	26351.049	5.0	52768.780	4.0
378.4268	24.00	-4.14	27223.050	2.0	53640.740	3.0
378.4309	15.01	-4.98	103756.900	1.0	130174.300	2.0
378.4415	25.02	-2.60	94850.660	1.5	121267.320	2.5
378.4474	26.02	-4.07	88694.670	5.0	115110.920	4.0
378.4485	28.01	-3.41	108548.610	1.5	134964.780	1.5
378.4578	24.00	-1.65	21810.840	1.0	48226.360	0.0
378.4620	24.01	-4.22	38509.070	3.5	64924.300	3.5
378.4624	25.01	-4.21	59537.400	4.0	85952.600	3.0
378.4640	28.01	-3.03	108368.050	2.5	134783.140	2.5
378.4669	23.00	-2.00	323.420	3.5	26738.310	4.5
378.4672	22.01	-2.59	40581.800	2.5	66996.670	3.5
378.4706	26.02	-4.35	90483.590	3.0	116898.220	2.0
378.4727	23.00	-1.22	13810.900	.5	40225.380	1.5
378.4810	57.01	-2.32	0.000	0.0	26421.406	0.0
378.4828	23.00	-1.02	15724.220	3.5	42138.000	2.5
378.4872	24.00	-4.44	26801.930	1.0	53215.400	1.0
378.4997	30.02	-.39	234384.000	3.0	260796.600	3.0
378.4997	30.02	-1.55	234384.000	3.0	260796.600	3.0
378.5007	23.00	-4.40	23519.840	4.5	49932.370	4.5
378.5015	26.00	-4.06	19552.474	1.0	45964.944	2.0
378.5017	9.02	-.57	440359.260	3.5	466771.720	3.5
378.5030	42.00	-.47	16696.107	0.0	43115.977	0.0
378.5142	23.01	-2.32	20343.000	2.0	46754.590	1.0
378.5199	25.02	-3.92	90440.500	4.5	116851.690	3.5
378.5327	23.03	-1.55	257690.800	3.0	284101.100	3.0
378.5434	25.00	-1.29	31076.420	1.5	57485.970	2.5
378.5460	72.00	-.50	4516.821	0.0	30933.690	0.0
378.5510	42.00	.24	26213.694	0.0	52630.214	0.0
378.5544	26.02	-4.52	89907.850	4.0	116316.630	5.0
378.5544	26.02	-3.84	89907.850	5.0	116316.630	5.0
378.5600	90.01	-1.03	6129.972	0.0	32545.864	0.0
378.5708	26.00	-3.20	26105.908	6.0	52513.546	6.0
378.5724	24.00	-3.92	26787.500	3.0	53195.030	2.0
378.5754	24.00	-1.42	30965.460	3.0	57372.780	4.0
378.5771	26.00	-2.69	26874.534	5.0	53281.735	5.0
378.5778	26.00	-2.06	27559.568	2.0	53966.720	2.0
378.5801	24.00	-2.07	21810.840	1.0	48217.830	2.0
378.5810	23.01	-6.54	13594.730	2.0	40001.660	2.0
378.5848	27.00	-4.89	26450.020	2.5	52856.680	3.5
378.5896	23.00	-2.90	18126.270	1.5	44532.600	2.5
378.5946	26.00	-.91	19621.004	5.0	46026.980	6.0
378.5968	22.00	-4.99	21588.496	4.0	47994.320	5.0
378.5976	8.01	-4.37	248514.230	1.5	274920.000	1.5
378.5976	8.01	-4.44	248514.230	1.5	274920.000	2.5
378.5986	23.01	-3.51	46739.980	2.0	73145.680	3.0
378.6043	22.00	-.12	7255.369	2.0	33660.671	1.0
378.6060	44.00	-.16	2661.698	0.0	29074.380	0.0
378.6150	26.00	-1.86	22838.320	2.0	49242.872	3.0
378.6158	9.02	-1.93	442278.930	2.5	468683.430	2.5
378.6173	22.00	-1.34	20126.055	3.0	46530.450	4.0
378.6178	26.00	-1.16	22838.320	2.0	49242.680	2.0
378.6220	41.00	-1.17	2742.356	0.0	29153.922	0.0
378.6225	24.00	-1.25	21847.880	2.0	48251.910	3.0
378.6230	29.01	-.72	120092.200	2.0	146496.200	3.0
378.6233	9.02	-2.98	442278.930	2.5	468682.910	3.5
378.6264	9.02	-4.84	443865.310	1.5	470269.070	.5
378.6267	22.00	-1.18	15220.390	5.0	41624.130	4.0
378.6327	22.01	-2.36	4897.600	3.5	31300.920	4.5
378.6360	26.01	-5.66	18886.750	.5	45289.840	1.5
378.6380	74.00	-.91	16857.422	0.0	43267.872	0.0
378.6381	9.02	-4.16	464728.420	4.5	491131.370	4.5
378.6383	18.01	-1.97	132327.280	3.5	158730.210	2.5
378.6397	22.00	-4.98	13981.750	1.0	40384.580	1.0
378.6416	30.02	-3.99	257566.100	1.0	283968.800	0.0
378.6601	15.01	-3.34	76764.960	2.0	103166.370	1.0
378.6630	58.01	-.39	1371.178	0.0	27779.884	0.0
378.6671	25.02	-2.88	192576.420	2.5	218977.340	3.5
378.6678	26.00	-2.47	8154.713	1.0	34555.586	0.0
378.6733	26.00	-3.14	27666.334	1.0	54066.821	2.0
378.6734	22.00	-3.13	7255.369	2.0	33655.853	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
378.6828	25.00	-1.03	37148.660	5.5	63548.490	4.5
378.6880	90.01	-1.57	7259.177	0.0	33666.140	0.0
378.6918	24.00	-2.49	21810.840	1.0	48210.040	1.0
378.6938	26.02	-2.12	114351.920	3.0	140750.980	2.0
378.6983	24.00	-3.41	26796.280	2.0	53195.030	2.0
378.7060	41.00	-.39	80.658	0.0	26486.366	0.0
378.7142	23.00	-.36	15103.770	4.5	41501.410	4.5
378.7161	26.00	-.78	29356.780	2.0	55754.290	2.0
378.7172	28.01	-2.73	104503.220	2.5	130900.650	2.5
378.7182	23.00	-4.37	0.000	1.5	26397.360	.5
378.7200	62.01	-1.52	322.630	0.0	26727.362	0.0
378.7222	27.00	-1.83	21920.090	4.5	48317.170	3.5
378.7237	23.01	-.64	20343.000	2.0	46739.980	2.0
378.7337	27.00	-2.20	21215.900	.5	47612.180	1.5
378.7370	72.00	-.41	18228.600	0.0	44632.147	0.0
378.7409	24.00	-2.14	30965.460	3.0	57361.240	3.0
378.7446	25.00	-2.07	34343.900	4.5	60739.420	3.5
378.7460	58.01	-.49	11614.683	0.0	38017.602	0.0
378.7480	41.00	-1.55	2097.096	0.0	28499.876	0.0
378.7520	75.00	-.15	14921.641	0.0	41324.142	0.0
378.7525	24.00	-1.58	21856.940	3.0	48251.910	3.0
378.7538	23.00	-.21	15264.830	5.5	41659.710	5.5
378.7538	10.01	-2.62	281025.940	2.5	307420.820	2.5
378.7560	64.01	-.24	3952.218	0.0	30354.440	0.0
378.7570	58.01	-1.18	2581.041	0.0	28983.193	0.0
378.7628	22.00	-1.69	170.132	3.0	26564.385	3.0
378.7703	21.00	-3.75	18515.770	1.5	44909.500	2.5
378.7753	10.01	-1.91	292546.700	.5	318940.080	1.5
378.7783	18.01	-1.93	184191.710	.5	210584.880	1.5
378.7793	24.00	-4.50	26801.930	1.0	53195.030	2.0
378.7822	24.01	-4.28	20512.620	2.5	46905.520	1.5
378.7875	23.00	-2.08	10892.500	3.5	37285.030	4.5
378.7882	26.00	-.87	8154.713	1.0	34547.192	2.0
378.7900	68.00	-1.07	0.000	0.0	26399.852	0.0
378.7902	26.01	-6.17	15844.710	4.5	42237.050	3.5
378.7910	58.01	-1.29	967.890	0.0	27367.672	0.0
378.7925	10.01	-3.54	302425.870	1.5	328818.050	2.5
378.8120	62.01	-.65	1935.780	0.0	28334.099	0.0
378.8139	22.01	-2.69	40425.800	1.5	66816.490	1.5
378.8187	26.00	-3.10	31307.235	4.0	57697.590	4.0
378.8210	58.01	-1.27	4758.794	0.0	31156.486	0.0
378.8260	42.00	.46	26052.379	0.0	52449.722	0.0
378.8267	15.01	-3.77	103630.600	2.0	130020.400	3.0
378.8274	25.01	-3.05	81780.700	3.0	108170.450	2.0
378.8364	9.02	-4.35	442294.310	1.5	468683.430	2.5
378.8405	26.00	-2.52	22838.320	2.0	49227.160	3.0
378.8451	23.00	-3.17	15103.770	4.5	41492.290	3.5
378.8460	66.01	-.65	806.575	0.0	27202.525	0.0
378.8470	45.00	-.57	5565.369	0.0	31961.249	0.0
378.8474	27.00	-2.10	28777.270	3.5	55165.630	2.5
378.8497	23.00	-2.53	18302.270	3.5	44690.470	3.5
378.8504	10.01	-3.60	302307.750	2.5	328695.900	2.5
378.8507	10.01	-4.99	302307.750	2.5	328695.880	1.5
378.8524	22.00	-5.01	13981.750	1.0	40369.760	0.0
378.8613	28.01	-4.68	110573.360	2.5	136960.750	2.5
378.8700	39.01	-.34	806.575	0.0	27200.853	0.0
378.8741	28.01	-2.92	110573.360	2.5	136959.860	2.5
378.8741	26.00	-.65	28604.610	2.0	54991.110	1.0
378.8750	58.01	-.32	3710.246	0.0	30104.175	0.0
378.8760	63.01	.08	26939.612	0.0	53333.472	0.0
378.8769	20.02	-3.83	359520.600	2.0	385906.900	2.0
378.8800	22.00	-2.61	386.874	4.0	26772.965	5.0
378.8811	28.00	-1.97	29888.505	2.0	56274.516	2.0
378.8854	24.00	-.47	24277.060	0.0	50662.770	1.0
378.8867	20.02	-.79	347758.220	2.0	374143.840	3.0
378.8886	28.01	-2.91	104646.520	3.5	131032.010	2.5
378.8929	24.00	-3.48	30965.460	3.0	57350.650	2.0
378.9044	24.00	-4.27	33906.650	1.0	60291.040	1.0
378.9060	23.00	-1.80	15270.420	1.5	41654.700	2.5
378.9084	24.00	-3.56	20520.920	3.0	46905.030	4.0
378.9110	90.01	-1.60	1774.465	0.0	28165.887	0.0
378.9110	76.00	-.71	14760.326	0.0	41151.748	0.0
378.9178	26.00	-1.13	21999.132	4.0	48382.585	5.0
378.9257	22.00	-.04	11776.806	4.0	38159.710	3.0
378.9308	26.00	-4.56	18378.187	2.0	44760.739	1.0
378.9325	26.00	-3.67	29371.860	3.0	55754.290	2.0
378.9403	26.02	-2.08	117950.320	4.0	144332.210	4.0
378.9482	24.00	-2.75	20523.690	4.0	46905.030	4.0
378.9500	41.00	-1.55	2097.096	0.0	28485.802	0.0
378.9518	24.00	-2.19	20523.940	5.0	46905.030	4.0
378.9529	26.00	-4.43	21038.987	2.0	47420.000	2.0
378.9581	25.01	-2.64	43850.420	2.0	70231.070	2.0
378.9588	27.02	-3.91	77121.100	4.5	103501.700	3.5
378.9671	29.01	-2.11	121981.680	2.0	148361.700	1.0
378.9722	24.00	-3.08	7810.820	1.0	34190.490	2.0
378.9726	25.00	-4.21	23719.520	1.5	50099.160	1.5
378.9775	27.02	-3.05	146815.600	3.5	173194.900	2.5
378.9775	27.02	-3.05	146815.600	3.5	173194.900	2.5
378.9807	26.00	-3.01	27166.804	4.0	53545.882	3.0
378.9897	23.00	-3.77	15571.900	2.5	41950.350	2.5
379.0094	26.00	-1.98	7985.783	2.0	34362.860	1.0
379.0118	24.00	-1.40	33040.100	2.0	59417.010	3.0
379.0140	76.00	.17	14760.326	0.0	41144.576	0.0
379.0150	41.00	-.39	967.890	0.0	27352.070	0.0
379.0207	25.00	-.95	17052.290	4.5	43428.580	4.5
379.0216	24.00	-.83	24286.540	1.0	50662.770	1.0
379.0240	26.00	-2.26	20641.110	4.0	47017.170	3.0
379.0306	22.00	-3.38	17423.853	2.0	43799.455	2.0
379.0320	23.00	-.70	2220.130	2.5	28595.640	3.5
379.0340	58.01	-1.38	5887.999	0.0	32270.856	0.0
379.0395	26.00	-3.77	31322.603	3.0	57697.590	4.0
379.0442	24.00	-.47	24286.540	1.0	50661.200	0.0
379.0473	24.00	-.47	33113.270	4.0	59487.710	4.0
379.0475	23.00	-.57	11100.650	4.5	37475.080	3.5
379.0477	28.00	-1.78	29888.505	2.0	56262.920	3.0
379.0487	26.00	-2.15	27394.676	3.0	53769.020	4.0
379.0495	24.00	-2.28	27703.840	4.0	54078.130	5.0
379.0510	44.00	-.05	2016.438	0.0	28398.112	0.0
379.0644	26.00	-4.72	24506.902	2.0	50880.152	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
379.0667	28.00	-3.16	29500.690	1.0	55873.780	2.0
379.0730	76.00	-.38	14760.326	0.0	41140.469	0.0
379.0752	28.01	-4.79	67694.640	2.5	94067.140	1.5
379.0756	26.00	-1.16	17550.180	3.0	43922.652	3.0
379.0826	8.01	-3.42	185340.680	1.5	211712.660	2.5
379.0830	57.01	-.46	967.890	0.0	27347.337	0.0
379.0895	9.02	-3.59	442748.850	2.5	469120.350	1.5
379.0917	10.01	-1.50	252953.540	1.5	279324.890	1.5
379.1015	9.02	-2.47	442748.850	2.5	469119.520	2.5
379.1084	25.00	-1.31	38934.940	2.5	65305.130	3.5
379.1099	26.00	-4.88	27543.000	1.0	53913.090	2.0
379.1119	24.00	-1.95	21847.880	2.0	48217.830	2.0
379.1170	64.01	.34	10001.532	0.0	36378.613	0.0
379.1210	41.00	.02	967.890	0.0	27344.693	0.0
379.1253	8.02	-.49	267632.590	2.0	294001.600	2.0
379.1290	90.01	-1.05	11453.368	0.0	37829.615	0.0
379.1327	23.00	-1.97	137.380	2.5	26505.880	2.5
379.1367	24.00	-.27	24286.540	1.0	50654.760	2.0
379.1400	40.00	-.78	564.603	0.0	26940.084	0.0
379.1432	26.02	-4.87	179893.560	5.0	206261.330	4.0
379.1439	14.02	.09	175230.010	0.0	201597.730	1.0
379.1457	24.02	-2.64	69780.900	1.0	96148.500	1.0
379.1500	63.01	-1.59	10566.135	0.0	36940.921	0.0
379.1508	26.00	-2.28	20641.110	4.0	47008.351	5.0
379.1526	22.00	-4.94	21739.713	5.0	48106.830	6.0
379.1616	28.01	-4.32	95332.530	2.5	121699.020	1.5
379.1690	58.01	-.67	7259.177	0.0	33632.641	0.0
379.1720	64.01	-1.32	4436.164	0.0	30809.419	0.0
379.1731	26.00	-2.03	27559.568	2.0	53925.260	1.0
379.1741	25.00	-1.91	35114.980	2.5	61480.600	3.5
379.1826	24.00	-3.95	27176.220	1.0	53541.250	2.0
379.1830	27.01	-5.75	25147.200	4.0	51512.200	3.0
379.2020	25.01	-4.79	79800.520	4.0	106164.200	4.0
379.2020	62.01	-1.60	322.630	0.0	26693.799	0.0
379.2020	73.00	-2.36	0.000	0.0	26371.169	0.0
379.2052	28.01	-2.73	110573.360	2.5	136936.820	3.5
379.2095	9.02	-1.50	440359.260	3.5	466722.420	2.5
379.2135	24.00	-.24	24299.890	2.0	50662.770	1.0
379.2149	26.00	-1.22	21999.132	4.0	48361.920	4.0
379.2161	10.01	-2.63	282375.330	1.5	308736.030	1.5
379.2171	24.00	-3.46	25038.610	5.0	51401.240	5.0
379.2180	45.00	.20	10888.765	0.0	37258.821	0.0
379.2210	10.01	-3.41	280947.100	1.5	307309.460	.5
379.2239	24.00	-2.99	21847.880	2.0	48210.040	1.0
379.2308	28.01	-3.90	107082.210	2.5	133443.890	2.5
379.2315	24.01	-2.23	42986.730	1.5	69348.360	1.5
379.2330	28.00	-3.22	2216.519	2.0	28578.046	3.0
379.2330	58.01	-.58	3629.588	0.0	29998.601	0.0
379.2363	22.00	-4.89	14105.680	3.0	40466.979	2.0
379.2376	24.00	-4.75	20517.400	2.0	46878.610	3.0
379.2377	24.02	-3.89	71321.800	3.0	97683.000	3.0
379.2384	24.01	-3.50	38563.150	4.5	64924.300	3.5
379.2400	40.00	-1.58	564.603	0.0	26933.130	0.0
379.2419	27.00	-2.76	29216.370	2.5	55577.280	1.5
379.2422	24.00	-2.79	21856.940	3.0	48217.830	2.0
379.2481	16.01	-1.56	129787.710	.5	156148.190	.5
379.2505	23.01	-3.30	47056.320	4.0	73416.630	5.0
379.2514	25.02	-3.55	192012.750	1.5	218373.000	1.5
379.2602	25.01	-2.85	81812.900	2.0	108172.540	1.0
379.2770	74.00	-.66	13227.833	0.0	39593.787	0.0
379.2829	26.00	-2.47	17927.378	1.0	44285.436	2.0
379.2859	23.00	-2.68	18085.820	.5	44443.670	1.5
379.2866	23.01	-2.46	20522.140	1.0	46879.940	2.0
379.2882	24.00	-4.13	20520.920	3.0	46878.610	3.0
379.2902	25.01	-2.36	81812.900	2.0	108170.450	2.0
379.2966	24.00	-2.22	35572.940	2.0	61930.050	3.0
379.2999	25.01	-4.52	79800.520	4.0	106157.400	3.0
379.3066	28.01	-1.70	105439.850	1.5	131796.260	2.5
379.3086	24.00	-.78	33060.740	3.0	59417.010	3.0
379.3089	25.00	-2.13	35114.980	2.5	61471.230	2.5
379.3100	92.01	-.61	4516.821	0.0	30880.481	0.0
379.3110	22.00	-3.73	14028.470	2.0	40384.580	1.0
379.3135	24.00	-2.33	28637.000	3.0	54992.930	2.0
379.3140	22.01	-2.44	40581.800	2.5	66937.700	2.5
379.3203	28.01	-4.22	109846.000	3.5	136201.460	3.5
379.3213	24.00	-4.34	33935.650	2.0	60291.040	1.0
379.3220	45.00	.01	5646.026	0.0	32008.852	0.0
379.3277	26.00	-.64	24506.902	2.0	50861.850	3.0
379.3281	24.00	-3.94	20523.690	4.0	46878.610	3.0
379.3288	24.00	-.14	24299.890	2.0	50654.760	2.0
379.3353	26.00	-.47	24506.902	2.0	50861.320	2.0
379.3370	72.01	-1.20	2984.328	0.0	29346.112	0.0
379.3473	26.00	-3.84	24180.848	3.0	50534.435	3.0
379.3498	26.02	-2.05	114339.950	4.0	140693.360	3.0
379.3520	58.01	-.78	5887.999	0.0	32248.740	0.0
379.3536	15.01	-3.10	76813.220	1.0	103166.370	1.0
379.3576	26.00	-1.80	27394.676	3.0	53747.547	3.0
379.3602	28.00	-3.20	2216.519	2.0	28569.210	2.0
379.3616	23.00	-5.75	0.000	1.5	26352.590	2.5
379.3620	42.00	-.40	16615.449	0.0	42975.496	0.0
379.3678	6.00	-2.62	61981.820	1.0	88333.980	0.0
379.3704	23.00	-.95	13801.530	1.5	40153.510	2.5
379.3790	77.00	-.61	13873.093	0.0	40231.958	0.0
379.3860	58.01	-1.00	7017.204	0.0	33375.583	0.0
379.3867	26.00	-1.43	22946.810	1.0	49297.660	1.0
379.3871	24.00	-.30	24303.940	3.0	50654.760	2.0
379.3888	28.00	-2.97	29832.810	3.0	56183.510	4.0
379.3910	76.00	.44	18793.202	0.0	45151.234	0.0
379.3970	62.01	-.76	806.575	0.0	27164.190	0.0
379.4060	77.00	-1.36	12098.628	0.0	38455.618	0.0
379.4061	22.00	-2.26	15108.121	3.0	41457.620	3.0
379.4149	26.00	-4.89	19788.248	4.0	46137.140	3.0
379.4150	90.01	-.96	11050.080	0.0	37406.444	0.0
379.4293	28.01	-4.68	100332.090	4.5	126679.980	4.5
379.4324	26.00	-1.02	19788.248	4.0	46135.920	5.0
379.4340	74.00	-.75	15002.299	0.0	41357.344	0.0
379.4359	23.01	-1.08	20343.000	2.0	46690.430	1.0
379.4430	42.00	.27	23390.681	0.0	49745.101	0.0
379.4470	41.00	-.23	12017.970	0.0	38372.112	0.0

WAVELENGTH	FLEM	LOGGF	ELO	JLO	EUP	JUP
379.4479	20.02	-2.74	359520.600	2.0	385867.200	3.0
379.4487	25.00	-.84	41230.300	3.5	67576.840	4.5
379.4488	8.01	-.99	214169.740	.5	240516.280	1.5
379.4578	24.00	-4.19	24940.610	2.0	51286.520	2.0
379.4598	24.00	-.81	24282.340	4.0	50628.110	3.0
379.4660	76.00	.27	28149.475	0.0	54502.297	0.0
379.4680	16.02	-1.26	147690.990	2.0	174036.190	1.0
379.4680	58.01	-.71	6452.602	0.0	32805.285	0.0
379.4683	23.00	-2.72	15664.750	1.5	42009.930	2.5
379.4741	22.00	-1.84	8602.340	2.0	34947.120	1.0
379.4780	57.01	-.32	1935.780	0.0	28287.769	0.0
379.4817	28.01	-4.97	77736.790	4.5	104081.040	4.5
379.4919	27.00	-3.99	16467.900	4.5	42811.440	3.5
379.4920	44.00	.27	16050.847	0.0	42401.864	0.0
379.4963	23.00	-.20	2424.890	4.5	28768.130	4.5
379.5004	26.00	-.81	7985.783	2.0	34328.733	3.0
379.5012	23.00	-2.13	137.380	2.5	26480.280	3.5
379.5088	15.01	-2.51	76824.000	0.0	103166.370	1.0
379.5109	9.02	-2.68	440202.480	2.5	466544.700	1.5
379.5170	69.01	-1.91	161.315	0.0	26510.596	0.0
379.5180	44.00	-.85	10566.135	0.0	36915.346	0.0
379.5195	22.01	-3.06	40425.800	1.5	66767.430	.5
379.5222	26.02	-2.96	114351.920	3.0	140693.360	3.0
379.5250	64.01	-1.52	2823.013	0.0	29171.738	0.0
379.5260	58.01	-.80	3710.246	0.0	30058.902	0.0
379.5307	26.02	-3.95	122944.150	4.0	149285.000	3.0
379.5315	18.02	-1.34	213950.870	2.0	240291.660	2.0
379.5350	25.01	-2.42	55759.270	3.0	82099.820	4.0
379.5364	14.01	-1.21	101023.310	1.5	127363.760	2.5
379.5405	29.01	-2.71	108335.430	2.0	134675.600	2.0
379.5468	25.02	-4.45	192365.520	1.5	218705.250	2.5
379.5522	20.00	-2.05	21849.634	2.0	48188.990	3.0
379.5552	14.01	-1.06	101024.610	2.5	127363.760	3.5
379.5552	14.01	-2.36	101024.610	2.5	127363.760	2.5
379.5553	28.00	-2.71	27414.893	2.0	53754.036	2.0
379.5591	25.00	-4.24	23549.200	2.5	49888.080	3.5
379.5668	22.00	-4.89	18037.225	4.0	44375.570	5.0
379.5670	76.00	.33	24116.599	0.0	50462.409	0.0
379.5703	21.00	-4.66	18571.400	2.5	44909.500	2.5
379.5750	64.00	-.66	967.890	0.0	27313.145	0.0
379.5760	69.01	-.64	161.315	0.0	26506.500	0.0
379.5855	27.00	-2.38	28345.860	4.5	54682.910	4.5
379.5865	22.00	-.17	11639.804	3.0	37976.780	2.0
379.5958	23.01	-4.02	46690.430	1.0	73026.760	2.0
379.6015	26.00	-2.29	19390.165	6.0	4572e.104	5.0
379.6040	42.00	.12	24358.571	0.0	50701.813	0.0
379.6068	29.01	-1.16	122867.530	1.0	149203.100	0.0
379.6092	29.01	-1.62	120092.200	2.0	146427.600	1.0
379.6124	14.02	.44	175263.100	1.0	201598.280	2.0
379.6172	24.00	-4.39	33906.650	1.0	60241.500	0.0
379.6203	14.02	-.04	175263.100	1.0	201597.730	1.0
379.6218	23.00	-2.75	15264.830	5.5	41599.360	4.5
379.6219	23.00	-2.42	18198.080	2.5	44532.600	2.5
379.6244	23.00	-1.37	15664.750	1.5	41999.100	1.5
379.6280	74.00	-.60	19438.462	0.0	45780.038	0.0
379.6336	2.01	-1.49	411477.918	0.0	437819.106	0.0
379.6366	25.02	-2.07	192172.890	2.5	218506.390	3.5
379.6370	64.01	-.04	241.973	0.0	26582.925	0.0
379.6440	41.00	.25	15163.614	0.0	41504.080	0.0
379.6466	23.00	-.73	15103.770	4.5	41436.580	3.5
379.6479	25.01	-2.18	44745.460	2.0	71078.180	1.0
379.6480	40.01	-.60	8065.752	0.0	34405.941	0.0
379.6498	23.01	-2.13	23391.000	5.0	49723.680	4.0
379.6548	26.01	-3.77	37227.320	.5	63559.560	.5
379.6558	25.00	-2.07	38351.780	.5	64683.950	1.5
379.6564	23.00	-4.27	15688.800	2.5	42020.930	3.5
379.6590	41.00	-1.43	1532.493	0.0	27871.919	0.0
379.6590	75.00	-1.22	11534.025	0.0	37873.451	0.0
379.6593	18.01	-2.29	173347.830	1.5	199679.760	2.5
379.6658	27.00	-3.32	23152.570	3.5	49484.050	3.5
379.6670	58.01	-.86	7662.464	0.0	34001.335	0.0
379.6698	17.01	-3.23	159574.200	2.0	185905.400	1.0
379.6720	90.00	-.62	8711.012	0.0	35049.536	0.0
379.6787	24.00	-3.88	23933.900	4.0	50264.480	3.0
379.6818	24.00	-1.92	27597.220	3.0	53927.590	4.0
379.6850	41.00	.03	13389.148	0.0	39726.770	0.0
379.6854	26.01	-3.41	72238.630	2.5	98568.750	3.5
379.6858	22.01	-4.86	4628.610	2.5	30958.700	2.5
379.6962	24.00	-2.78	20517.400	2.0	46846.770	3.0
379.7070	68.00	-1.02	403.288	0.0	26739.384	0.0
379.7128	24.00	-.37	24299.890	2.0	50628.110	3.0
379.7245	29.00	-1.81	44926.239	0.0	71261.121	0.0
379.7280	62.01	-1.34	806.575	0.0	27141.215	0.0
379.7287	9.02	-1.53	442278.930	2.5	468606.050	3.5
379.7300	42.00	-.74	10888.765	0.0	37223.266	0.0
379.7330	26.01	-4.23	60441.050	1.5	86767.870	2.5
379.7334	9.02	-3.56	418248.560	1.5	444575.350	2.5
379.7380	24.00	-1.90	31009.000	3.0	57335.470	4.0
379.7438	27.00	-3.05	16470.600	1.5	42796.670	1.5
379.7451	28.01	-3.71	110573.360	2.5	136899.340	2.5
379.7462	24.02	-2.97	70980.200	1.0	97306.100	2.0
379.7469	28.00	-1.43	31441.665	2.0	57767.520	1.0
379.7470	24.00	-2.63	20520.920	3.0	46846.770	3.0
379.7511	26.00	.21	26105.908	6.0	52431.470	6.0
379.7590	75.00	-.85	14518.354	0.0	40850.844	0.0
379.7651	25.00	-1.91	34343.900	4.5	60668.490	4.5
379.7679	24.00	-.23	31377.960	4.0	57702.360	5.0
379.7709	22.00	-2.63	170.132	3.0	26494.322	2.0
379.7712	24.00	.24	24303.940	3.0	50628.110	3.0
379.7809	29.01	-.55	120092.200	2.0	146415.700	2.0
379.7815	18.01	-2.84	179931.770	1.5	206255.230	2.5
379.7869	24.00	-2.63	20523.690	4.0	46846.770	3.0
379.7940	26.01	-4.39	60445.280	2.5	86767.870	2.5
379.7950	26.00	-2.06	20874.482	3.0	47197.000	2.0
379.7966	25.01	-4.60	47073.560	3.0	73395.970	2.0
379.7991	18.01	-3.62	172816.210	.5	199138.450	1.5
379.8025	28.01	-2.97	110573.360	2.5	136895.360	3.5
379.8050	44.00	-.83	3064.986	0.0	29394.287	0.0
379.8089	25.01	-4.57	47073.560	3.0	73395.120	3.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
379.8090	25.01	-2.87	81780.700	3.0	108102.250	3.0
379.8091	27.00	-2.94	17233.680	3.5	43555.220	3.5
379.8100	90.00	-1.09	4920.109	0.0	31249.063	0.0
379.8120	41.00	-.17	322.630	0.0	26651.445	0.0
379.8131	18.01	-2.19	184191.710	.5	210512.980	1.5
379.8151	23.00	-1.63	15688.800	2.5	42009.930	2.5
379.8233	28.01	-4.54	77332.470	2.5	103653.030	3.5
379.8249	24.01	-2.50	50667.330	3.5	76987.780	2.5
379.8250	42.00	-.03	0.000	0.0	26327.914	0.0
379.8276	22.00	-.33	11531.760	2.0	37852.021	1.0
379.8317	10.01	-3.92	276511.820	.5	302831.800	.5
379.8324	10.01	-2.29	280989.530	1.5	307309.460	.5
379.8351	26.01	-4.20	18886.750	.5	45206.490	.5
379.8364	22.00	-1.22	22404.690	3.0	48724.340	2.0
379.8370	25.02	-2.64	94771.470	2.5	121091.080	1.5
379.8390	64.01	-.30	10324.163	0.0	36651.107	0.0
379.8405	24.00	-4.46	23933.900	4.0	50253.270	5.0
379.8444	15.01	-2.46	111508.500	0.0	137827.600	1.0
379.8457	21.00	-4.14	18504.050	.5	44823.060	1.5
379.8513	26.00	-1.30	7376.762	4.0	33695.378	5.0
379.8513	25.00	-1.39	38669.600	3.5	64988.220	3.5
379.8573	24.00	-4.30	27223.050	2.0	53541.250	2.0
379.8594	26.01	-4.30	21308.080	1.5	47626.140	.5
379.8631	24.00	-.87	33040.100	2.0	59357.900	2.0
379.8641	23.00	-1.05	13801.530	1.5	40119.260	2.5
379.8648	25.02	-3.37	90746.060	5.5	117063.740	4.5
379.8660	72.00	-.92	10485.478	0.0	36810.551	0.0
379.8689	23.00	-2.54	18126.270	1.5	44443.670	1.5
379.8750	69.01	-1.05	8872.327	0.0	35196.776	0.0
379.8818	17.01	.32	146333.800	2.0	172650.300	3.0
379.8862	23.03	-1.30	257143.200	2.0	283459.400	3.0
379.8869	25.00	-2.77	34423.270	3.5	60739.420	3.5
379.8900	44.00	-.06	1129.205	0.0	27452.614	0.0
379.8921	25.02	-3.37	192880.160	3.5	219195.950	4.5
379.8946	26.01	-1.65	73016.330	3.5	99331.950	4.5
379.9010	63.01	-1.20	10243.505	0.0	36566.152	0.0
379.9040	58.01	-1.07	3548.931	0.0	29871.370	0.0
379.9064	26.01	-4.58	72130.440	4.5	98445.240	4.5
379.9164	15.01	-1.36	101636.490	1.0	127950.600	2.0
379.9190	46.00	-.99	7662.464	0.0	33983.864	0.0
379.9200	92.01	-.52	8307.725	0.0	34629.056	0.0
379.9213	24.00	-1.68	23163.270	0.0	49477.040	1.0
379.9252	24.00	-1.62	28679.430	1.0	54992.930	2.0
379.9252	25.00	-1.84	17282.000	3.5	43595.500	2.5
379.9278	28.01	-3.31	94729.250	2.5	121042.570	1.5
379.9310	45.00	.13	5646.026	0.0	31966.595	0.0
379.9317	25.02	-3.45	192392.200	3.5	218705.250	2.5
379.9350	44.00	-.21	0.000	0.0	26320.292	0.0
379.9369	28.01	-1.81	104503.220	2.5	130815.910	3.5
379.9379	18.01	-.73	157673.320	2.5	183985.940	1.5
379.9535	25.02	-2.52	192665.800	4.5	218977.340	3.5
379.9540	62.01	-1.18	1451.835	0.0	27770.810	0.0
379.9550	26.00	-.95	7728.058	3.0	34039.495	4.0
379.9555	15.01	-.49	102799.200	1.0	129110.600	1.0
379.9578	23.00	-2.28	15078.250	.5	41389.490	1.5
379.9649	24.00	-1.51	28682.180	2.0	54992.930	2.0
379.9672	24.00	-3.23	23512.000	1.0	49822.590	2.0
379.9714	23.00	-1.17	15688.800	2.5	41999.100	1.5
379.9780	22.01	-2.83	4897.600	3.5	31207.440	2.5
379.9805	27.00	-2.43	14036.280	1.5	40345.950	2.5
379.9874	25.00	-3.13	37148.660	5.5	63457.850	5.5
379.9880	29.00	-1.58	44522.951	0.0	70839.572	0.0
379.9908	24.00	-.49	31393.400	5.0	57702.360	5.0
379.9909	23.00	-.71	2153.200	1.5	28462.150	2.5
379.9964	10.01	-.90	254165.010	1.5	280473.580	1.5
380.0120	77.00	-.90	0.000	0.0	26314.958	0.0
380.0147	19.01	-.19	186685.600	2.0	212992.900	1.0
380.0149	21.00	-4.37	18515.770	1.5	44823.060	1.5
380.0191	27.01	-3.34	24074.600	2.0	50381.600	3.0
380.0220	25.01	-.33	82136.200	4.0	108443.000	5.0
380.0228	22.00	-3.40	19937.859	1.0	46244.600	2.0
380.0231	18.02	-1.42	213950.870	2.0	240257.590	1.0
380.0260	44.00	-.56	8469.040	0.0	34783.029	0.0
380.0298	24.00	-3.91	24940.610	2.0	51246.870	1.0
380.0309	25.00	-2.51	35165.050	1.5	61471.230	2.5
380.0370	62.01	-1.22	3468.273	0.0	29781.500	0.0
380.0380	72.00	-1.28	0.000	0.0	26313.158	0.0
380.0451	25.01	-1.19	82136.200	4.0	108441.400	4.0
380.0457	10.01	-4.26	276511.820	.5	302816.980	1.5
380.0502	29.00	-1.35	44926.239	0.0	71238.552	0.0
380.0556	25.00	-1.00	31001.150	2.5	57305.620	3.5
380.0585	27.00	-4.34	29216.370	2.5	55520.640	3.5
380.0610	24.00	-4.02	7593.160	2.0	33897.260	1.0
380.0662	24.00	-2.19	33113.270	4.0	59417.010	3.0
380.0662	25.02	-3.10	192365.520	1.5	218669.260	1.5
380.0740	12.02	-1.79	582747.300	2.0	609050.500	2.0
380.0798	25.01	-2.37	82136.200	4.0	108439.000	3.0
380.0811	10.01	-1.92	281720.280	1.5	308022.990	.5
380.0890	62.01	-.89	2177.753	0.0	28487.380	0.0
380.0923	28.00	-2.52	31441.665	2.0	57743.596	3.0
380.0940	41.00	-.27	9275.615	0.0	35584.896	0.0
380.0959	28.01	-3.95	107142.210	1.5	133443.890	2.5
380.1016	10.01	-1.96	280768.520	.5	307069.810	1.5
380.1020	50.00	-.37	8549.697	0.0	34858.425	0.0
380.1058	11.02	-3.33	440472.000	2.5	466773.000	1.5
380.1082	22.00	-1.33	15156.787	4.0	41457.620	3.0
380.1134	25.00	-2.80	37148.660	5.5	63449.130	5.5
380.1146	26.00	-4.28	27666.334	1.0	53966.720	2.0
380.1150	92.00	-.58	564.603	0.0	26872.431	0.0
380.1159	22.00	-1.79	19421.576	3.0	45721.878	4.0
380.1159	23.00	-3.06	137.380	2.5	26437.680	1.5
380.1180	24.01	-1.26	50687.630	2.5	76987.780	2.5
380.1207	25.01	-2.64	43850.420	2.0	70150.390	1.0
380.1228	27.00	-2.80	23184.230	2.5	49484.050	3.5
380.1300	41.00	.13	10969.423	0.0	37276.213	0.0
380.1363	26.00	-2.08	29798.960	4.0	56097.850	3.0
380.1432	15.01	-2.72	101636.490	1.0	127934.900	1.0
380.1440	90.00	-.43	7420.492	0.0	33726.313	0.0
380.1463	17.02	-3.32	216524.600	2.5	242822.800	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
380.1477	12.02	-2.94	582747.300	2.0	609045.400	3.0
380.1497	29.01	-1.04	122223.840	0.0	148521.800	1.0
380.1506	12.02	-.88	582747.300	2.0	609045.200	3.0
380.1520	74.00	-1.06	13227.833	0.0	39533.100	0.0
380.1530	58.01	.77	7178.519	0.0	33483.717	0.0
380.1535	30.02	.01	235623.900	3.0	261921.600	2.0
380.1564	25.00	-3.49	34463.370	1.5	60760.870	1.5
380.1603	27.00	-2.00	21920.090	4.5	48217.320	3.5
380.1605	28.01	-3.27	105499.050	3.5	131796.260	2.5
380.1613	24.00	-1.83	33060.740	3.0	59357.900	2.0
380.1627	25.01	-.50	82144.340	3.0	108441.400	4.0
380.1678	23.00	-3.24	15724.220	3.5	42020.930	3.5
380.1682	26.00	-1.01	22838.320	2.0	49135.003	3.0
380.1749	10.01	-3.04	282680.650	.5	308976.870	.5
380.1751	30.02	-2.97	238336.200	2.0	264632.400	3.0
380.1788	25.00	-2.95	37148.660	5.5	63444.610	4.5
380.1799	26.00	-1.62	22946.810	1.0	49242.680	2.0
380.1840	42.00	.45	20003.065	0.0	46306.118	0.0
380.1892	25.02	-1.84	192012.750	1.5	218307.980	2.5
380.1898	25.00	-.83	25265.740	5.5	51560.930	5.5
380.1920	74.00	-.24	19115.832	0.0	45418.332	0.0
380.1944	22.00	-4.44	18911.399	2.0	45206.270	3.0
380.1972	26.00	-1.25	26874.534	5.0	53169.210	6.0
380.1974	25.01	-1.05	82144.340	3.0	108439.000	3.0
380.2001	26.00	-.13	24180.848	3.0	50475.320	4.0
380.2127	25.00	-2.03	37164.250	6.5	63457.850	5.5
380.2140	90.01	-1.70	9517.587	0.0	35818.565	0.0
380.2166	27.00	-4.14	25739.930	2.5	52033.260	1.5
380.2213	25.00	-4.16	23719.520	1.5	50012.530	2.5
380.2234	25.01	-2.07	82144.340	3.0	108437.200	2.0
380.2279	26.00	-2.46	26623.726	2.0	52916.278	2.0
380.2416	18.01	-3.55	192712.000	1.5	219003.600	2.5
380.2490	8.02	-2.29	366486.910	1.0	392778.000	1.0
380.2630	16.01	-.49	129858.070	1.5	156148.190	.5
380.2677	18.01	-2.90	192712.000	1.5	219001.800	1.5
380.2691	22.00	-4.77	19421.576	3.0	45711.280	4.0
380.2719	25.00	-3.32	38120.180	4.5	64409.690	3.5
380.2742	25.01	-2.44	81812.900	2.0	108102.250	3.0
380.2788	25.01	-3.10	51553.060	5.0	77842.090	6.0
380.2792	28.00	-3.47	27414.893	2.0	53703.899	1.0
380.2816	26.01	-.14	16369.390	3.5	42658.230	3.5
380.2827	10.01	-2.40	292651.320	1.5	318940.080	1.5
380.2880	23.00	-2.18	10892.500	3.5	37180.900	4.5
380.2893	21.00	-3.48	15672.550	1.5	41960.860	2.5
380.2920	41.00	-.14	645.260	0.0	26940.843	0.0
380.2948	25.01	-.69	82151.070	2.0	108439.000	3.0
380.3070	90.00	-.68	0.000	0.0	26294.546	0.0
380.3072	25.00	-1.55	34938.700	4.5	61225.770	5.5
380.3097	25.00	-3.08	38351.780	.5	64638.680	.5
380.3100	58.01	-.25	2823.013	0.0	29117.352	0.0
380.3111	8.01	-.30	214229.480	1.5	240516.280	1.5
380.3114	23.01	-3.73	46739.980	2.0	73026.760	2.0
380.3132	10.01	-2.52	281720.280	1.5	308006.930	.5
380.3137	8.01	-4.05	185235.360	.5	211521.980	1.5
380.3171	18.01	.25	173393.380	2.5	199679.760	2.5
380.3200	44.00	.34	20083.723	0.0	46377.370	0.0
380.3208	25.01	-1.07	82151.070	2.0	108437.200	2.0
380.3245	26.00	-2.22	18378.187	2.0	44664.061	2.0
380.3256	30.02	-3.62	235623.900	3.0	261909.700	4.0
380.3269	23.00	-1.33	15724.220	3.5	42009.930	2.5
380.3285	23.00	-3.55	15664.750	1.5	41950.350	2.5
380.3389	25.00	-1.17	37164.250	6.5	63449.130	5.5
380.3413	26.02	-5.00	93412.930	2.0	119697.640	2.0
380.3439	25.01	-2.07	82151.070	2.0	108435.600	1.0
380.3477	23.00	-.56	2311.370	3.5	28595.640	3.5
380.3487	28.00	-1.98	29888.505	2.0	56172.704	3.0
380.3530	17.02	-1.89	179663.000	1.5	205946.900	2.5
380.3780	23.00	-.72	10892.500	3.5	37174.680	3.5
380.3840	58.01	-.31	12179.286	0.0	38468.510	0.0
380.3880	41.00	-.70	967.890	0.0	27256.837	0.0
380.3881	25.01	-.92	82155.720	1.0	108437.200	2.0
380.3900	23.00	-1.32	323.420	3.5	26604.770	3.5
380.3940	62.00	-.49	0.000	0.0	26288.532	0.0
380.3980	90.00	-.45	8711.012	0.0	34999.268	0.0
380.4009	26.00	-1.66	26874.534	5.0	53155.130	4.0
380.4018	25.00	-2.12	25265.740	5.5	51546.270	4.5
380.4053	25.00	-4.66	23818.870	.5	50099.160	1.5
380.4078	24.00	-4.27	31055.350	5.0	57335.470	4.0
380.4080	74.00	-.69	19680.435	0.0	45968.000	0.0
380.4112	25.01	-1.23	82155.720	1.0	108435.600	1.0
380.4160	58.01	-1.12	5565.369	0.0	31852.381	0.0
380.4228	28.01	-4.75	110573.360	2.5	136852.440	1.5
380.4279	9.02	.05	440359.260	3.5	466637.990	4.5
380.4305	6.00	-2.30	61981.820	1.0	88260.370	2.0
380.4390	64.00	.22	7339.834	0.0	33625.257	0.0
380.4466	25.01	-1.23	82158.160	0.0	108435.600	1.0
380.4506	24.00	-2.03	28679.430	1.0	54956.590	1.0
380.4520	42.00	-.49	16615.449	0.0	42899.974	0.0
380.4579	24.01	-2.44	64448.840	2.5	90725.500	3.5
380.4593	24.00	-1.27	31106.370	4.0	57382.930	5.0
380.4610	26.00	-2.85	26406.490	1.0	52682.930	2.0
380.4651	25.00	-1.22	33825.490	2.5	60101.650	2.5
380.4740	41.00	.45	11130.738	0.0	37413.743	0.0
380.4747	25.00	-1.78	25285.430	4.5	51560.930	5.5
380.4782	26.00	-2.35	24338.766	3.0	50614.020	4.0
380.4787	24.00	.45	24282.340	4.0	50557.560	4.0
380.4894	22.00	-4.70	14028.470	2.0	40302.950	3.0
380.4904	24.00	-2.62	28682.180	2.0	54956.590	1.0
380.4919	23.00	-.63	15264.830	5.5	41539.140	4.5
380.4964	25.01	-4.97	82136.200	4.0	108410.200	3.0
380.4978	25.01	-4.15	82136.200	4.0	108410.100	4.0
380.5022	25.01	-3.72	82136.200	4.0	108409.800	5.0
380.5114	22.00	-.46	16875.190	2.0	43148.150	3.0
380.5148	25.00	-2.53	34938.700	4.5	61211.430	4.5
380.5174	10.01	-2.37	280797.260	2.5	307069.810	1.5
380.5232	29.00	-1.11	45894.129	0.0	72173.736	0.0
380.5268	17.01	.45	146469.000	3.0	172740.900	4.0
380.5342	26.00	-1.98	27559.568	2.0	53830.960	3.0
380.5345	26.00	.40	26627.612	4.0	52898.980	5.0
380.5461	22.00	-.46	16961.420	3.0	43231.990	4.0
380.5466	22.00	-1.86	386.874	4.0	26657.409	4.0
380.5532	26.01	-6.32	15844.710	4.5	42114.790	4.5
380.5539	10.01	-4.14	302425.870	1.5	328695.900	2.5
380.5542	10.01	-3.69	302425.870	1.5	328695.880	1.5
380.5630	62.01	-1.47	806.575	0.0	27083.433	0.0
380.5694	9.01	-2.18	270508.290	2.0	296777.250	2.0
380.5755	28.01	-3.41	93528.440	3.5	119796.980	2.5
380.5766	27.00	-2.04	18389.570	1.5	44658.030	1.5
380.5787	22.00	-3.88	19421.576	3.0	45689.890	3.0
380.5810	90.01	-1.45	6613.917	0.0	32889.532	0.0
380.5917	24.00	-2.12	31009.000	3.0	57276.420	3.0
380.5920	45.00	.27	13389.148	0.0	39664.004	0.0
380.5930	42.00	.43	25649.091	0.0	51923.878	0.0
380.6024	27.00	-4.28	26450.020	2.5	52716.700	3.5
380.6063	24.00	-2.13	31106.370	4.0	57372.780	4.0
380.6070	72.01	.39	21535.558	0.0	47809.379	0.0
380.6129	25.01	-4.75	82144.340	3.0	108410.300	2.0
380.6143	25.01	-4.11	82144.340	3.0	108410.200	3.0
380.6158	25.01	-3.91	82144.340	3.0	108410.100	4.0
380.6160	23.01	-3.68	46879.940	2.0	73145.680	3.0
380.6181	27.02	-4.65	77121.100	4.5	103386.700	4.5
380.6200	25.02	-2.05	191915.430	.5	218180.900	1.5
380.6200	41.00	-.08	10808.108	0.0	37081.031	0.0
380.6214	26.00	-.66	27543.000	1.0	53808.370	1.0
380.6250	10.01	-1.41	252953.540	1.5	279218.660	2.5
380.6425	15.01	-3.76	101636.490	1.0	127900.400	0.0
380.6452	22.00	-.62	16817.190	1.0	43080.920	2.0
380.6453	23.00	-1.54	15664.750	1.5	41928.470	.5
380.6470	62.00	.07	3952.218	0.0	30223.278	0.0
380.6519	16.01	-.95	129858.070	1.5	156121.330	2.5
380.6525	14.02	.71	175336.260	2.0	201599.480	3.0
380.6555	24.00	-3.64	7927.470	2.0	34190.490	2.0
380.6573	23.01	-2.41	20617.050	2.0	46879.940	2.0
380.6630	41.00	-.15	14115.066	0.0	40385.021	0.0
380.6697	28.01	-1.35	104503.220	2.5	130765.260	3.5
380.6699	26.00	.12	26351.049	5.0	52613.072	5.0
380.6699	14.02	-.04	175336.260	2.0	201598.280	2.0
380.6711	25.00	.26	17052.290	4.5	43314.230	5.5
380.6760	45.00	-.84	2581.041	0.0	28850.099	0.0
380.6764	26.00	-3.56	20874.482	3.0	47136.058	2.0
380.6768	23.00	-3.06	15688.800	2.5	41950.350	2.5
380.6770	62.01	-1.57	2984.328	0.0	29253.317	0.0
380.6779	14.02	-1.22	175336.260	2.0	201597.730	1.0
380.6804	23.00	-.30	11100.650	4.5	37361.950	4.5
380.6811	24.00	-.26	27816.880	5.0	54078.130	5.0
380.6816	26.01	-4.48	38164.240	2.5	64425.460	2.5
380.6827	10.01	-4.57	302307.750	2.5	328568.890	1.5
380.6871	25.00	-.97	25285.430	4.5	51546.270	4.5
380.6962	25.00	-.40	35769.970	3.5	62030.180	4.5
380.6985	23.01	-8.87	13741.610	3.0	40001.660	2.0
380.7095	25.00	-2.22	37586.030	1.5	63845.320	1.5
380.7101	22.00	-3.05	17540.205	3.0	43799.455	2.0
380.7104	25.01	-4.36	82151.070	2.0	108410.300	2.0
380.7119	25.01	-4.36	82151.070	2.0	108410.200	3.0
380.7129	21.00	-3.44	15756.510	2.5	42015.570	3.5
380.7138	28.00	-1.09	3409.925	2.0	29668.918	3.0
380.7141	22.00	-5.91	6598.749	2.0	32857.721	3.0
380.7148	26.00	-3.01	27666.334	1.0	53925.260	1.0
380.7205	22.00	.07	19573.968	4.0	45832.500	5.0
380.7206	25.00	-1.72	25287.740	3.5	51546.270	4.5
380.7230	60.01	-1.26	483.945	0.0	26749.760	0.0
380.7435	23.01	-3.20	20622.990	3.0	46879.940	2.0
380.7509	23.00	-.91	2112.320	.5	28368.760	1.5
380.7539	26.00	-.89	17927.378	1.0	44183.607	2.0
380.7555	28.00	-3.77	29320.782	3.0	55576.905	3.0
380.7638	25.01	-4.40	79913.350	4.0	106168.900	5.0
380.7650	42.00	-.17	21051.613	0.0	47314.531	0.0
380.7650	64.01	-.33	10324.163	0.0	36587.081	0.0
380.7690	58.01	-.72	5646.026	0.0	31908.668	0.0
380.7720	69.00	-.93	0.000	0.0	26262.435	0.0
380.7736	24.00	-3.43	31106.370	4.0	57361.240	3.0
380.7740	75.00	-.73	14921.641	0.0	41183.938	0.0
380.7752	22.00	-.62	17075.310	4.0	43330.070	5.0
380.7870	90.01	-.63	9114.300	0.0	35375.701	0.0
380.7918	24.00	-2.69	24303.940	3.0	50557.560	4.0
380.7920	62.01	-1.80	0.000	0.0	26261.056	0.0
380.8066	12.02	-.68	564731.600	1.0	590984.200	0.0
380.8076	24.00	-1.73	36577.730	4.0	62830.260	5.0
380.8095	23.00	-1.98	18438.070	4.5	44690.470	3.5
380.8100	27.00	-2.78	3482.820	4.5	29735.180	3.5
380.8120	58.01	-.20	2339.068	0.0	28598.745	0.0
380.8163	29.01	-3.53	120684.550	3.0	146936.480	2.0
380.8199	28.01	-3.72	105499.050	3.5	131750.730	3.5
380.8211	26.01	-3.19	74498.150	1.5	100749.750	2.5
380.8264	28.01	-3.75	95893.760	1.5	122144.990	2.5
380.8284	26.00	-2.08	24335.764	2.0	50586.857	3.0
380.8311	27.00	-3.35	29269.730	4.5	55520.640	3.5
380.8337	25.00	-2.52	38669.600	3.5	64920.330	3.5
380.8412	23.00	-3.03	15770.720	4.5	42020.930	3.5
380.8460	62.01	-1.12	2661.698	0.0	28919.030	0.0
380.8501	23.03	-3.01	257690.800	3.0	283940.400	2.0
380.8505	25.00	-1.89	25281.040	2.5	51530.610	3.5
380.8518	23.00	-1.26	0.000	1.5	26249.480	1.5
380.8524	10.01	-2.55	281171.380	2.5	307420.820	2.5
380.8531	21.00	-2.79	15672.550	1.5	41921.940	1.5
380.8578	18.01	-2.54	132481.140	2.5	158730.210	2.5
380.8605	28.01	-4.32	94067.140	1.5	120316.020	.5
380.8680	44.00	.19	14599.011	0.0	40854.827	0.0
380.8720	24.00	-3.95	31028.330	2.0	57276.420	3.0
380.8720	26.00	-3.09	24338.766	3.0	50586.857	3.0
380.8731	26.00	-1.22	20641.110	4.0	46889.126	4.0
380.8752	28.01	-4.95	100490.950	1.5	126738.820	1.5
380.8790	57.01	-1.93	3226.301	0.0	29481.358	0.0
380.8930	92.00	.30	6210.629	0.0	32464.721	0.0
380.8949	9.02	-1.45	464921.740	3.5	491168.250	2.5
380.9035	26.00	-2.28	23051.744	0.0	49297.660	1.0
380.9083	23.00	-2.72	18198.080	2.5	44443.670	1.5
380.9136	25.00	-2.12	34423.270	3.5	60668.490	4.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
380.9142	25.00	-2.00	25285.430	4.5	51530.610	3.5
380.9220	58.01	-.21	4839.451	0.0	31091.545	0.0
380.9230	74.00	-1.71	2903.671	0.0	29155.696	0.0
380.9284	27.02	-3.31	146950.700	2.5	173194.900	2.5
380.9284	27.02	-3.31	146950.700	2.5	173194.900	2.5
380.9350	28.00	-2.74	32982.280	1.0	59226.030	1.0
380.9456	18.01	-.42	155351.030	1.5	181594.050	2.5
380.9477	25.00	-1.09	25287.740	3.5	51530.610	3.5
380.9479	24.00	-.53	33762.740	6.0	60005.600	5.0
380.9500	45.00	-1.13	11856.655	0.0	38106.819	0.0
380.9500	58.01	-1.09	4436.164	0.0	30686.328	0.0
380.9517	17.01	.17	146330.000	1.0	172572.600	2.0
380.9592	25.00	-.59	17282.000	3.5	43524.080	3.5
380.9601	23.00	-1.06	2220.130	2.5	28462.150	2.5
380.9667	16.01	-.82	129787.710	.5	156029.280	1.5
380.9750	62.01	-1.24	2661.698	0.0	28910.139	0.0
380.9811	26.01	-1.60	77742.780	2.5	103983.350	3.5
380.9814	25.02	-4.17	192576.420	2.5	218816.970	2.5
380.9833	25.02	-2.56	94850.660	1.5	121091.080	1.5
380.9858	26.01	-4.30	73091.700	4.5	99331.950	4.5
380.9880	62.01	-1.47	806.575	0.0	27054.121	0.0
380.9953	9.02	-1.69	440582.120	4.5	466821.720	3.5
380.9957	20.02	-2.02	324660.470	3.0	350900.040	2.0
381.0040	11.02	-4.75	442710.500	1.5	468949.500	.5
381.0068	17.01	-.27	146333.800	2.0	172572.600	2.0
381.0081	28.01	-4.36	100619.260	4.5	126857.970	5.5
381.0100	58.01	-1.48	3710.246	0.0	29956.276	0.0
381.0102	22.00	-2.20	20006.032	2.0	46244.600	2.0
381.0198	22.00	-4.82	18825.890	1.0	45063.800	2.0
381.0203	26.01	-4.29	37227.320	.5	63465.190	1.5
381.0257	23.01	-4.62	47056.320	4.0	73293.820	5.0
381.0329	20.02	-4.50	359520.600	2.0	385757.600	3.0
381.0365	28.01	-3.22	101754.800	2.5	127991.560	3.5
381.0380	74.00	-.05	17986.627	0.0	44230.729	0.0
381.0391	23.00	-2.53	15264.830	5.5	41501.410	4.5
381.0490	41.00	.58	11453.368	0.0	37696.712	0.0
381.0577	30.02	.01	237506.800	1.0	263742.100	2.0
381.0577	30.02	-1.15	237506.800	1.0	263742.100	2.0
381.0665	22.01	-3.09	40581.800	2.5	66816.490	1.5
381.0680	25.00	-1.17	25281.040	2.5	51515.630	2.5
381.0681	25.01	-2.17	55759.270	3.0	81993.850	4.0
381.0689	28.01	-3.88	108548.610	1.5	134783.140	2.5
381.0712	24.01	-2.17	40415.340	.5	66649.710	1.5
381.0716	22.00	-2.87	18141.229	5.0	44375.570	5.0
381.0720	69.01	-.88	8711.012	0.0	34952.772	0.0
381.0749	26.00	-.94	26623.726	2.0	52857.840	1.0
381.0800	74.00	-.44	13711.778	0.0	39952.987	0.0
381.0824	27.00	-2.74	29216.370	2.5	55449.970	2.5
381.0900	58.01	-.78	5887.999	0.0	32128.520	0.0
381.0909	26.00	-3.90	21038.987	2.0	47271.999	1.0
381.0958	8.02	-1.59	267632.590	2.0	293865.260	1.0
381.0990	9.02	-2.08	440069.510	1.5	466301.960	2.5
381.0991	23.01	-3.38	20522.140	1.0	46754.590	1.0
381.0995	20.02	-4.23	359543.080	4.0	385775.500	4.0
381.1027	26.00	-1.39	21999.132	4.0	48231.330	5.0
381.1030	41.00	-.91	80.658	0.0	26320.284	0.0
381.1049	27.00	-6.37	0.000	4.5	26232.050	3.5
381.1059	26.00	-4.03	20874.482	3.0	47106.463	4.0
381.1060	27.00	-2.43	7442.410	3.5	33674.380	2.5
381.1060	60.01	-1.25	2984.328	0.0	29223.747	0.0
381.1198	28.01	-2.28	105439.850	1.5	131670.670	2.5
381.1211	18.01	-1.65	160239.350	1.5	186470.280	1.5
381.1239	28.01	-4.51	111783.790	3.5	138014.530	2.5
381.1279	28.00	-3.36	1713.080	1.0	27943.543	1.0
381.1299	23.00	-2.28	18302.270	3.5	44532.600	2.5
381.1330	63.00	.48	13953.751	0.0	40191.311	0.0
381.1350	8.05	-.35	640040.000	0.0	666277.422	0.0
381.1390	42.00	.10	21454.900	0.0	47692.047	0.0
381.1447	22.00	-1.46	15108.121	3.0	41337.430	2.0
381.1528	9.02	-.08	464939.500	2.5	491168.250	2.5
381.1620	58.01	-.28	11614.683	0.0	37850.247	0.0
381.1630	27.00	-4.59	26232.050	3.5	52460.100	2.5
381.1653	25.00	-2.12	25287.740	3.5	51515.630	2.5
381.1709	25.02	-3.54	192172.890	2.5	218400.400	3.5
381.1738	28.01	-1.62	104503.220	2.5	130730.530	2.5
381.1770	60.01	-1.57	0.000	0.0	26234.531	0.0
381.1778	23.01	-2.19	47051.890	3.0	73278.920	4.0
381.1780	72.00	-1.42	2339.068	0.0	28573.531	0.0
381.1796	26.00	-1.89	27166.804	4.0	53393.715	4.0
381.1883	26.00	-1.19	22249.430	3.0	48475.740	3.0
381.1938	24.00	-2.69	24833.860	3.0	51059.790	4.0
381.1950	29.00	-1.39	45894.129	0.0	72127.422	0.0
381.1980	9.02	-1.25	440069.510	1.5	466295.150	1.5
381.2000	92.00	.23	0.000	0.0	26232.949	0.0
381.2070	62.01	-1.27	806.575	0.0	27039.042	0.0
381.2078	8.01	-3.93	248514.230	1.5	274739.200	2.5
381.2156	27.00	-4.73	25937.590	4.5	52162.020	3.5
381.2210	58.01	-.54	4678.136	0.0	30909.640	0.0
381.2241	24.00	-2.65	25177.390	4.0	51401.240	5.0
381.2255	24.00	-.36	27703.840	4.0	53927.590	4.0
381.2283	25.01	-1.98	44521.520	4.0	70745.080	3.0
381.2360	24.00	-.97	31364.330	3.0	57587.360	4.0
381.2367	10.01	-3.28	292033.150	2.5	318256.130	2.5
381.2422	23.01	-4.83	47056.320	4.0	73278.920	4.0
381.2450	45.00	-.54	14276.381	0.0	40506.233	0.0
381.2460	27.00	-1.82	14399.280	.5	40621.620	1.5
381.2470	42.00	-.49	16615.449	0.0	42845.164	0.0
381.2524	25.01	-2.02	59537.400	4.0	85759.300	4.0
381.2693	28.01	-3.64	66571.340	2.5	92792.080	3.5
381.2713	30.02	.77	234576.000	4.0	260796.600	3.0
381.2713	30.02	-.39	234576.000	4.0	260796.600	3.0
381.2720	44.00	.25	12743.888	0.0	38971.883	0.0
381.2761	10.01	-4.25	302475.610	.5	328695.680	1.5
381.2786	24.02	-4.93	131448.800	5.0	157668.900	6.0
381.2812	18.02	-4.12	226355.960	2.0	252575.880	1.0
381.2965	27.00	-4.14	25937.590	4.5	52156.460	4.5
381.2966	26.00	-1.67	7728.058	3.0	33946.920	2.0
381.3033	25.00	-1.19	38669.600	3.5	64888.000	4.5
381.3060	26.00	-1.12	20874.482	3.0	47092.693	3.0
381.3066	26.00	-4.52	19390.165	6.0	45608.341	6.0
381.3070	90.01	-.67	9194.957	0.0	35420.544	0.0
381.3114	23.01	-2.37	20522.140	1.0	46739.980	2.0
381.3199	28.01	-2.37	106007.890	2.5	132225.150	1.5
381.3253	22.00	-.27	16817.190	1.0	43034.080	1.0
381.3324	6.00	-3.57	61981.820	1.0	88198.220	2.0
381.3381	22.01	-2.42	4897.600	3.5	31113.610	3.5
381.3385	28.01	-1.54	105439.850	1.5	131655.830	.5
381.3400	4.00	-.60	42565.000	0.0	68788.318	0.0
381.3442	24.00	-3.89	31987.060	4.0	58202.650	3.0
381.3446	23.00	-2.42	2153.200	1.5	28368.760	1.5
381.3474	28.00	-4.15	32973.414	4.0	59188.780	3.0
381.3497	23.00	-1.58	137.380	2.5	26352.590	2.5
381.3501	23.00	-2.45	11100.650	4.5	37315.630	5.5
381.3503	2.01	-1.41	411477.918	0.0	437700.528	0.0
381.3542	29.00	-1.66	44926.239	0.0	71148.580	0.0
381.3545	25.00	-3.71	37148.660	5.5	63363.540	6.5
381.3563	10.01	-3.65	281025.940	2.5	307240.700	3.5
381.3584	26.02	-3.25	184181.390	1.0	210396.000	2.0
381.3637	26.00	-1.20	21715.735	5.0	47929.981	4.0
381.3752	8.01	-3.30	185499.200	2.5	211712.660	2.5
381.3783	15.01	-4.22	105550.450	2.0	131763.700	1.0
381.3790	92.01	-1.08	2258.411	0.0	28479.047	0.0
381.3830	62.00	-.18	3952.218	0.0	30172.579	0.0
381.3870	9.02	-4.47	444056.420	.5	470269.070	.5
381.3872	22.00	-3.02	11639.804	3.0	37852.434	4.0
381.3881	26.00	-.57	29313.008	6.0	55525.560	5.0
381.3909	26.01	-4.93	60270.370	3.5	86482.750	3.5
381.3913	27.00	-2.41	28777.270	3.5	54989.620	3.5
381.3923	26.02	-2.95	184181.390	1.0	210393.670	1.0
381.3930	26.00	-2.13	19621.004	5.0	45833.240	4.0
381.3939	22.00	-4.81	11531.760	2.0	37743.933	3.0
381.3941	25.02	-4.09	191915.430	.5	218127.590	.5
381.3942	25.01	-3.22	44315.170	6.0	70527.320	5.0
381.3970	64.01	-.23	0.000	0.0	26219.399	0.0
381.4008	24.01	-1.14	50667.330	3.5	76879.030	3.5
381.4012	24.00	-4.59	31009.000	3.0	57220.670	2.0
381.4017	9.02	-4.33	444057.440	1.5	470269.070	.5
381.4070	92.01	-1.25	887.233	0.0	27105.944	0.0
381.4115	26.01	-2.48	38214.500	1.5	64425.460	2.5
381.4138	12.02	-3.20	582839.700	3.0	609050.500	2.0
381.4161	9.02	-1.09	464921.740	3.5	491132.380	3.5
381.4168	27.02	-4.27	77383.100	3.5	103593.700	2.5
381.4261	27.00	-3.60	16778.160	2.5	42988.120	3.5
381.4265	24.00	-2.43	36552.130	3.0	62762.060	4.0
381.4309	9.02	.60	464921.740	3.5	491131.370	4.5
381.4315	26.02	-4.74	105895.350	1.0	132104.940	2.0
381.4342	24.00	-.58	31377.960	4.0	57587.360	4.0
381.4390	22.00	-3.20	15975.590	3.0	42184.660	4.0
381.4456	27.00	-1.33	15774.040	1.5	41982.660	1.5
381.4525	26.00	-3.21	8154.713	1.0	34362.860	1.0
381.4559	22.01	-1.67	4628.610	2.5	30836.520	1.5
381.4587	28.01	-4.67	75149.480	4.5	101357.200	4.5
381.4601	24.00	-.43	27597.220	3.0	53804.840	3.0
381.4630	62.01	-1.17	2177.753	0.0	28392.615	0.0
381.4706	25.02	-2.38	192989.050	5.5	219195.950	4.5
381.4721	13.01	-2.61	121365.200	0.0	147572.000	1.0
381.4837	12.02	-1.11	582839.700	3.0	609045.700	4.0
381.4860	44.00	-.07	14921.641	0.0	41134.923	0.0
381.4877	22.00	-.17	16875.190	2.0	43080.920	2.0
381.4881	12.02	-1.84	582839.700	3.0	609045.400	3.0
381.4910	12.02	-2.45	582839.700	3.0	609045.200	3.0
381.4930	58.01	-1.49	3629.588	0.0	29842.389	0.0
381.4988	9.02	-.06	440582.120	4.5	466787.080	4.5
381.5003	28.00	-3.91	29668.918	3.0	55873.780	2.0
381.5010	45.00	.37	16050.847	0.0	42263.098	0.0
381.5010	58.01	-1.31	2097.096	0.0	28309.347	0.0
381.5051	28.01	-4.25	109846.000	3.5	136050.530	2.5
381.5077	21.00	-2.69	15756.510	2.5	41960.860	2.5
381.5078	22.00	-2.28	17540.205	3.0	43744.550	4.0
381.5168	28.00	-2.08	28569.210	2.0	54772.940	3.0
381.5238	21.00	-3.63	15881.760	3.5	42065.010	4.5
381.5373	23.01	-.19	23391.090	5.0	49593.410	5.0
381.5442	23.01	-3.77	47297.080	5.0	73498.930	6.0
381.5446	24.00	-.57	31355.210	2.0	57557.030	3.0
381.5510	27.00	-4.49	26063.110	1.5	52264.490	1.5
381.5510	41.00	-.85	645.260	0.0	26854.076	0.0
381.5513	23.00	-1.46	2112.320	.5	28313.680	.5
381.5660	75.00	-.98	14518.354	0.0	40726.140	0.0
381.5675	23.01	-3.76	20980.920	2.0	47181.170	3.0
381.5695	25.02	-3.13	192172.890	2.5	218373.000	1.5
381.5766	24.00	-1.66	20520.920	3.0	46720.540	4.0
381.5813	28.02	-4.18	156853.400	3.0	183052.700	4.0
381.5814	25.00	-2.08	37164.250	6.5	63363.540	6.5
381.5820	25.00	-3.61	37148.660	5.5	63347.910	4.5
381.5830	58.01	-.02	6452.602	0.0	32659.220	0.0
381.5843	26.00	.21	11976.239	4.0	38175.332	3.0
381.5892	10.01	-4.90	276276.850	1.5	302475.610	.5
381.5899	26.02	-3.82	105906.230	2.0	132104.940	2.0
381.5921	10.01	-2.44	280700.770	3.5	306899.330	2.5
381.5950	23.00	-2.84	13801.530	1.5	39999.890	2.5
381.5959	22.01	-2.24	40798.370	3.5	66996.670	3.5
381.6107	26.01	-4.82	60402.380	2.5	86599.660	2.5
381.6109	22.00	-6.18	14105.680	3.0	40302.950	3.0
381.6116	25.01	-2.48	59537.400	4.0	85734.620	3.0
381.6125	24.00	-4.71	24056.110	5.0	50253.270	5.0
381.6170	24.00	-1.08	20523.690	4.0	46720.540	4.0
381.6189	22.00	-7.01	6661.003	3.0	32857.721	3.0
381.6206	24.00	-1.42	20523.940	5.0	46720.540	4.0
381.6310	58.01	-1.09	5887.999	0.0	32091.321	0.0
381.6314	27.00	-.68	15774.040	1.5	41969.900	.5
381.6340	41.00	-1.64	1532.493	0.0	27735.609	0.0
381.6342	26.00	-.82	17726.985	2.0	43922.652	3.0
381.6390	74.00	-.35	19115.832	0.0	45318.605	0.0
381.6455	28.00	-2.45	28578.046	3.0	54772.940	3.0
381.6461	27.00	-.70	15774.040	1.5	41968.890	2.5
381.6470	45.00	.37	14276.381	0.0	40478.605	0.0
381.6471	25.01	-4.87	44745.460	2.0	70940.240	2.0
381.6480	24.00	-2.06	33762.740	6.0	59957.460	7.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
381.6591	24.00	-.90	31393.400	5.0	57587.360	4.0
381.6640	64.01	-.88	241.973	0.0	26443.029	0.0
381.6684	28.00	-.50	35639.148	3.0	61832.470	4.0
381.6698	56.01	-2.53	45949.496	0.0	72150.154	0.0
381.6712	28.01	-3.82	110573.360	2.5	136766.490	2.5
381.6741	25.00	-1.43	17451.520	2.5	43644.450	1.5
381.6748	9.02	.49	464939.500	2.5	491132.380	3.5
381.6774	24.00	-.68	31364.330	3.0	57557.030	3.0
381.6827	24.00	-2.08	31028.330	2.0	57220.670	2.0
381.6833	8.02	-1.54	306584.800	2.0	332777.100	1.0
381.6872	27.00	-1.75	17233.680	3.5	43425.710	2.5
381.6911	26.00	-4.59	24506.902	2.0	50698.666	2.0
381.6964	24.01	-2.93	50687.630	2.5	76879.030	3.5
381.7018	28.01	-4.04	95893.760	1.5	122084.790	1.5
381.7052	17.01	-1.19	159574.200	2.0	185765.000	2.0
381.7061	27.00	-2.86	29216.370	2.5	55407.100	1.5
381.7165	28.01	-4.60	74300.930	1.5	100490.950	1.5
381.7177	28.01	-4.55	92373.450	2.5	118563.390	3.5
381.7200	72.01	-.23	17583.339	0.0	43780.552	0.0
381.7227	9.02	-1.21	440582.120	4.5	466771.720	3.5
381.7240	77.00	-1.26	6291.287	0.0	32488.225	0.0
381.7270	28.01	-3.29	103653.030	3.5	129842.330	2.5
381.7270	44.00	.69	15405.586	0.0	41602.318	0.0
381.7328	27.01	-8.64	19189.900	4.0	45378.800	4.0
381.7375	18.01	-1.87	179931.770	1.5	206120.350	2.5
381.7391	26.01	-2.01	73143.480	3.5	99331.950	4.5
381.7440	28.01	-1.03	104503.220	2.5	130691.350	1.5
381.7460	58.01	-.25	4758.794	0.0	30954.222	0.0
381.7462	26.00	-2.90	27559.568	2.0	53747.547	3.0
381.7480	74.00	-1.05	2903.671	0.0	29098.962	0.0
381.7490	29.00	-1.93	45894.129	0.0	72089.352	0.0
381.7519	25.01	-4.12	56883.380	1.0	83070.970	2.0
381.7531	28.01	-2.84	105499.050	3.5	131686.560	4.5
381.7562	12.02	-.35	562939.500	2.0	589126.800	1.0
381.7580	40.01	-.88	4194.191	0.0	30388.796	0.0
381.7606	19.01	.10	186388.500	3.0	212575.500	2.0
381.7610	28.01	-4.32	101144.630	3.5	127331.600	2.5
381.7642	26.00	-1.31	26874.534	5.0	53061.280	5.0
381.7645	22.00	.04	16961.420	3.0	43148.150	3.0
381.7677	23.00	-1.78	15571.900	2.5	41758.410	3.5
381.7834	28.01	-3.27	109846.000	3.5	136031.430	2.5
381.7841	24.00	-1.19	20519.600	6.0	46704.980	5.0
381.7855	23.00	-.99	553.020	4.5	26738.310	4.5
381.7917	28.01	-4.56	79823.030	3.5	106007.890	2.5
381.7931	22.00	-3.02	15156.787	4.0	41341.553	5.0
381.7938	27.00	-1.36	20500.710	1.5	46685.430	1.5
381.7951	25.02	-2.76	94906.450	.5	121091.080	1.5
381.7987	23.00	-3.74	11100.650	4.5	37285.030	4.5
381.7994	24.00	-4.06	36577.730	4.0	62762.060	4.0
381.8044	8.02	-4.12	366594.010	2.0	392778.000	1.0
381.8129	26.01	-4.37	72261.830	5.5	98445.240	4.5
381.8130	27.02	-4.81	77472.300	2.5	103655.700	1.5
381.8145	28.00	-3.19	28578.046	3.0	54761.346	4.0
381.8150	28.00	-2.91	28068.091	4.0	54251.353	3.0
381.8189	22.00	-1.49	18192.577	6.0	44375.570	5.0
381.8190	45.00	-.03	9114.300	0.0	35304.720	0.0
381.8218	27.01	-4.24	21624.400	5.0	47807.200	4.0
381.8247	23.00	-.59	0.000	1.5	26182.600	.5
381.8264	22.00	-4.38	19573.968	4.0	45756.450	5.0
381.8267	23.00	-2.61	323.420	3.5	26505.880	2.5
381.8350	39.01	-1.09	967.890	0.0	27157.213	0.0
381.8353	28.00	-1.45	31786.210	3.0	57968.080	3.0
381.8360	62.00	-.85	1451.835	0.0	27641.089	0.0
381.8423	10.01	-.79	254292.190	.5	280473.580	1.5
381.8436	17.01	-.20	146469.000	3.0	172650.300	3.0
381.8438	24.00	-1.67	20523.690	4.0	46704.980	5.0
381.8474	24.00	-.96	20523.940	5.0	46704.980	5.0
381.8480	92.01	-1.64	1693.808	0.0	27882.239	0.0
381.8505	24.00	-2.18	31987.060	4.0	58167.890	4.0
381.8538	28.01	-3.65	105439.850	1.5	131620.450	1.5
381.8600	24.00	-3.40	25106.340	3.0	51286.520	2.0
381.8643	23.00	-.75	15571.900	2.5	41751.780	1.5
381.8660	42.00	-.13	20809.640	0.0	46996.837	0.0
381.8690	58.01	-.97	4436.164	0.0	30623.155	0.0
381.8690	78.00	-1.29	10001.532	0.0	36188.523	0.0
381.8747	24.01	-3.50	38269.670	3.5	64448.840	2.5
381.8762	24.00	-.84	31377.960	4.0	57557.030	3.0
381.8764	22.00	-4.56	20795.599	5.0	46974.650	5.0
381.8780	10.01	-2.23	281998.280	2.5	308177.220	1.5
381.8786	27.00	-2.90	18389.570	1.5	44568.470	2.5
381.8791	25.00	-2.41	37586.030	1.5	63764.900	2.5
381.8817	29.01	-1.06	120919.410	1.0	147098.100	0.0
381.8860	41.01	.16	12743.888	0.0	38929.713	0.0
381.8910	6.00	-4.09	61981.820	1.0	88159.870	0.0
381.8976	24.00	-4.98	31009.000	3.0	57186.600	3.0
381.8989	22.00	-2.61	386.874	4.0	26564.385	3.0
381.8999	24.00	-2.61	33906.650	1.0	60084.090	1.0
381.9017	18.01	-2.34	173347.830	1.5	199525.150	1.5
381.9020	58.01	-.50	4436.164	0.0	30620.892	0.0
381.9030	44.00	-.89	2661.698	0.0	28846.357	0.0
381.9074	28.01	-4.59	70358.940	4.5	96535.870	3.5
381.9093	26.00	-2.79	29313.008	6.0	55489.810	6.0
381.9150	41.00	-.72	4920.109	0.0	31103.946	0.0
381.9163	27.00	-3.59	25937.590	4.5	52113.910	5.5
381.9242	26.02	-4.24	105929.160	3.0	132104.940	2.0
381.9250	92.00	-.44	4194.191	0.0	30377.342	0.0
381.9277	22.00	-2.70	15877.180	2.0	42052.720	3.0
381.9278	28.01	-3.57	73903.250	.5	100078.780	1.5
381.9380	72.00	-.50	13953.751	0.0	40136.011	0.0
381.9388	24.00	.29	35862.820	4.0	62037.600	5.0
381.9420	10.01	-3.64	281720.280	1.5	307894.840	2.5
381.9434	24.00	-4.05	35501.260	3.0	61675.720	2.0
381.9495	26.00	-1.81	27394.676	3.0	53568.720	2.0
381.9548	26.02	-3.33	105906.230	2.0	132079.910	3.0
381.9595	27.00	-3.81	29216.370	2.5	55389.730	1.5
381.9600	2.00	-.71	169087.000	0.0	195267.752	0.0
381.9627	26.00	-2.14	18378.187	2.0	44551.325	3.0
381.9670	63.01	.02	0.000	0.0	26180.272	0.0
381.9732	28.01	-4.09	91800.050	4.5	117972.470	3.5

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
381.9770	44.00	-.96	11372.710	0.0	37552.297	0.0
381.9820	24.00	-2.63	31048.850	1.0	57220.670	2.0
381.9840	18.01	-3.03	179931.770	1.5	206103.450	1.5
381.9870	42.00	.07	20164.380	0.0	46343.281	0.0
381.9892	24.00	-3.22	24093.160	2.0	50264.480	3.0
381.9906	27.00	-1.80	20500.710	1.5	46671.940	2.5
381.9909	16.01	-.65	129858.070	1.5	156029.280	1.5
381.9963	24.00	-1.92	20517.400	2.0	46688.240	3.0
381.9964	23.01	-2.77	47051.890	3.0	73222.720	4.0
381.9976	23.00	-.83	2424.890	4.5	28595.640	3.5
382.0019	25.02	-2.27	191915.430	.5	218085.880	.5
382.0076	25.00	-2.15	35041.370	3.5	61211.430	4.5
382.0100	26.00	-4.16	34636.820	2.0	60806.720	3.0
382.0110	74.00	-1.00	16292.819	0.0	42470.076	0.0
382.0139	27.00	-2.49	28777.270	3.5	54946.900	2.5
382.0174	28.01	-2.88	104646.520	3.5	130815.910	3.5
382.0216	26.00	-4.78	31805.059	3.0	57974.160	2.0
382.0225	28.00	-3.65	28068.091	4.0	54237.136	4.0
382.0231	17.01	.59	147053.700	2.0	173222.700	3 0
382.0259	27.00	-2.15	28345.860	4.5	54514.670	3.5
382.0298	23.00	-.73	8578.520	2.5	34747.060	3.5
382.0335	23.01	-2.44	20522.140	1.0	46690.430	1.0
382.0349	23.01	-4.77	46739.980	2.0	72908.170	3.0
382.0355	25.02	-2.27	192012.750	1.5	218180.900	1.5
382.0427	26.00	.15	6928.266	5.0	33095.922	4.0
382.0476	24.00	-1.26	20520.920	3.0	46688.240	3.0
382.0513	24.00	-4.49	35870.530	4.0	62037.600	5.0
382.0622	26.02	-3.69	117950.320	4.0	144116.640	3.0
382.0649	27.00	-3.61	18389.570	1.5	44555.710	1.5
382.0700	20.02	-2.84	339198.090	1.0	365363.880	1.0
382.0730	72.00	-.55	4516.821	0.0	30689.830	0.0
382.0752	21.00	-3.41	15756.510	2.5	41921.940	1.5
382.0824	27.00	-3.72	17233.680	3.5	43398.620	3.5
382.0872	25.00	-4.72	25281.040	2.5	51445.650	1.5
382.0881	24.00	-1.55	20523.690	4.0	46688.240	3.0
382.0884	29.00	-1.27	44926.239	0.0	71098.193	0.0
382.0920	25.00	-4.10	33825.490	2.5	59989.770	1.5
382.0938	26.01	-4.63	72130.440	4.5	98294.600	5.5
382.1076	28.00	-1.09	28569.210	2.0	54732.425	2.0
382.1131	28.01	-4.63	95017.710	4.5	121180.550	5.5
382.1141	24.00	.17	35813.730	3.0	61976.500	4.0
382.1148	25.01	-4.32	72247.380	3.0	98410.100	2.0
382.1181	26.00	.36	26351.049	5.0	52513.546	6.0
382.1190	41.00	-1.07	8630.355	0.0	34800.213	0.0
382.1218	24.00	-1.88	24897.550	4.0	51059.790	4.0
382.1270	58.01	-.96	2500.383	0.0	28669.693	0.0
382.1407	24.00	-3.05	20517.400	2.0	46678.350	1.0
382.1420	90.01	-.74	11050.080	0.0	37218.363	0.0
382.1452	23.00	-3.11	13801.530	1.5	39962.170	2.5
382.1475	23.00	-.92	2153.200	1.5	28313.680	.5
382.1510	64.01	-1.63	3064.986	0.0	29232.653	0.0
382.1595	24.00	-1.70	20517.400	2.0	46677.060	2.0
382.1623	21.00	-3.98	11557.640	2.5	37717.110	3.5
382.1650	22.00	-2.49	17423.853	2.0	43583.140	3.0
382.1690	8.01	-.69	214169.740	.5	240328.750	.5
382.1700	58.01	-.73	4194.191	0.0	30360.557	0.0
382.1708	22.00	-.53	16875.190	2.0	43034.080	1.0
382.1763	23.00	-2.92	15270.420	1.5	41428.930	2.5
382.1836	26.00	-1.24	21038.987	2.0	47197.000	2.0
382.1910	17.02	-.90	179781.000	.5	205938.500	1.5
382.1917	26.01	-3.94	18886.750	.5	45044.210	1.5
382.1917	24.00	-.53	21856.940	3.0	48014.400	4.0
382.1950	92.00	-.20	3710.246	0.0	29874.900	0.0
382.2004	23.00	-2.34	323.420	3.5	26480.280	3.5
382.2031	22.00	.25	17075.310	4.0	43231.990	4.0
382.2090	44.00	.70	16050.847	0.0	42214.543	0.0
382.2109	24.00	-1.97	20520.920	3.0	46677.060	2.0
382.2150	90.01	-.93	9517.587	0.0	35680.872	0.0
382.2170	64.01	-1.12	4758.794	0.0	30921.942	0.0
382.2260	45.00	.25	7743.122	0.0	33905.654	0.0
382.2267	28.01	-3.29	101740.270	3.5	127895.330	3.5
382.2304	28.01	-1.49	104646.520	3.5	130801.330	4.5
382.2311	24.00	-4.31	24056.110	5.0	50210.870	4.0
382.2367	28.00	-3.03	28578.046	3.0	54732.425	2.0
382.2410	40.00	-.86	0.000	0.0	26161.505	0.0
382.2479	25.00	-3.16	38669.600	3.5	64823.210	2.5
382.2539	24.00	-2.25	35884.400	5.0	62037.600	5.0
382.2577	8.00	-4.00	101135.407	3.0	127288.349	2.0
382.2655	26.02	-3.35	184247.160	2.0	210399.570	3.0
382.2831	26.00	-2.28	27394.676	3.0	53545.882	3.0
382.2893	23.00	-.73	2311.370	3.5	28462.150	2.5
382.2980	42.00	-.92	11050.080	0.0	37207.685	0.0
382.3150	10.01	-3.56	276276.850	1.5	302425.870	1.5
382.3177	26.02	-2.78	184247.160	2.0	210396.000	2.0
382.3207	23.00	-.73	2220.130	2.5	28368.760	1.5
382.3235	24.00	-1.05	33935.650	2.0	60084.090	1.0
382.3251	18.01	-3.78	163506.450	3.5	189654.780	2.5
382.3312	22.00	-2.91	19573.968	4.0	45721.878	4.0
382.3370	23.00	-1.35	15770.720	4.5	41918.240	5.5
382.3405	22.00	-2.97	15108.121	3.0	41255.400	4.0
382.3414	8.00	-3.09	101135.407	3.0	127282.626	3.0
382.3472	23.01	-3.25	46879.940	2.0	73026.760	2.0
382.3507	25.00	.13	17282.000	3.5	43428.580	4.5
382.3517	26.02	-3.18	184247.160	2.0	210393.670	1.0
382.3522	24.00	-2.73	7750.780	0.0	33897.260	1.0
382.3570	59.01	-2.17	0.000	0.0	26153.569	0.0
382.3580	90.01	-.78	13147.176	0.0	39306.676	0.0
382.3600	73.00	-1.71	5968.656	0.0	32122.019	0.0
382.3652	28.01	-4.18	101740.270	3.5	127885.860	4.5
382.3700	58.01	-.33	8227.067	0.0	34379.746	0.0
382.3733	28.00	-2.62	31441.665	2.0	57586.760	2.0
382.3760	20.02	-.62	324660.470	3.0	350805.320	4.0
382.3868	8.00	-3.50	101147.526	2.0	127291.638	1.0
382.3887	25.00	-.48	17451.520	2.5	43595.500	2.5
382.3900	58.01	-.53	2500.383	0.0	28651.694	0.0
382.3984	23.00	-.68	8476.200	1.5	34619.520	2.5
382.4028	10.01	-4.30	302425.870	1.5	328568.890	1.5
382.4029	10.01	-4.33	302425.870	1.5	328568.880	.5
382.4063	26.01	-3.54	74606.970	2.5	100749.750	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
382.4076	26.00	-1.36	20874.482	3.0	47017.170	3.0
382.4086	23.02	-4.23	63315.050	3.5	89457.670	2.5
382.4139	25.01	-3.17	78913.170	2.0	105055.430	2.0
382.4139	24.01	-2.89	64448.840	2.5	90591.100	2.5
382.4150	64.00	0.00	7501.149	0.0	33650.751	0.0
382.4150	74.00	-.69	18873.860	0.0	45023.462	0.0
382.4180	62.01	-1.17	1451.835	0.0	27601.232	0.0
382.4254	27.01	-4.17	22009.230	4.0	48150.700	3.0
382.4299	26.00	-.02	26627.612	4.0	52768.780	4.0
382.4349	8.00	-2.56	101147.526	2.0	127288.349	2.0
382.4358	24.00	-3.42	23512.000	1.0	49652.760	2.0
382.4390	74.00	-.17	19519.120	0.0	45667.081	0.0
382.4411	30.02	-.91	234866.900	1.0	261007.300	2.0
382.4411	30.02	.24	234866.900	1.0	261007.300	2.0
382.4445	26.00	-1.47	0.000	4.0	26140.164	3.0
382.4452	25.00	-3.94	37148.660	5.5	63288.780	5.5
382.4455	17.02	-.32	183042.700	2.5	209182.800	1.5
382.4461	28.01	-3.01	109846.000	3.5	135986.060	3.5
382.4469	24.02	-2.96	71166.100	2.0	97306.100	2.0
382.4567	22.01	-3.34	40798.370	3.5	66937.700	2.5
382.4626	7.01	-.22	170572.610	2.0	196711.540	2.0
382.4673	10.01	-2.31	281998.280	2.5	308136.890	1.5
382.4729	26.00	-4.30	21038.987	2.0	47177.210	1.0
382.4755	28.01	-3.83	105499.050	3.5	131637.100	3.5
382.4783	29.01	-1.22	122223.840	0.0	148361.700	1.0
382.4829	23.01	-7.14	20617.050	2.0	46754.590	1.0
382.4863	22.00	-4.14	19573.968	4.0	45711.280	4.0
382.4880	41.00	-.75	645.260	0.0	26789.871	0.0
382.4916	26.01	-4.92	20830.520	2.5	46967.470	2.5
382.4930	44.00	-.07	10566.135	0.0	36710.404	0.0
382.5008	23.00	-1.88	15724.220	3.5	41860.540	4.5
382.5024	8.00	-2.79	101155.422	1.0	127291.638	1.0
382.5047	29.00	-1.84	30569.200	0.0	56712.670	0.0
382.5087	28.00	-2.96	32982.280	1.0	59118.060	2.0
382.5105	25.01	-3.13	44521.520	4.0	70657.180	5.0
382.5106	26.02	-3.19	117950.320	4.0	144085.970	4.0
382.5187	8.00	-2.39	101147.526	2.0	127282.626	3.0
382.5188	25.02	-2.58	192172.890	2.5	218307.980	2.5
382.5246	12.02	-.97	562634.200	1.0	588768.900	2.0
382.5320	42.00	.11	23390.681	0.0	49532.285	0.0
382.5332	22.00	-4.50	17540.205	3.0	43674.310	4.0
382.5371	24.01	-2.88	38315.000	2.5	64448.840	2.5
382.5375	21.00	-2.53	15881.760	3.5	42015.570	3.5
382.5405	26.00	-2.55	18378.187	2.0	44511.795	2.0
382.5415	23.00	-2.73	13801.530	1.5	39935.070	1.5
382.5504	8.00	-3.05	101155.422	1.0	127288.349	2.0
382.5674	18.01	-.32	173393.380	2.5	199525.150	1.5
382.5692	25.01	-3.81	53781.700	3.0	79913.350	4.0
382.5718	22.00	-3.30	15975.590	3.0	42107.060	4.0
382.5741	28.01	-2.68	109846.000	3.5	135977.310	4.5
382.5756	27.00	-.92	28345.860	4.5	54477.070	3.5
382.5791	24.01	-4.09	47354.630	2.5	73485.600	3.5
382.5839	28.00	-.75	28569.210	2.0	54699.852	3.0
382.5883	26.00	.00	7376.762	4.0	33507.102	3.0
382.6050	64.01	-.77	3952.218	0.0	30088.834	0.0
382.6104	25.02	-3.16	192576.420	2.5	218705.250	2.5
382.6170	73.00	-1.28	12743.888	0.0	38879.684	0.0
382.6189	25.00	-2.70	37420.240	5.5	63548.490	4.5
382.6190	74.00	-.73	15002.299	0.0	41137.959	0.0
382.6200	62.01	-.34	4355.506	0.0	30491.097	0.0
382.6267	27.00	-.83	28777.270	3.5	54904.990	2.5
382.6280	26.00	-4.83	31686.342	2.0	57813.970	3.0
382.6302	28.01	-1.82	105668.780	2.5	131796.260	2.5
382.6364	23.01	-2.49	20980.920	2.0	47107.980	1.0
382.6380	69.00	-1.25	0.000	0.0	26134.362	0.0
382.6420	60.01	-.87	483.945	0.0	26618.034	0.0
382.6424	24.00	-1.34	21847.880	2.0	47974.530	3.0
382.6510	92.01	-1.04	241.973	0.0	26375.447	0.0
382.6517	22.00	-.89	18037.225	4.0	44163.240	5.0
382.6613	25.00	-1.45	24779.320	1.5	50904.680	2.5
382.6631	26.00	-2.11	19788.248	4.0	45913.480	3.0
382.6634	22.00	-2.94	18037.225	4.0	44162.440	4.0
382.6680	63.01	.52	26697.639	0.0	52829.952	0.0
382.6700	42.00	-.44	11372.710	0.0	37504.887	0.0
382.6710	59.01	-1.22	3871.561	0.0	30003.669	0.0
382.6734	25.00	-2.76	37164.250	6.5	63288.780	5.5
382.6753	28.01	-4.99	107737.810	1.5	133862.210	1.5
382.6772	23.00	-.86	8412.940	.5	34537.210	1.5
382.6787	23.00	-2.35	13810.900	.5	39935.070	1.5
382.6789	28.00	-1.56	30979.789	4.0	57103.946	3.0
382.6806	18.01	-.35	157673.320	2.5	183797.360	2.5
382.6844	26.00	-1.54	21999.132	4.0	48122.913	3.0
382.6850	73.00	-2.25	1935.780	0.0	28066.932	0.0
382.6872	25.02	-2.79	94850.660	1.5	120974.250	.5
382.6885	29.01	-.63	120092.200	2.0	146215.700	1.0
382.6900	26.01	-8.65	15844.710	4.5	41968.110	5.5
382.6929	15.01	-2.03	104051.100	3.0	130174.300	2.0
382.6940	90.01	-.52	14276.381	0.0	40406.919	0.0
382.6957	22.00	-1.21	11531.760	2.0	37654.770	2.0
382.6969	23.01	-2.23	20617.050	2.0	46739.980	2.0
382.7001	10.01	-2.23	280947.100	1.5	307069.810	1.5
382.7010	41.00	.02	13389.148	0.0	39519.208	0.0
382.7076	26.01	-2.57	38164.240	2.5	64286.440	3.5
382.7083	24.00	-.13	35807.900	2.0	61930.050	3.0
382.7133	28.00	-3.25	28578.046	3.0	54699.852	3.0
382.7140	76.00	.19	22503.448	0.0	48632.620	0.0
382.7160	42.00	.23	23551.996	0.0	49681.032	0.0
382.7163	8.01	-3.37	232480.100	.5	258601.700	1.5
382.7175	9.02	.13	440069.510	1.5	466191.030	2.5
382.7210	58.01	-.86	5404.054	0.0	31532.748	0.0
382.7227	22.00	-1.68	15220.390	5.0	41341.553	5.0
382.7257	23.01	-2.02	20980.920	2.0	47101.880	2.0
382.7410	28.01	-4.59	107737.810	1.5	133857.730	.5
382.7426	15.01	.07	101636.490	1.0	127756.300	2.0
382.7457	15.01	-3.20	104054.700	1.0	130174.300	2.0
382.7464	23.01	-4.75	47297.080	5.0	73416.630	5.0
382.7471	22.00	-.33	16961.420	3.0	43080.920	2.0
382.7500	27.00	-2.31	28777.270	3.5	54896.570	3.5
382.7534	23.00	-2.72	15270.420	1.5	41389.490	1.5
382.7544	20.02	-1.18	324660.470	3.0	350779.470	3.0
382.7575	26.00	-4.59	21715.735	5.0	47834.529	5.0
382.7583	28.01	-1.32	104646.520	3.5	130765.260	3.5
382.7603	27.02	-4.80	77383.100	3.5	103501.700	3.5
382.7611	22.00	-1.41	20126.055	3.0	46244.600	2.0
382.7662	17.01	.67	147125.700	3.0	173243.900	4.0
382.7668	26.01	-3.54	36126.410	1.5	62244.570	1.5
382.7751	24.00	-1.20	21856.940	3.0	47974.530	3.0
382.7826	26.00	.07	12560.933	3.0	38678.015	2.0
382.7839	23.01	-2.80	20622.990	3.0	46739.980	2.0
382.7855	26.00	-1.65	29313.008	6.0	55429.890	5.0
382.7892	25.00	-1.27	24788.050	2.5	50904.680	2.5
382.7902	24.00	-1.93	24833.860	3.0	50950.420	3.0
382.7937	24.00	-1.64	35813.730	3.0	61930.050	3.0
382.7996	22.00	-4.88	19573.968	4.0	45689.890	3.0
382.8027	20.02	-1.65	348028.130	3.0	374143.840	3.0
382.8085	20.02	-3.26	348028.130	3.0	374143.440	4.0
382.8136	22.00	-5.71	6742.757	4.0	32857.721	3.0
382.8141	26.00	-1.85	27166.804	4.0	53281.735	5.0
382.8154	25.02	-2.78	192012.750	1.5	218127.590	.5
382.8185	22.00	.46	17215.440	5.0	43330.070	5.0
382.8222	23.02	-3.22	63303.120	4.5	89417.500	3.5
382.8240	41.01	-.54	13550.463	0.0	39672.127	0.0
382.8247	6.00	-3.80	61981.820	1.0	88096.030	2.0
382.8249	25.02	-2.34	192392.200	3.5	218506.390	3.5
382.8266	28.01	-2.69	109846.000	3.5	135960.080	4.5
382.8324	24.00	-1.58	35862.820	4.0	61976.500	4.0
382.8380	90.00	-.81	0.000	0.0	26120.769	0.0
382.8402	26.02	-3.54	114339.950	4.0	140453.100	3.0
382.8412	26.02	-4.52	121241.670	4.0	147354.750	5.0
382.8468	28.01	-2.50	109269.830	1.5	135382.530	1.5
382.8480	45.00	.22	9114.300	0.0	35234.327	0.0
382.8499	26.00	-1.64	22249.430	3.0	48361.920	4.0
382.8512	17.02	-3.82	216710.400	3.5	242822.800	2.5
382.8556	23.00	-.35	137.380	2.5	26249.480	1.5
382.8566	21.00	-3.52	18711.030	.5	44823.060	1.5
382.8662	28.00	-2.52	30163.140	2.0	56274.516	2.0
382.8686	22.00	-2.89	15877.180	2.0	41988.390	3.0
382.8710	44.00	-.91	8711.012	0.0	34829.470	0.0
382.8719	28.01	-1.63	104646.520	3.5	130757.510	4.5
382.8751	20.02	-.54	348028.130	3.0	374138.900	4.0
382.8760	24.00	-2.09	27816.880	5.0	53927.590	4.0
382.8834	23.00	-3.53	11100.650	4.5	37210.850	5.5
382.8836	6.00	-3.24	61981.820	1.0	88092.010	1.0
382.8870	42.00	-.14	11775.998	0.0	37893.364	0.0
382.8950	73.00	-1.15	10566.135	0.0	36682.956	0.0
382.9015	24.00	-1.14	31280.350	5.0	57389.320	6.0
382.9098	25.01	-2.41	81993.850	4.0	108102.250	3.0
382.9119	26.00	-2.61	29798.960	4.0	55907.220	5.0
382.9130	74.00	-2.33	1613.150	0.0	27728.743	0.0
382.9223	25.01	-4.49	53805.800	4.0	79913.350	4.0
382.9230	25.01	-4.06	78913.170	2.0	105020.670	1.0
382.9291	24.00	-1.84	21810.840	1.0	47917.930	2.0
382.9316	28.01	-4.94	73903.250	.5	100010.170	.5
382.9323	21.00	-2.70	11610.240	3.5	37717.110	3.5
382.9347	17.01	-2.09	121499.000	2.0	147605.700	3.0
382.9355	12.00	-.28	21850.405	0.0	47957.056	1.0
382.9362	26.00	-2.33	29798.960	4.0	55905.560	4.0
382.9455	24.00	-2.24	35870.530	4.0	61976.500	4.0
382.9455	26.00	-1.36	26406.490	1.0	52512.460	1.0
382.9489	24.00	-.67	31048.850	1.0	57154.590	0.0
382.9522	23.01	-2.74	8640.210	2.0	34745.720	3.0
382.9583	26.00	-3.11	19621.004	5.0	45726.104	5.0
382.9592	9.01	-4.25	243458.900	1.0	269563.930	2.0
382.9659	23.01	-2.52	8841.970	3.0	34946.550	4.0
382.9670	72.00	-.03	16696.107	0.0	42808.017	0.0
382.9685	26.00	-.13	24506.902	2.0	50611.303	3.0
382.9690	58.01	-1.14	1371.178	0.0	27482.952	0.0
382.9706	24.00	-.36	31028.330	2.0	57132.590	1.0
382.9717	25.00	-1.30	17568.480	1.5	43672.660	.5
382.9725	22.00	-1.11	11639.804	3.0	37743.933	3.0
382.9751	10.01	-.38	254165.010	1.5	280268.960	2.5
382.9764	26.00	-2.96	20641.110	4.0	46744.975	3.0
382.9788	23.02	-2.22	61777.150	1.5	87880.850	2.5
382.9790	92.00	-.97	0.000	0.0	26111.092	0.0
382.9795	7.01	-.61	170607.890	1.0	196711.540	2.0
382.9802	17.01	-1.48	146469.000	3.0	172572.600	2.0
382.9806	24.00	-1.41	35934.020	6.0	62037.600	5.0
382.9807	25.01	-2.78	55759.270	3.0	81862.840	4.0
382.9848	25.01	-4.21	72306.810	2.0	98410.100	2.0
382.9877	26.01	-4.41	60441.050	1.5	86544.140	1.5
382.9896	25.02	-3.77	109841.120	3.5	135944.080	4.5
382.9923	24.00	-4.08	35572.940	2.0	61675.720	2.0
382.9952	24.00	-2.28	31280.350	5.0	57382.930	5.0
382.9970	27.00	-2.09	28845.220	5.5	54947.680	5.5
382.9971	23.02	-4.88	63315.050	3.5	89417.500	3.5
382.9974	25.00	-1.14	24802.250	3.5	50904.680	2.5
383.0000	41.00	-1.07	8630.355	0.0	34740.016	0.0
383.0000	73.01	-1.30	5565.369	0.0	31675.030	0.0
383.0020	72.00	-.05	13953.751	0.0	40063.275	0.0
383.0027	10.01	-2.78	280797.260	2.5	306899.330	2.5
383.0030	58.01	-.50	6291.287	0.0	32400.743	0.0
383.0034	24.00	-.75	27825.450	5.0	53927.470	6.0
383.0055	27.00	-1.99	30443.630	1.5	56545.510	2.5
383.0096	26.02	-2.72	179630.770	4.0	205732.370	3.0
383.0158	26.02	-3.93	114351.920	3.0	140453.100	3.0
383.0162	9.01	-4.20	243462.780	2.0	269563.930	2.0
383.0165	18.01	-2.52	160239.350	1.5	186340.480	1.5
383.0184	24.00	-2.03	27703.840	4.0	53804.840	3.0
383.0284	9.02	-.30	440202.480	2.5	466302.800	3.5
383.0290	62.01	-1.26	806.575	0.0	26914.259	0.0
383.0363	28.00	-2.85	30163.140	2.0	56262.920	3.0
383.0395	18.01	-2.72	132630.650	1.5	158730.210	2.5
383.0397	24.00	-3.08	28637.000	3.0	54736.550	4.0
383.0407	9.02	-1.28	440202.480	2.5	466301.960	2.5
383.0419	30.02	-.51	237642.700	3.0	263742.100	2.0
383.0419	30.02	.65	237642.700	3.0	263742.100	2.0
383.0438	8.01	-1.01	214229.480	1.5	240328.750	.5
383.0498	26.01	-4.80	60445.280	2.5	86544.140	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
383.0520	18.01	-.47	173347.830	1.5	199446.540	.5
383.0530	68.00	-.29	0.000	0.0	26106.048	0.0
383.0534	22.00	-1.77	15156.787	4.0	41255.400	4.0
383.0560	58.01	.10	7662.464	0.0	33768.308	0.0
383.0566	28.01	-2.69	109846.000	3.5	135944.400	3.5
383.0630	22.00	-2.67	17369.590	1.0	43467.550	2.0
383.0661	23.01	-3.61	47181.170	3.0	73278.920	4.0
383.0673	28.01	-3.71	105588.890	4.5	131686.560	4.5
383.0745	25.02	-3.23	192880.160	3.5	218977.340	3.5
383.0761	26.00	-2.04	21038.987	2.0	47136.058	2.0
383.0770	90.00	-1.42	0.000	0.0	26104.412	0.0
383.0771	17.01	-1.47	147125.700	3.0	173222.700	3.0
383.0815	24.02	-3.09	70980.200	1.0	97076.900	1.0
383.0820	42.00	.27	25649.091	0.0	51753.163	0.0
383.0864	26.00	-2.67	21715.735	5.0	47812.104	4.0
383.0883	10.01	-4.71	302750.810	3.5	328847.050	4.5
383.0935	28.00	-2.54	29481.020	4.0	55576.905	3.0
383.1018	23.01	-2.54	9097.810	4.0	35193.130	5.0
383.1024	24.00	-2.59	8095.210	3.0	34190.490	2.0
383.1070	42.00	.07	27262.242	0.0	53364.610	0.0
383.1115	9.01	-4.00	243469.270	3.0	269563.930	2.0
383.1197	24.02	-2.53	70291.800	2.0	96385.900	2.0
383.1242	23.01	-2.75	47051.890	3.0	73145.680	3.0
383.1319	10.01	-4.63	302475.610	.5	328568.880	.5
383.1348	26.01	-3.26	72352.170	3.5	98445.240	4.5
383.1382	25.02	-3.33	192576.420	2.5	218669.260	1.5
383.1407	9.02	-2.22	440202.480	2.5	466295.150	1.5
383.1442	24.00	-3.68	31280.350	5.0	57372.780	4.0
383.1479	26.02	-2.28	179579.830	5.0	205672.010	4.0
383.1489	25.01	-3.05	44138.960	1.0	70231.070	2.0
383.1491	24.00	-1.15	35884.400	5.0	61976.500	4.0
383.1500	62.01	-.60	3468.273	0.0	29567.712	0.0
383.1508	20.02	-3.23	348051.860	4.0	374143.840	3.0
383.1549	13.01	-2.91	121480.300	3.0	147572.000	2.0
383.1567	20.02	-1.65	348051.860	4.0	374143.440	4.0
383.1586	28.00	-3.01	30619.440	2.0	56710.889	2.0
383.1638	13.01	-3.27	121480.900	2.0	147572.000	1.0
383.1638	13.01	-3.66	121480.900	2.0	147572.000	2.0
383.1661	24.00	-4.92	24093.160	2.0	50184.100	2.0
383.1679	25.01	-3.21	41204.340	5.0	67295.160	4.0
383.1680	22.00	-3.38	11531.760	2.0	37622.573	3.0
383.1682	13.01	-3.75	121481.200	1.0	147572.000	1.0
383.1682	13.01	-3.54	121481.200	1.0	147572.000	0.0
383.1682	13.01	-4.84	121481.200	1.0	147572.000	2.0
383.1687	28.00	-2.12	3409.925	2.0	29500.690	1.0
383.1715	27.00	-3.13	18389.570	1.5	44480.140	2.5
383.1760	42.00	-.96	16615.449	0.0	42713.117	0.0
383.1800	44.00	.27	12098.628	0.0	38196.023	0.0
383.1800	64.01	-1.20	241.973	0.0	26339.368	0.0
383.1816	28.00	-2.00	28578.046	3.0	54667.928	4.0
383.1825	23.00	-.42	15770.720	4.5	41860.540	4.5
383.1840	41.01	.17	13631.121	0.0	39728.244	0.0
383.1861	16.02	-.41	146696.190	0.0	172785.770	1.0
383.1861	16.02	-1.27	146696.190	0.0	172785.770	1.0
383.1875	25.01	-4.69	72320.620	1.0	98410.100	2.0
383.1893	25.02	-4.28	109780.400	2.5	135869.760	3.5
383.1970	18.02	-1.99	242923.960	1.0	269012.800	2.0
383.2056	22.00	-2.15	18145.400	2.0	44233.650	3.0
383.2088	26.02	-3.56	184316.580	3.0	210404.610	4.0
383.2110	42.00	.59	25810.406	0.0	51905.690	0.0
383.2174	20.02	-.64	348051.860	4.0	374139.310	5.0
383.2234	20.02	-2.24	348051.860	4.0	374138.900	4.0
383.2235	23.00	-1.53	15664.750	1.5	41751.780	.5
383.2235	23.00	-1.89	15664.750	1.5	41751.780	1.5
383.2240	28.01	-4.89	100592.980	3.5	126679.980	4.5
383.2290	46.00	-.72	10001.532	0.0	36095.591	0.0
383.2300	12.00	-.40	21870.464	1.0	47957.056	1.0
383.2304	12.00	-.10	21870.464	1.0	47957.028	2.0
383.2322	24.00	-3.65	7810.820	1.0	33897.260	1.0
383.2345	24.01	-3.12	38362.560	1.5	64448.840	2.5
383.2375	24.00	-4.36	23512.000	1.0	49598.080	2.0
383.2507	26.02	-4.92	121241.670	4.0	147326.850	4.0
383.2632	25.01	-3.08	43131.400	2.0	69215.730	1.0
383.2647	28.01	-2.77	101247.370	2.5	127331.600	2.5
383.2679	28.01	-3.12	104646.520	3.5	130730.530	2.5
383.2719	24.00	-.74	31048.850	1.0	57132.590	1.0
383.2730	27.00	-1.41	28777.270	3.5	54860.930	4.5
383.2750	58.01	-1.20	2581.041	0.0	28671.968	0.0
383.2810	62.00	-.40	2258.411	0.0	28348.929	0.0
383.2829	26.02	-2.71	184316.580	3.0	210399.570	3.0
383.2842	23.00	-1.44	13801.530	1.5	39884.430	1.5
383.2857	23.00	-2.44	15571.900	2.5	41654.700	2.5
383.2866	28.00	-4.48	1332.153	3.0	27414.893	2.0
383.2880	39.01	-.56	1371.178	0.0	27461.220	0.0
383.2892	27.00	-2.49	18775.010	.5	44857.570	.5
383.2967	24.00	-4.99	33040.100	2.0	59122.150	3.0
383.2970	64.00	-.64	483.945	0.0	26573.374	0.0
383.2982	28.01	-1.43	105668.780	2.5	131750.730	3.5
383.3013	26.01	-4.58	21308.080	1.5	47389.820	1.5
383.3027	24.01	-3.91	47354.630	2.5	73436.270	2.5
383.3073	22.00	-1.64	15877.180	2.0	41958.510	2.0
383.3075	21.01	-2.07	0.000	1.0	26081.320	2.0
383.3133	25.02	-2.69	109780.400	2.5	135861.320	1.5
383.3162	20.02	-2.38	324660.470	3.0	350741.190	3.0
383.3195	28.02	-3.23	156972.200	3.0	183052.700	4.0
383.3206	26.00	-1.42	26351.049	5.0	52431.470	6.0
383.3227	10.01	-3.55	280989.530	1.5	307069.810	1.5
383.3232	23.00	-.65	11100.650	4.5	37180.900	4.5
383.3260	41.00	-.61	12421.258	0.0	38508.714	0.0
383.3310	26.00	-.90	20641.110	4.0	46720.824	4.0
383.3347	6.00	-3.20	61981.820	1.0	88061.280	1.0
383.3354	26.02	-2.78	184316.580	3.0	210396.000	2.0
383.3376	22.01	-3.92	39233.440	1.5	65312.710	2.5
383.3400	17.01	.80	147198.400	4.0	173277.500	5.0
383.3401	21.00	-3.31	15881.760	3.5	41960.860	2.5
383.3459	24.00	-.11	31009.000	3.0	57087.700	2.0
383.3477	22.00	-3.02	16106.080	4.0	42184.660	4.0
383.3480	25.02	-4.27	109780.400	2.5	135858.960	2.5
383.3505	24.00	-3.54	7593.160	2.0	33671.550	3.0
383.3550	2.00	-1.97	171135.000	0.0	197220.482	0.0
383.3690	22.00	-2.17	15975.590	3.0	42052.720	3.0
383.3714	24.00	-2.81	23512.000	1.0	49588.970	1.0
383.3724	23.03	.20	258288.800	1.0	284365.700	1.0
383.3740	73.01	-.81	3145.643	0.0	29229.832	0.0
383.3750	42.00	.17	12259.943	0.0	38344.064	0.0
383.3796	28.00	-1.67	33112.368	3.0	59188.780	3.0
383.3807	2.01	-1.34	411477.918	0.0	437561.651	0.0
383.3830	62.01	-1.09	2177.753	0.0	28261.330	0.0
383.3843	23.00	-2.48	13801.530	1.5	39877.620	.5
383.3852	26.02	-2.92	179661.480	3.0	205737.510	2.0
383.3861	25.00	-.50	17568.480	1.5	43644.450	1.5
383.3890	45.00	-.03	7743.122	0.0	33826.291	0.0
383.3911	22.00	-.80	11776.806	4.0	37852.434	4.0
383.3957	20.00	-1.91	21849.634	2.0	47924.947	3.0
383.4003	8.01	-2.65	232526.700	1.5	258601.700	1.5
383.4040	74.00	-.59	19680.435	0.0	45762.583	0.0
383.4121	26.00	-4.60	29371.860	3.0	55446.060	4.0
383.4146	23.00	-1.88	11100.650	4.5	37174.680	3.5
383.4211	28.01	-4.28	101258.010	1.5	127331.600	2.5
383.4220	23.00	-1.37	13810.900	.5	39884.430	1.5
383.4220	7.00	-4.79	86220.480	1.5	112294.007	.5
383.4224	26.00	-.21	7728.058	3.0	33801.555	2.0
383.4240	8.05	-.65	640040.000	0.0	666120.788	0.0
383.4242	23.01	-3.79	20617.050	2.0	46690.430	1.0
383.4312	28.00	-1.62	31031.042	3.0	57103.946	3.0
383.4321	22.00	-.29	17075.310	4.0	43148.150	3.0
383.4362	25.00	-.04	17451.520	2.5	43524.080	3.5
383.4396	24.00	-4.86	31028.330	2.0	57100.660	2.0
383.4445	26.00	-2.03	26224.961	3.0	52296.960	2.0
383.4480	62.00	.53	3952.218	0.0	30031.373	0.0
383.4489	15.01	-2.47	104102.600	2.0	130174.300	2.0
383.4560	58.01	-.51	2500.383	0.0	28578.994	0.0
383.4596	23.01	-4.40	20980.920	2.0	47051.890	3.0
383.4608	26.02	-2.38	179661.480	3.0	205732.370	3.0
383.4665	23.00	-8.16	14910.040	3.5	40980.540	4.5
383.4675	18.00	-3.73	95399.870	1.0	121470.304	0.0
383.4731	24.00	-1.30	21847.880	2.0	47917.930	2.0
383.4750	45.00	-1.14	11856.655	0.0	37933.974	0.0
383.4780	58.01	-1.10	3952.218	0.0	30029.333	0.0
383.4796	23.00	-1.59	15688.800	2.5	41758.410	3.5
383.4806	26.01	-3.01	36252.960	2.5	62322.500	3.5
383.4833	28.01	-3.34	92373.450	2.5	118442.810	1.5
383.4839	10.01	-3.82	281171.380	2.5	307240.700	3.5
383.4911	55.00	-6.64	0.000	0.0	26076.224	0.0
383.4959	29.01	-4.99	115665.400	1.0	141733.900	2.0
383.4970	42.00	.01	25407.119	0.0	51482.942	0.0
383.5050	44.00	.03	14599.011	0.0	40674.290	0.0
383.5050	74.00	-1.13	3306.958	0.0	29382.237	0.0
383.5062	25.02	-2.77	94906.450	.5	120974.250	.5
383.5080	57.01	-1.27	5646.026	0.0	31721.101	0.0
383.5146	24.00	-2.97	35862.820	4.0	61930.050	3.0
383.5180	41.00	-1.13	0.000	0.0	26074.395	0.0
383.5221	23.00	-3.18	13810.900	.5	39877.620	.5
383.5223	24.00	-2.03	21810.840	1.0	47877.550	1.0
383.5232	27.00	-2.70	29216.370	2.5	55283.020	2.5
383.5286	28.00	-4.18	32973.414	4.0	59039.693	4.0
383.5310	42.00	-.09	21212.928	0.0	47286.440	0.0
383.5324	18.01	-3.24	188766.150	2.5	214832.170	3.5
383.5483	27.00	-3.35	18389.570	1.5	44454.510	.5
383.5554	23.00	-.88	8412.940	.5	34477.400	.5
383.5579	23.01	-2.86	20522.140	1.0	46586.430	0.0
383.5672	24.01	-4.03	64448.840	2.5	90512.500	1.5
383.5692	24.01	-4.04	47372.750	1.5	73436.270	2.5
383.5720	62.01	-1.33	1451.835	0.0	27522.560	0.0
383.5750	58.01	-.94	7178.519	0.0	33249.040	0.0
383.5772	23.00	-1.58	15688.800	2.5	41751.780	1.5
383.5892	27.00	-1.41	20500.710	1.5	46562.870	1.5
383.5933	22.00	-1.87	15108.121	3.0	41170.003	3.0
383.5960	40.00	-.27	0.000	0.0	26069.094	0.0
383.5969	27.00	-4.15	17233.680	3.5	43295.320	4.5
383.6003	24.00	-2.28	33060.740	3.0	59122.150	3.0
383.6048	22.01	-1.96	4897.600	3.5	30958.700	2.5
383.6060	76.00	-1.00	8630.355	0.0	34698.769	0.0
383.6062	23.00	-.65	8476.200	1.5	34537.210	1.5
383.6065	24.00	-2.25	21856.940	3.0	47917.930	2.0
383.6104	28.01	-4.93	100619.260	4.5	126679.980	4.5
383.6110	58.01	-.86	1855.123	0.0	27923.197	0.0
383.6117	29.01	-1.91	120875.850	2.0	146936.480	2.0
383.6119	26.02	-2.60	179676.890	2.0	205737.510	2.0
383.6122	30.02	-3.38	257908.200	1.0	283966.800	0.0
383.6281	24.00	-1.46	35870.530	4.0	61930.050	3.0
383.6300	75.00	-1.02	14357.039	0.0	40423.822	0.0
383.6303	24.00	-.75	31028.330	2.0	57087.700	2.0
383.6327	26.00	-.19	26623.726	2.0	52682.930	2.0
383.6433	21.00	-2.37	16026.520	4.5	42085.010	4.5
383.6450	41.00	-.11	9356.272	0.0	35422.036	0.0
383.6500	66.01	-.09	4274.849	0.0	30340.273	0.0
383.6596	10.01	-3.18	282680.650	.5	308738.030	1.5
383.6600	73.00	-2.13	3871.561	0.0	29936.306	0.0
383.6606	24.01	-4.80	47354.630	2.5	73411.940	1.5
383.6621	22.00	-3.88	35618.510	1.0	61675.720	2.0
383.6748	24.00	-2.67	27649.710	4.0	53706.060	5.0
383.6756	24.00	-3.76	24833.860	3.0	50890.150	2.0
383.6760	40.01	-.07	4436.164	0.0	30499.822	0.0
383.6786	22.00	-4.94	18525.070	2.0	44581.160	2.0
383.6805	28.01	-3.32	109846.000	3.5	135901.960	2.5
383.6819	9.02	-.89	440582.120	4.5	466637.990	4.5
383.6855	25.01	-4.75	56883.380	1.0	82939.000	1.0
383.6876	26.02	-3.03	179676.890	2.0	205732.370	3.0
383.6889	25.00	-1.20	37789.930	2.5	63845.320	1.5
383.6910	64.01	-.33	3952.218	0.0	30014.857	0.0
383.6918	26.00	-3.56	22249.430	3.0	48304.623	2.0
383.6932	28.01	-3.92	72985.650	1.5	99040.750	1.5
383.6969	18.02	-2.33	242923.960	1.0	268976.800	1.0
383.7010	26.02	-3.31	179682.940	1.0	205737.510	2.0
383.7029	25.02	-3.31	192012.750	1.5	218067.190	2.5
383.7030	10.01	-2.42	281720.280	1.5	307774.710	1.5
383.7080	41.00	-.02	14760.326	0.0	40821.810	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
383.7132	21.00	-3.75	18855.760	1.5	44909.500	2.5
383.7137	26.00	-1.90	21038.987	2.0	47092.693	3.0
383.7200	25.00	-2.39	38934.940	2.5	64988.220	3.5
383.7203	28.01	-3.05	92325.850	3.5	118379.110	2.5
383.7210	58.01	-1.16	2500.383	0.0	28560.984	0.0
383.7235	24.00	-3.12	24200.230	6.0	50253.270	5.0
383.7260	24.00	-4.34	24897.550	4.0	50950.420	3.0
383.7285	30.02	-.14	237506.800	1.0	263559.500	1.0
383.7285	30.02	-1.30	237506.800	1.0	263559.500	1.0
383.7332	27.00	-1.65	29216.370	2.5	55268.750	3.5
383.7424	26.02	-4.71	90423.680	2.0	116475.440	3.0
383.7425	23.00	-2.83	553.020	4.5	26604.770	3.5
383.7544	28.00	-.69	30922.763	5.0	56973.707	5.0
383.7793	23.01	-3.07	46739.980	2.0	72789.230	3.0
383.7796	16.02	-.57	146736.540	1.0	172785.770	1.0
383.7796	16.02	-2.90	146736.540	1.0	172785.770	1.0
383.7870	90.00	-.72	2823.013	0.0	28879.133	0.0
383.7976	29.00	-1.94	45894.129	0.0	71949.529	0.0
383.7998	55.00	-6.78	0.000	0.0	26055.251	0.0
383.8011	24.00	-4.97	31048.850	1.0	57096.620	1.0
383.8070	44.00	-.64	7985.094	0.0	34039.856	0.0
383.8101	9.02	-3.14	442636.270	3.5	468683.430	2.5
383.8178	9.02	-1.78	442636.270	3.5	468682.910	3.5
383.8200	69.01	-.33	8872.327	0.0	34926.206	0.0
383.8271	12.00	-1.78	35051.264	1.0	61097.270	2.0
383.8280	40.01	-1.13	4436.164	0.0	30489.500	0.0
383.8290	12.00	-1.58	21911.178	2.0	47957.056	1.0
383.8292	12.00	.34	21911.178	2.0	47957.045	3.0
383.8294	12.00	-.58	21911.178	2.0	47957.028	2.0
383.8312	16.02	.17	147146.000	2.0	173191.730	2.0
383.8312	16.02	-1.20	147146.000	2.0	173191.730	2.0
383.8315	23.00	-2.26	13801.530	1.5	39847.240	1.5
383.8346	17.01	-1.27	147198.400	4.0	173243.900	4.0
383.8421	26.00	-2.92	19788.248	4.0	45833.240	4.0
383.8500	74.00	-.63	12098.628	0.0	38150.471	0.0
383.8501	18.01	-4.77	185624.730	3.5	211669.180	2.5
383.8540	58.01	-.15	2581.041	0.0	28632.613	0.0
383.8586	10.01	-3.30	281025.940	2.5	307069.810	1.5
383.8612	22.00	-3.15	17423.853	2.0	43467.550	2.0
383.8636	24.00	-1.55	33762.740	6.0	59806.270	5.0
383.8664	25.00	-2.20	38669.600	3.5	64712.940	2.5
383.8681	27.00	-2.03	29269.730	4.5	55312.960	4.5
383.8724	22.00	-3.07	17540.205	3.0	43583.140	3.0
383.8789	22.00	-2.46	20795.599	5.0	46838.090	4.0
383.8900	64.00	-1.29	967.890	0.0	27017.019	0.0
383.8928	23.01	-4.75	47181.170	3.0	73222.720	4.0
383.8940	62.01	-1.06	2661.698	0.0	28710.555	0.0
383.8963	22.00	-6.32	12118.394	4.0	38159.710	3.0
383.8974	26.02	-2.39	179630.770	4.0	205672.010	4.0
383.8980	60.01	-.78	0.000	0.0	26048.586	0.0
383.9009	23.00	-.28	8578.520	2.5	34619.520	2.5
383.9014	28.00	-4.01	29832.810	3.0	55873.780	2.0
383.9030	73.00	-1.32	9598.245	0.0	35646.492	0.0
383.9095	25.01	-2.08	44899.820	3.0	70940.240	2.0
383.9186	21.00	-1.76	11677.310	4.5	37717.110	3.5
383.9186	22.00	-1.05	18818.230	0.0	44858.030	1.0
383.9202	16.01	-2.51	114279.110	3.5	140318.800	3.5
383.9250	26.00	-.29	24574.655	4.0	50614.020	4.0
383.9276	24.01	-4.34	47372.750	1.5	73411.940	1.5
383.9326	24.00	-1.59	31048.850	1.0	57087.700	2.0
383.9338	18.01	-2.28	185624.730	3.5	211663.500	3.5
383.9375	23.00	-.11	14548.830	2.5	40587.350	3.5
383.9500	58.01	-.54	7178.519	0.0	33223.577	0.0
383.9509	25.00	-4.00	37420.240	5.5	63457.850	5.5
383.9534	23.00	-4.11	24838.560	3.5	50876.000	4.5
383.9614	24.02	-4.71	71321.800	3.0	97358.700	4.0
383.9620	92.00	.49	3710.246	0.0	29754.490	0.0
383.9639	26.02	-3.96	184374.590	4.0	210411.320	5.0
383.9640	64.01	-.31	3952.218	0.0	29996.326	0.0
383.9696	23.00	-3.18	13810.900	.5	39847.240	1.5
383.9700	44.00	.35	12098.628	0.0	38142.329	0.0
383.9740	90.01	-.59	6613.917	0.0	32657.347	0.0
383.9819	25.00	-.63	17637.150	.5	43672.660	.5
383.9821	15.01	-2.61	103630.600	2.0	129666.100	2.0
383.9893	22.00	-2.86	15220.390	5.0	41255.400	4.0
384.0014	23.00	-.63	15724.220	3.5	41758.410	3.5
384.0052	24.01	-4.30	47372.750	1.5	73406.680	.5
384.0133	23.00	-.38	10892.500	3.5	36925.880	3.5
384.0148	27.00	-3.24	16778.160	2.5	42811.440	3.5
384.0161	21.00	-3.83	11520.150	1.5	37553.340	2.5
384.0196	26.00	-3.42	18378.187	2.0	44411.137	1.0
384.0204	24.00	-3.33	31055.350	5.0	57088.250	5.0
384.0260	64.00	-.91	161.315	0.0	26201.219	0.0
384.0300	76.00	.82	28956.050	0.0	54995.682	0.0
384.0316	22.00	-.58	18825.890	1.0	44858.030	1.0
384.0351	30.02	-1.97	238205.500	1.0	264237.400	1.0
384.0359	25.01	-4.74	55115.800	2.0	81147.650	2.0
384.0424	28.00	-.67	30922.763	5.0	56954.167	6.0
384.0425	28.01	-4.84	95893.760	1.5	121925.160	.5
384.0434	23.00	.06	8715.720	3.5	34747.060	3.5
384.0440	26.00	-.48	7985.783	2.0	34017.084	1.0
384.0449	23.00	-3.06	14949.300	4.5	40980.540	4.5
384.0450	62.01	-1.45	322.630	0.0	26361.245	0.0
384.0499	10.01	-3.73	276276.850	1.5	302307.750	2.5
384.0629	26.02	-2.74	184374.590	4.0	210404.610	4.0
384.0632	8.03	.14	576684.500	2.5	602714.500	3.5
384.0680	24.00	-2.31	21847.880	2.0	47877.550	1.0
384.0720	57.01	-1.30	1371.178	0.0	27407.963	0.0
384.0754	23.00	-.16	323.420	3.5	26352.590	2.5
384.0795	25.00	-1.45	37420.240	5.5	63449.130	5.5
384.0798	25.01	-4.00	49889.860	3.0	75918.730	2.0
384.0800	90.00	-.94	4920.109	0.0	30956.351	0.0
384.0820	44.00	-.94	7985.094	0.0	34021.201	0.0
384.0832	25.02	-3.85	109841.120	3.5	135869.760	3.5
384.0893	23.01	-2.91	46879.940	2.0	72908.170	3.0
384.0974	25.00	-1.40	37737.220	3.5	63764.900	2.5
384.1030	27.01	-5.44	24886.500	2.0	50913.800	2.0
384.1050	26.00	-.05	12968.552	2.0	38995.717	1.0
384.1071	25.00	-.28	17568.480	1.5	43595.500	2.5
384.1155	9.02	.83	440582.120	4.5	466608.570	5.5
384.1180	71.00	-.92	1935.780	0.0	27969.447	0.0
384.1189	22.00	-3.48	22081.198	2.0	48107.420	2.0
384.1244	24.00	-2.94	27500.370	3.0	53526.220	4.0
384.1290	76.00	.59	24842.516	0.0	50875.437	0.0
384.1340	26.01	-4.86	36126.410	1.5	62151.610	2.5
384.1372	26.02	-2.52	184374.590	4.0	210399.570	3.0
384.1393	18.01	-4.21	189040.870	1.5	215065.710	.5
384.1429	24.00	-1.97	31009.000	3.0	57033.600	4.0
384.1443	25.01	-2.56	46521.520	4.0	70546.020	4.0
384.1448	29.01	-2.66	108335.430	2.0	134359.900	1.0
384.1449	27.00	-1.55	7442.410	3.5	33466.870	3.5
384.1463	25.00	-4.13	25281.040	2.5	51305.410	2.5
384.1463	25.00	-4.01	37420.240	5.5	63444.610	4.5
384.1473	17.01	-2.55	147198.400	4.0	173222.700	3.0
384.1475	28.00	-1.16	31786.210	3.0	57810.494	4.0
384.1491	22.00	-4.07	15877.180	2.0	41901.360	1.0
384.1517	18.01	-.94	158167.710	1.5	184191.710	.5
384.1520	23.00	-4.24	24727.850	2.5	50751.830	3.5
384.1626	22.00	-.99	11531.760	2.0	37555.021	3.0
384.1688	8.00	-4.51	107595.159	3.0	133618.000	2.0
384.1697	8.01	-4.50	185499.200	2.5	211521.980	1.5
384.1720	58.01	-.19	10001.532	0.0	36031.539	0.0
384.1810	41.00	.21	13308.491	0.0	39337.689	0.0
384.1811	22.00	-3.47	18141.229	5.0	44163.240	5.0
384.1876	27.00	-1.95	28345.860	4.5	54367.430	5.5
384.1883	23.00	-2.44	323.420	3.5	26344.940	4.5
384.1897	25.01	-2.86	55759.270	3.0	81780.700	3.0
384.1929	22.00	-1.60	18141.229	5.0	44162.440	4.0
384.1933	24.00	-2.23	25038.610	5.0	51059.790	4.0
384.1960	90.01	-.70	9678.902	0.0	35707.283	0.0
384.2034	13.01	-1.04	121480.300	3.0	147500.800	4.0
384.2046	27.00	-.76	7442.410	3.5	33462.830	2.5
384.2050	58.01	-.97	7017.204	0.0	33044.976	0.0
384.2122	13.01	-2.47	121480.300	3.0	147500.200	3.0
384.2181	13.01	-3.65	121480.300	3.0	147499.800	2.0
384.2187	7.01	-.74	170572.610	2.0	196592.070	1.0
384.2211	13.01	-1.57	121480.900	2.0	147500.200	3.0
384.2270	13.01	-2.10	121480.900	2.0	147499.800	2.0
384.2300	74.00	-1.86	6129.972	0.0	32156.050	0.0
384.2314	13.01	-1.37	121481.200	1.0	147499.800	2.0
384.2328	27.00	-3.92	16778.160	2.5	42796.670	1.5
384.2328	25.00	-2.78	34938.700	4.5	60957.210	3.5
384.2359	22.00	-2.38	18061.540	1.0	44079.840	2.0
384.2360	62.01	-1.39	2177.753	0.0	28203.425	0.0
384.2427	25.02	-3.29	109841.120	3.5	135858.960	2.5
384.2452	25.00	-4.59	25287.740	3.5	51305.410	2.5
384.2462	14.02	-.85	214532.170	1.0	240549.770	2.0
384.2521	26.02	-3.09	179676.890	2.0	205694.090	1.0
384.2524	25.00	-1.68	34938.700	4.5	60955.880	4.5
384.2540	29.01	-2.11	120919.410	1.0	146936.480	2.0
384.2617	22.00	-.41	17215.440	5.0	43231.990	4.0
384.2625	24.00	-4.47	23305.010	2.0	49321.510	2.0
384.2700	28.01	-3.56	110573.360	2.5	136589.350	3.5
384.2710	41.00	-.40	9275.615	0.0	35298.916	0.0
384.2725	23.00	-2.69	8412.940	.5	34428.760	1.5
384.2741	27.00	-2.63	28845.220	5.5	54860.930	4.5
384.2802	56.01	-2.42	46154.890	0.0	72177.568	0.0
384.2851	22.00	-2.38	11639.804	3.0	37654.770	2.0
384.2851	9.01	-1.60	269573.640	1.0	295588.610	1.0
384.2899	26.00	-2.27	20874.482	3.0	46889.126	4.0
384.2978	27.00	-3.29	29563.170	1.5	55577.280	1.5
384.2992	26.00	-2.95	20874.482	3.0	46888.494	2.0
384.3018	26.01	-3.31	60402.380	2.5	86416.220	3.5
384.3020	40.01	-.77	2823.013	0.0	28844.215	0.0
384.3047	21.01	-1.74	67.680	2.0	26081.320	2.0
384.3110	22.00	-2.93	15156.787	4.0	41170.003	3.0
384.3157	21.01	-3.61	4802.750	2.0	30815.650	1.0
384.3160	44.00	-1.79	3064.986	0.0	29085.240	0.0
384.3171	22.00	-2.12	15975.590	3.0	41988.390	3.0
384.3176	28.01	-3.89	108368.050	2.5	134380.820	3.5
384.3233	24.00	-4.34	24093.160	2.0	50105.540	1.0
384.3260	26.00	-.28	24574.655	4.0	50586.857	3.0
384.3275	17.01	-2.54	139350.000	1.0	165362.100	0.0
384.3280	64.00	.34	1693.808	0.0	27713.250	0.0
384.3374	25.01	-2.80	44138.960	1.0	70150.390	1.0
384.3415	26.02	-2.92	179682.940	1.0	205694.090	1.0
384.3496	23.00	-2.43	8476.200	1.5	34486.800	2.5
384.3498	27.00	-2.13	28345.860	4.5	54356.450	4.5
384.3500	62.01	-.46	3468.273	0.0	29486.225	0.0
384.3507	26.02	-3.22	179661.480	3.0	205672.010	4.0
384.3517	29.01	-3.18	120875.850	2.0	146886.310	1.0
384.3549	28.00	-3.81	32982.280	1.0	58992.520	2.0
384.3573	27.00	-4.49	26450.020	2.5	52460.100	2.5
384.3613	24.00	-2.12	24940.610	2.0	50950.420	3.0
384.3649	28.00	-2.32	30163.140	2.0	56172.704	3.0
384.3653	24.00	.38	21856.940	3.0	47866.480	4.0
384.3660	76.00	-.75	15082.956	0.0	41099.825	0.0
384.3693	27.00	-1.38	17233.680	3.5	43242.950	2.5
384.3710	26.00	-3.02	27559.568	2.0	53568.720	2.0
384.3714	12.00	-1.48	35051.264	1.0	61066.390	2.0
384.3746	26.00	-3.83	31805.059	3.0	57813.970	3.0
384.3750	24.00	-1.73	24093.160	2.0	50102.040	3.0
384.3750	24.00	-1.14	33113.270	4.0	59122.150	3.0
384.3770	62.01	-1.42	1935.780	0.0	27951.905	0.0
384.3770	58.01	-.15	8711.012	0.0	34727.137	0.0
384.3800	64.01	-1.30	4758.794	0.0	30774.716	0.0
384.3851	25.02	-3.15	192392.200	3.5	218400.400	3.5
384.3879	25.01	-2.67	43311.000	1.0	69319.010	0.0
384.3879	25.02	-3.24	192172.890	2.5	218180.900	1.5
384.3895	27.01	-7.73	19189.900	4.0	45197.800	5.0
384.3900	42.00	-.20	20809.640	0.0	46824.685	0.0
384.3930	41.00	-1.41	5887.999	0.0	31903.041	0.0
384.3957	25.02	-4.09	192365.520	1.5	218373.000	1.5
384.3984	25.00	-.66	17637.150	.5	43644.450	1.5
384.4045	27.00	-4.85	26063.110	1.5	52070.000	2.5
384.4073	19.01	-.87	163237.000	1.0	189243.700	1.0
384.4080	41.00	-.47	11130.738	0.0	37144.765	0.0
384.4084	23.00	-4.78	24648.100	1.5	50654.720	2.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
384.4111	27.00	-2.42	28345.860	4.5	54352.300	3.5
384.4201	25.01	-3.69	59537.400	4.0	85543.230	5.0
384.4206	25.01	-1.39	44521.520	4.0	70527.320	5.0
384.4222	28.00	-1.97	33112.368	3.0	59118.060	2.0
384.4226	28.01	-3.67	92373.450	2.5	118379.110	2.5
384.4230	63.01	-1.14	10566.135	0.0	36579.147	0.0
384.4260	28.00	-.66	28569.210	2.0	54574.640	1.0
384.4268	23.00	-2.57	10892.500	3.5	36897.880	4.5
384.4395	26.01	-4.87	60384.460	.5	86388.980	.5
384.4439	23.00	-1.15	0.000	1.5	26004.220	2.5
384.4476	23.01	-1.78	13609.000	4.0	39612.970	5.0
384.4500	62.01	-1.88	1451.835	0.0	27463.020	0.0
384.4560	28.00	-1.44	31786.210	3.0	57789.611	4.0
384.4562	18.01	-2.90	135085.920	1.5	161089.310	.5
384.4580	64.01	-.51	1129.205	0.0	27139.849	0.0
384.4686	18.01	-2.73	186074.350	2.5	212076.900	2.5
384.4688	24.00	-1.39	27382.180	2.0	53384.720	3.0
384.4704	25.01	-2.92	82099.820	4.0	108102.250	3.0
384.4730	18.01	-1.22	157673.320	2.5	183675.570	3.5
384.4754	28.01	-3.04	105668.780	2.5	131670.870	2.5
384.4828	26.01	-1.32	73091.700	4.5	99093.290	5.5
384.4850	27.00	-2.87	20500.710	1.5	46502.150	.5
384.4886	23.00	-.88	8476.200	1.5	34477.400	.5
384.4905	10.01	-3.91	302816.980	1.5	328818.050	2.5
384.4909	10.01	-2.35	292451.780	1.5	318452.820	1.5
384.4918	22.00	-2.77	16106.080	4.0	42107.060	4.0
384.5029	26.00	-4.41	18378.187	2.0	44378.420	1.0
384.5119	25.01	-3.86	44745.460	2.0	70745.080	3.0
384.5171	26.00	-1.31	19552.474	1.0	45551.748	1.0
384.5174	26.01	-2.42	36126.410	1.5	62125.660	1.5
384.5205	26.00	-2.02	27394.676	3.0	53393.715	4.0
384.5208	27.00	-2.58	29269.730	4.5	55268.750	3.5
384.5254	28.01	-4.34	111783.790	3.5	137782.500	4.5
384.5280	58.01	-1.26	3952.218	0.0	29958.127	0.0
384.5403	17.01	.02	128621.900	1.0	154619.600	2.0
384.5403	18.01	-1.61	134241.650	2.5	160239.350	1.5
384.5440	18.01	-1.42	186074.350	2.5	212071.800	3.5
384.5461	27.00	.04	7442.410	3.5	33439.720	4.5
384.5470	64.01	-1.13	4758.794	0.0	30763.418	0.0
384.5480	58.01	-.29	10001.532	0.0	36006.088	0.0
384.5545	23.01	-4.52	47297.080	5.0	73293.820	5.0
384.5576	23.01	-4.26	47420.100	4.0	73416.630	5.0
384.5625	25.01	-4.51	44521.520	4.0	70517.720	3.0
384.5633	24.01	-2.17	39684.000	3.5	65680.150	4.5
384.5669	17.01	.13	128621.900	1.0	154617.800	1.0
384.5693	26.00	-1.02	28604.610	2.0	54600.350	3.0
384.5698	26.02	-3.97	90423.680	2.0	116419.390	2.0
384.5699	21.00	-2.58	11557.640	2.5	37553.340	2.5
384.5743	15.01	-2.02	103630.600	2.0	129626.000	1.0
384.5798	25.00	-1.69	34938.700	4.5	60933.730	5.5
384.5832	17.01	-.23	128621.900	1.0	154616.700	0.0
384.5849	22.00	-2.19	15877.180	2.0	41871.870	2.0
384.5900	41.00	-1.30	322.630	0.0	26324.346	0.0
384.5918	9.02	-.07	440202.480	2.5	466196.700	3.5
384.5943	26.02	-2.92	184417.270	5.0	210411.320	5.0
384.5950	42.00	-.46	16615.449	0.0	42616.827	0.0
384.5963	28.00	-1.35	30979.789	4.0	56973.707	5.0
384.5991	26.00	-1.69	27166.804	4.0	53160.530	3.0
384.6000	57.01	-2.00	1371.178	0.0	27372.218	0.0
384.6059	28.01	-2.93	68735.980	2.5	94729.250	2.5
384.6121	21.00	-2.29	16022.720	2.5	42015.570	3.5
384.6134	28.01	-4.24	111783.790	3.5	137776.550	3.5
384.6210	74.00	-1.52	1613.150	0.0	27612.770	0.0
384.6216	25.00	-3.26	33825.490	2.5	59817.700	2.5
384.6222	27.00	-4.21	29563.170	1.5	55555.340	2.5
384.6269	26.02	-3.50	90483.590	3.0	116475.440	3.0
384.6282	26.00	-2.40	29798.960	4.0	55790.720	3.0
384.6301	23.01	-4.33	46690.430	1.0	72682.060	2.0
384.6304	26.01	-4.75	36252.960	2.5	62244.570	1.5
384.6416	26.00	-.64	28819.966	5.0	54810.820	4.0
384.6490	64.00	.02	6936.547	0.0	32934.275	0.0
384.6512	6.01	-2.31	195752.580	1.5	221742.790	.5
384.6520	58.01	-.18	8065.752	0.0	34063.277	0.0
384.6550	23.00	-1.58	15664.750	1.5	41654.700	2.5
384.6550	92.00	-.21	3710.246	0.0	29707.568	0.0
384.6631	26.00	-2.16	22249.430	3.0	48238.832	2.0
384.6640	73.00	-1.73	9194.957	0.0	35191.671	0.0
384.6680	44.00	-.32	8952.985	0.0	34949.429	0.0
384.6683	21.00	-3.43	16026.520	4.5	42015.570	3.5
384.6713	9.02	-2.60	442694.580	1.5	468683.430	2.5
384.6757	9.02	-.51	440202.480	2.5	466191.030	2.5
384.6760	62.00	-.47	241.973	0.0	26237.876	0.0
384.6790	26.00	-1.73	27166.804	4.0	53155.130	4.0
384.6802	26.00	.16	26224.961	3.0	52213.207	3.0
384.6864	56.01	-3.32	46154.890	0.0	72150.090	0.0
384.6885	23.00	-1.12	15770.720	4.5	41758.410	3.5
384.6904	28.01	-2.78	106133.140	1.5	132120.700	.5
384.6936	26.02	-2.31	184417.270	5.0	210404.610	4.0
384.6937	26.00	-2.75	19621.004	5.0	45608.341	6.0
384.6950	16.01	-1.75	130134.080	2.5	156121.330	2.5
384.6962	22.00	-4.56	18593.990	3.0	44581.160	2.0
384.7010	40.00	-.95	564.603	0.0	26558.817	0.0
384.7086	9.01	.31	176493.930	2.0	202480.260	3.0
384.7215	26.00	-2.31	26627.612	4.0	52613.072	5.0
384.7225	25.00	-1.12	38934.940	2.5	64920.330	3.5
384.7230	28.01	-3.82	95332.530	2.5	121317.890	3.5
384.7242	28.00	-3.92	29888.505	2.0	55873.780	2.0
384.7250	42.00	-.63	11050.080	0.0	37042.672	0.0
384.7321	23.01	-.67	22273.540	1.0	48258.280	0.0
384.7333	23.00	-1.11	137.380	2.5	26122.040	3.5
384.7405	7.01	-1.02	170607.890	1.0	196592.070	1.0
384.7416	12.02	-4.08	536152.000	1.0	562136.100	2.0
384.7453	23.01	-2.52	46690.430	1.0	72674.280	2.0
384.7474	22.00	-2.60	16875.190	2.0	42858.900	3.0
384.7490	74.00	-2.18	0.000	0.0	25990.971	0.0
384.7510	62.01	-1.04	2661.698	0.0	28652.534	0.0
384.7518	25.02	-3.32	192392.200	3.5	218375.610	4.5
384.7591	22.00	-2.34	15975.590	3.0	41958.510	2.0
384.7613	22.00	-1.58	11639.804	3.0	37622.573	3.0
384.7706	24.00	-.96	24282.340	4.0	50264.480	3.0
384.7760	22.01	-3.72	39476.870	2.5	65458.650	3.5
384.7766	18.01	-1.99	185624.730	3.5	211606.470	3.5
384.8020	69.01	-.60	0.000	0.0	25987.391	0.0
384.8029	22.00	-2.82	17995.750	0.0	43975.710	1.0
384.8050	73.00	-1.74	5565.369	0.0	31552.557	0.0
384.8068	23.00	-1.87	15000.840	5.5	40980.540	4.5
384.8081	24.00	-1.79	27300.190	1.0	53279.800	2.0
384.8083	25.00	-2.16	38669.600	3.5	64649.200	3.5
384.8097	25.01	-4.35	82193.040	2.0	108172.540	1.0
384.8110	58.01	-.61	4194.191	0.0	30180.974	0.0
384.8203	10.01	-3.73	302839.280	2.5	328818.070	3.5
384.8206	10.01	-4.77	302839.280	2.5	328818.050	2.5
384.8212	12.01	-1.59	71490.190	2.5	97468.920	1.5
384.8219	26.02	-3.51	179216.470	6.0	205195.150	5.0
384.8240	60.01	-.61	1451.835	0.0	27437.740	0.0
384.8290	17.02	-1.86	217850.200	2.5	243828.400	2.5
384.8292	26.00	-2.04	21038.987	2.0	47017.170	3.0
384.8300	42.00	.62	24681.201	0.0	50666.701	0.0
384.8310	22.00	-.86	11639.804	3.0	37617.868	4.0
384.8314	24.00	-1.18	27649.710	4.0	53627.750	5.0
384.8315	27.00	-4.70	26063.110	1.5	52041.140	.5
384.8341	12.01	-2.54	71491.060	1.5	97468.920	1.5
384.8407	25.01	-3.64	82193.040	2.0	108170.450	2.0
384.8432	24.00	-.54	21810.840	1.0	47788.080	0.0
384.8452	6.01	-2.71	195752.580	1.5	221729.690	1.5
384.8482	10.01	-2.01	281332.550	.5	307309.460	.5
384.8517	24.00	-2.39	31009.000	3.0	56985.670	3.0
384.8580	24.01	-4.40	54444.190	3.5	80420.430	2.5
384.8600	58.01	-.08	4113.534	0.0	30097.009	0.0
384.8620	92.01	-.71	4516.821	0.0	30500.160	0.0
384.8628	25.01	-4.16	44521.520	4.0	70497.440	4.0
384.8726	24.00	-.30	21810.840	1.0	47786.100	2.0
384.8749	27.02	-4.56	77411.600	5.5	103386.700	4.5
384.8769	25.00	-2.34	37789.930	2.5	63764.900	2.5
384.8774	20.02	-4.70	359800.570	3.0	385775.500	4.0
384.8878	27.00	-4.73	29294.520	3.5	55268.750	3.5
384.8972	27.01	-4.41	22414.500	3.0	48388.100	2.0
384.9020	57.01	-1.05	0.000	0.0	25980.639	0.0
384.9120	28.01	-3.00	101247.370	2.5	127219.970	3.5
384.9180	72.00	-.64	5565.369	0.0	31544.928	0.0
384.9250	40.00	-1.02	0.000	0.0	25979.087	0.0
384.9261	26.02	-4.53	179760.720	3.0	205732.370	3.0
384.9336	24.00	-2.25	31364.330	3.0	57335.470	4.0
384.9367	24.00	.45	24282.340	4.0	50253.270	5.0
384.9401	17.01	-1.45	121635.000	3.0	147605.700	3.0
384.9407	22.00	-4.66	18192.577	6.0	44163.240	5.0
384.9449	23.00	-4.28	14949.300	4.5	40919.680	5.5
384.9493	28.01	-4.68	111783.790	3.5	137753.870	4.5
384.9514	29.01	-1.63	108014.660	3.0	133984.600	3.0
384.9520	72.01	-.10	17583.339	0.0	43560.604	0.0
384.9533	27.00	-1.41	28345.860	4.5	54315.670	5.5
384.9536	24.00	-2.32	7927.470	2.0	33897.260	1.0
384.9537	9.02	-2.78	442636.270	3.5	468606.050	3.5
384.9554	28.01	-1.89	32523.540	3.5	58493.210	2.5
384.9554	9.02	-1.43	442636.270	3.5	468605.940	4.5
384.9570	58.01	-1.57	1371.178	0.0	27348.105	0.0
384.9609	15.01	-2.50	104051.100	3.0	130020.400	3.0
384.9696	18.01	-.86	185624.730	3.5	211593.440	4.5
384.9704	9.02	.21	440069.510	1.5	466038.170	2.5
384.9747	23.01	-2.83	14461.730	3.0	40430.100	4.0
384.9754	28.01	-2.55	105668.780	2.5	131637.100	3.5
384.9850	92.01	-1.65	0.000	0.0	25975.038	0.0
384.9885	26.00	-3.24	21999.132	4.0	47966.571	3.0
384.9905	21.00	-4.29	18855.760	1.5	44823.060	1.5
384.9931	22.00	-1.67	11776.806	4.0	37743.933	3.0
384.9940	76.00	-.66	12663.231	0.0	38637.662	0.0
384.9963	26.00	-.86	8154.713	1.0	34121.623	0.0
384.9965	29.01	-2.40	120919.410	1.0	146886.310	1.0
384.9985	9.01	.17	176493.930	2.0	202460.690	2.0
385.0021	24.00	.10	21847.880	2.0	47814.400	3.0
385.0049	21.00	-2.70	11520.150	1.5	37486.480	1.5
385.0103	27.00	-2.52	17233.680	3.5	43199.650	2.5
385.0113	23.00	-.76	15688.800	2.5	41654.700	2.5
385.0120	58.01	-.71	5887.999	0.0	31861.215	0.0
385.0177	26.01	-6.78	16369.390	3.5	42334.860	2.5
385.0240	24.00	-1.67	23512.000	1.0	49477.040	1.0
385.0307	24.00	-.80	24299.890	2.0	50264.480	3.0
385.0319	23.01	-4.00	47181.170	3.0	73145.680	3.0
385.0328	24.00	-2.22	24093.160	2.0	50057.610	2.0
385.0380	25.00	-1.83	34938.700	4.5	60902.800	3.5
385.0386	12.01	-1.84	71491.060	1.5	97455.120	.5
385.0404	26.02	-2.14	184447.380	6.0	210411.320	5.0
385.0408	23.01	-2.45	11295.510	0.0	37259.420	1.0
385.0418	6.01	-2.11	195765.850	2.5	221729.690	1.5
385.0426	10.01	-4.74	276511.820	.5	302475.610	.5
385.0430	44.00	-.32	7420.492	0.0	33391.617	0.0
385.0450	27.00	-3.23	16470.600	1.5	42434.230	2.5
385.0467	15.01	-1.93	101636.490	1.0	127600.000	1.0
385.0573	17.02	-4.98	196137.900	2.5	222100.700	1.5
385.0585	18.01	-.24	135085.920	1.5	161048.640	1.5
385.0610	25.02	-2.74	192012.750	1.5	217975.300	2.5
385.0690	64.01	-.22	564.603	0.0	26533.975	0.0
385.0771	24.00	-.17	21810.840	1.0	47772.300	1.0
385.0783	18.01	-3.12	185624.730	3.5	211586.110	2.5
385.0795	27.01	-4.05	24074.600	2.0	50035.900	3.0
385.0810	17.02	-.62	179076.100	1.5	205037.300	1.5
385.0819	26.00	-2.71	7985.783	2.0	33946.920	2.0
385.0908	24.00	-3.83	24303.940	3.0	50264.480	3.0
385.0943	27.00	-2.63	4142.660	3.5	30102.960	2.5
385.0944	16.01	-1.32	129858.070	1.5	155818.370	2.5
385.0970	64.01	-.10	0.000	0.0	25967.484	0.0
385.0973	17.01	.44	128662.500	2.0	154622.600	3.0
385.1133	29.01	-2.35	95565.650	4.0	121524.670	3.0
385.1163	25.00	-.71	33825.490	2.5	59784.310	3.5
385.1182	23.00	-.71	8578.520	2.5	34537.210	1.5
385.1255	28.01	-2.47	105838.060	3.5	131796.260	2.5
385.1324	15.01	-4.06	77711.000	2.0	103668.740	3.0
385.1357	24.00	-.98	31377.960	4.0	57335.470	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
385.1365	24.00	-.17	21856.940	3.0	47814.400	3.0
385.1376	28.00	-1.90	31786.210	3.0	57743.596	3.0
385.1383	24.00	-2.27	31028.330	2.0	56985.670	3.0
385.1418	17.01	.24	128662.500	2.0	154619.600	2.0
385.1496	10.01	-4.59	302890.570	2.5	328847.150	3.5
385.1570	74.01	-.53	13066.518	0.0	39029.956	0.0
385.1600	68.00	-.48	7097.862	0.0	33061.098	0.0
385.1668	9.01	-.06	176493.930	2.0	202449.350	1.0
385.1672	28.01	-4.86	110021.920	4.5	135977.310	4.5
385.1686	17.01	-.35	128662.500	2.0	154617.800	1.0
385.1711	6.01	-3.85	195752.580	1.5	221707.710	2.5
385.1720	92.00	-.25	5887.999	0.0	31850.426	0.0
385.1737	26.00	-4.09	28604.610	2.0	54559.560	3.0
385.1835	25.00	-2.83	37420.240	5.5	63374.530	4.5
385.1843	27.00	-2.05	20500.710	1.5	46454.950	1.5
385.1849	24.02	-4.83	71166.100	2.0	97120.300	3.0
385.1880	62.01	-1.19	2177.753	0.0	28139.102	0.0
385.1960	24.00	-2.20	25106.340	3.0	51059.790	4.0
385.1990	42.00	.28	25729.749	0.0	51690.356	0.0
385.2017	12.00	-1.83	35051.264	1.0	61004.330	2.0
385.2092	23.00	-2.59	8476.200	1.5	34428.760	1.5
385.2099	23.01	-2.86	8640.210	2.0	34592.720	2.0
385.2110	58.01	-1.24	2339.068	0.0	28298.867	0.0
385.2116	28.01	-3.94	109148.050	4.5	135100.450	3.5
385.2140	44.00	.09	16938.079	0.0	42897.675	0.0
385.2140	90.00	-1.10	3629.588	0.0	29589.184	0.0
385.2141	10.01	-2.68	280947.100	1.5	306899.330	2.5
385.2214	24.00	-2.39	7810.820	1.0	33762.560	0.0
385.2224	28.01	-2.82	105668.780	2.5	131620.450	1.5
385.2372	16.01	-3.95	114279.110	3.5	140229.780	2.5
385.2382	8.01	-4.99	229946.600	2.5	255897.200	2.5
385.2450	64.01	-.15	241.973	0.0	26199.481	0.0
385.2499	25.00	-2.34	41031.480	4.5	66981.300	3.5
385.2517	24.00	-3.46	31377.960	4.0	57327.660	5.0
385.2540	24.00	-1.33	24940.610	2.0	50890.150	2.0
385.2575	26.00	-.72	17550.180	3.0	43499.485	4.0
385.2582	27.00	-.86	29216.370	2.5	55165.630	2.5
385.2600	26.01	-3.98	72619.610	2.5	98568.750	3.5
385.2606	30.02	-1.97	257566.100	1.0	283515.200	2.0
385.2628	24.00	-3.66	7593.160	2.0	33542.110	2.0
385.2779	26.01	-4.90	60441.050	1.5	86388.980	.5
385.2802	28.01	-5.47	29070.930	1.5	55018.710	2.5
385.2830	23.00	-.16	25253.530	5.5	51201.120	6.5
385.2971	22.00	-2.65	16106.080	4.0	42052.720	3.0
385.2972	22.00	-.21	18911.399	2.0	44858.030	1.0
385.3030	66.01	-.40	4274.849	0.0	30228.449	0.0
385.3064	22.00	.46	15877.180	2.0	41823.190	3.0
385.3157	24.01	-.83	42898.120	2.5	68843.510	3.5
385.3160	58.01	-.59	0.000	0.0	25952.725	0.0
385.3220	18.02	-1.59	214346.700	1.0	240291.660	2.0
385.3300	62.00	.39	3064.986	0.0	29016.768	0.0
385.3380	41.00	-.31	10808.108	0.0	36759.351	0.0
385.3431	9.02	-.72	440359.260	3.5	466302.800	3.5
385.3452	8.02	-2.06	374575.000	1.0	400518.400	0.0
385.3460	26.00	-4.33	23783.617	5.0	49726.964	4.0
385.3467	25.00	-.06	37420.240	5.5	63363.540	6.5
385.3497	21.00	-1.92	11610.240	3.5	37553.340	2.5
385.3528	26.02	-4.46	200504.990	3.0	226447.880	2.0
385.3556	9.02	-3.11	440359.260	3.5	466301.960	2.5
385.3592	25.02	-3.45	192365.520	1.5	218307.980	2.5
385.3621	25.02	-3.20	192172.890	2.5	218115.150	3.5
385.3648	23.01	-3.51	46739.980	2.0	72682.060	2.0
385.3650	24.00	-2.70	31393.400	5.0	57335.470	4.0
385.3662	22.00	-1.98	20126.055	3.0	46068.040	4.0
385.3681	6.01	-2.59	195765.850	2.5	221707.710	2.5
385.3740	22.00	-2.58	15975.590	3.0	41917.050	4.0
385.3988	24.01	-4.00	40415.340	.5	66355.130	1.5
385.3991	24.01	-4.14	38509.070	3.5	64448.840	2.5
385.4094	21.00	-2.48	16021.780	1.5	41960.860	2.5
385.4180	64.01	-1.20	3952.218	0.0	29898.074	0.0
385.4190	58.01	-.21	1855.123	0.0	27800.912	0.0
385.4220	92.00	-.28	0.000	0.0	25945.587	0.0
385.4222	24.00	-.09	21847.880	2.0	47786.100	2.0
385.4234	21.00	-3.04	16022.720	2.5	41960.860	2.5
385.4276	26.00	-3.45	19788.248	4.0	45726.104	5.0
385.4280	14.02	-.41	204330.790	2.0	230268.620	3.0
385.4284	26.02	-4.69	188109.580	3.0	214047.380	4.0
385.4286	25.00	-3.81	37586.030	1.5	63523.820	2.5
385.4315	27.00	-5.17	0.000	4.5	25937.590	4.5
385.4320	58.01	-.21	1855.123	0.0	27800.037	0.0
385.4358	26.00	-.65	25899.974	4.0	51837.279	3.0
385.4431	25.02	-2.63	192880.160	3.5	218816.970	2.5
385.4500	90.01	-.50	10082.190	0.0	36025.892	0.0
385.4560	62.00	.15	1451.835	0.0	27395.133	0.0
385.4675	28.00	-1.13	30922.763	5.0	56857.933	4.0
385.4676	24.00	-4.12	23386.350	3.0	49321.510	2.0
385.4690	28.01	-2.10	105861.190	2.5	131796.260	2.5
385.4700	9.04	-.87	834547.000	1.5	860482.000	.5
385.4700	41.00	-.80	10969.423	0.0	36911.779	0.0
385.4745	17.01	.37	158723.700	1.0	184658.400	2.0
385.4763	9.02	-3.68	442748.850	2.5	468683.430	2.5
385.4783	22.00	-3.78	18145.400	2.0	44079.840	2.0
385.4804	23.01	-2.90	46739.980	2.0	72674.280	2.0
385.4810	24.00	-2.42	31393.400	5.0	57327.660	5.0
385.4835	28.01	-4.35	110021.920	4.5	135956.010	5.5
385.4837	25.01	-3.44	53805.800	4.0	79739.880	5.0
385.4840	9.02	-2.46	442748.850	2.5	468682.910	3.5
385.4910	57.01	-1.38	6129.972	0.0	32070.915	0.0
385.4935	26.02	-4.11	117950.320	4.0	143883.740	5.0
385.4989	18.02	-2.43	226355.960	2.0	252289.020	3.0
385.5014	8.00	-1.64	102662.026	2.0	128594.916	2.0
385.5053	6.01	-4.00	195765.850	2.5	221698.480	3.5
385.5096	7.01	-.88	170607.890	1.0	196540.230	0.0
385.5106	25.00	-.79	34463.370	1.5	60395.640	1.5
385.5112	23.01	-2.50	25191.080	2.0	51123.310	2.0
385.5150	41.00	-.50	10969.423	0.0	36908.751	0.0
385.5160	18.01	-1.74	160239.350	1.5	186171.260	.5
385.5200	9.02	.62	440359.260	3.5	466290.900	4.5
385.5234	23.01	-2.74	46586.430	0.0	72517.840	1.0
385.5300	58.01	-.23	4113.534	0.0	30051.853	0.0
385.5311	25.02	-2.06	192665.800	4.5	218596.690	5.5
385.5317	26.00	-2.45	21999.132	4.0	47929.981	4.0
385.5368	23.00	-.51	0.000	1.5	25930.510	1.5
385.5372	23.00	-1.00	15724.220	3.5	41654.700	2.5
385.5390	23.00	-.77	10892.500	3.5	36822.860	3.5
385.5394	27.00	-4.21	25269.250	3.5	51199.580	3.5
385.5430	40.01	-1.28	4436.164	0.0	30373.608	0.0
385.5448	27.00	-3.91	26232.050	3.5	52162.020	3.5
385.5448	25.02	-4.07	192576.420	2.5	218506.390	3.5
385.5450	41.00	-1.85	0.000	0.0	25937.310	0.0
385.5518	25.02	-4.08	109780.400	2.5	135709.900	2.5
385.5540	74.00	-.74	13711.778	0.0	39648.482	0.0
385.5560	64.01	-.92	1855.123	0.0	27791.693	0.0
385.5568	24.00	-.99	21856.940	3.0	47786.100	2.0
385.5616	21.00	-2.11	11557.640	2.5	37486.480	1.5
385.5662	24.00	-1.35	24282.340	4.0	50210.870	4.0
385.5667	8.01	-3.07	232480.100	.5	258408.600	.5
385.5790	25.00	-2.50	37420.240	5.5	63347.910	4.5
385.5802	25.02	-2.67	192741.670	.5	218669.260	1.5
385.5809	23.01	-3.30	26839.820	3.0	52767.360	3.0
385.5820	23.01	-4.46	46754.590	1.0	72682.060	2.0
385.5838	22.00	-4.41	17540.205	3.0	43467.550	2.0
385.5841	28.00	-.89	33112.368	3.0	59039.693	4.0
385.5847	26.00	-.87	26140.164	3.0	52067.450	2.0
385.5851	23.00	-.06	553.020	4.5	26480.280	3.5
385.5900	62.01	-1.15	322.630	0.0	26256.913	0.0
385.5909	23.00	-4.70	24727.850	2.5	50654.720	2.5
385.5934	24.01	-2.28	64924.300	3.5	90851.000	4.5
385.6063	7.01	-.80	170666.230	0.0	196592.070	1.0
385.6092	24.00	-3.10	24093.160	2.0	50018.800	1.0
385.6136	18.01	-3.23	158167.710	1.5	184093.060	.5
385.6205	23.01	-4.95	47101.880	2.0	73026.760	2.0
385.6273	24.00	-.66	21847.880	2.0	47772.300	1.0
385.6275	27.00	-4.13	26232.050	3.5	52156.460	4.5
385.6360	26.02	-2.55	179748.170	5.0	205672.010	4.0
385.6373	26.00	-1.38	415.932	3.0	26339.682	2.0
385.6460	44.00	-1.18	2016.438	0.0	27946.955	0.0
385.6497	28.01	-4.78	111783.790	3.5	137706.710	2.5
385.6520	45.00	.17	5646.026	0.0	31576.139	0.0
385.6534	23.00	-1.65	14514.750	1.5	40437.420	1.5
385.6552	25.00	-.87	27201.540	2.5	53124.090	3.5
385.6637	6.01	-1.92	195785.740	3.5	221707.710	2.5
385.6731	24.00	-3.89	31355.210	2.0	57276.420	3.0
385.6794	27.00	-1.95	15184.040	2.5	41104.960	2.5
385.6873	23.00	-2.62	15571.900	2.5	41492.290	3.5
385.6977	23.01	-2.77	46754.590	1.0	72674.280	2.0
385.7020	58.01	-.22	5726.684	0.0	31653.436	0.0
385.7090	76.00	-1.65	4113.534	0.0	30039.815	0.0
385.7104	23.00	-2.88	15000.840	5.5	40919.680	5.5
385.7113	23.01	-3.37	47107.980	1.0	73026.760	2.0
385.7240	58.01	-.88	3306.958	0.0	29232.231	0.0
385.7248	25.00	-2.21	37630.620	4.5	63548.490	4.5
385.7258	15.01	-3.40	104102.600	2.0	130020.400	3.0
385.7355	22.00	-3.44	16267.510	5.0	42184.660	4.0
385.7383	18.02	-2.97	226355.960	2.0	252272.920	1.0
385.7401	26.01	-4.62	72651.910	3.5	98568.750	3.5
385.7430	26.01	-3.51	50212.930	2.5	76129.580	1.5
385.7550	44.00	.80	14599.011	0.0	40522.201	0.0
385.7550	25.00	-2.50	38669.600	3.5	64585.440	4.5
385.7550	25.00	-2.25	35041.370	3.5	60957.210	3.5
385.7559	25.02	-2.62	192392.200	3.5	218307.980	2.5
385.7574	25.00	-3.55	37630.620	4.5	63546.300	3.5
385.7630	17.02	-.70	217913.100	1.5	243828.400	2.5
385.7640	58.01	-.67	2339.068	0.0	28261.653	0.0
385.7643	22.00	-3.82	11639.804	3.0	37555.021	3.0
385.7644	24.00	-1.56	27300.190	1.0	53215.400	1.0
385.7705	23.00	-.28	25111.500	4.5	51026.300	5.5
385.7748	25.00	-1.72	35041.370	3.5	60955.880	4.5
385.7799	22.00	-3.42	18061.540	1.0	43975.710	1.0
385.7817	10.01	-4.46	276511.820	.5	302425.870	1.5
385.7820	26.02	-3.61	179757.980	4.0	205672.010	4.0
385.7820	58.01	-1.11	4436.164	0.0	30357.539	0.0
385.7824	26.00	-3.31	22249.430	3.0	48163.427	2.0
385.7837	26.02	-4.38	179178.620	3.0	205092.530	4.0
385.7840	69.01	-1.38	8872.327	0.0	34793.568	0.0
385.7896	22.00	-.75	11776.806	4.0	37690.320	5.0
385.7910	62.01	-1.14	2177.753	0.0	28098.524	0.0
385.7933	23.00	-4.66	24838.560	3.5	50751.830	3.5
385.7940	58.01	-1.35	3952.218	0.0	29872.787	0.0
385.7942	25.01	-3.35	43131.400	2.0	69044.610	2.0
385.8012	6.01	-2.70	195785.740	3.5	221698.480	3.5
385.8022	28.01	-2.61	105838.060	3.5	131750.730	3.5
385.8034	25.01	-4.10	81054.350	2.0	106966.940	2.0
385.8080	2.01	-1.26	411477.918	0.0	437397.546	0.0
385.8088	21.00	-2.67	16009.710	.5	41921.940	1.5
385.8108	24.00	-4.63	31364.330	3.0	57276.420	3.0
385.8132	22.00	-2.18	16106.080	4.0	42018.010	5.0
385.8156	25.02	-4.77	109780.400	2.5	135692.170	3.5
385.8214	22.00	-1.21	19573.968	4.0	45485.350	5.0
385.8287	18.02	-2.21	214346.700	1.0	240257.590	1.0
385.8292	28.00	-.78	3409.925	2.0	29320.782	3.0
385.8300	24.02	-4.13	71166.100	2.0	97076.900	1.0
385.8310	72.00	-1.17	2339.068	0.0	28257.151	0.0
385.8375	25.01	-4.96	59537.400	4.0	85447.700	5.0
385.8390	68.00	-.24	7097.862	0.0	43015.408	0.0
385.8449	10.01	-3.99	280989.530	1.5	306899.330	2.5
385.8450	64.00	-.65	6936.547	0.0	32853.690	0.0
385.8471	26.00	-1.55	26140.164	3.0	52049.820	2.0
385.8520	62.00	-.26	1451.835	0.0	27368.508	0.0
385.8525	23.01	-2.28	46879.940	2.0	72789.230	3.0
385.8537	25.01	-4.21	82193.040	2.0	108102.250	3.0
385.8539	15.01	-3.27	103756.900	1.0	129666.100	2.0
385.8594	24.00	-4.45	35618.510	1.0	61527.340	1.0
385.8656	25.01	-4.22	55371.300	3.0	81279.710	4.0
385.8662	28.01	-4.32	95332.530	2.5	121240.900	3.5
385.8676	23.00	-2.01	8578.520	2.5	34486.800	2.5
385.8719	28.00	-4.21	29668.918	3.0	55576.905	3.0
385.8740	62.00	.16	2258.411	0.0	28173.606	0.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
385.8767	25.00	-1.77	27201.540	2.5	53109.210	2.5
385.8829	26.00	-2.66	18378.187	2.0	44285.436	2.0
385.8860	12.00	-1.52	35051.264	1.0	60958.310	2.0
385.8877	24.00	.37	24303.940	3.0	50210.870	4.0
385.8878	22.00	-3.73	16817.190	1.0	42724.110	2.0
385.8950	41.00	-1.20	80.658	0.0	25994.443	0.0
385.8998	10.01	-2.31	292546.700	.5	318452.820	1.5
385.9069	27.00	-2.08	28777.270	3.5	54682.910	4.5
385.9205	25.01	-2.76	43311.000	1.0	69215.730	1.0
385.9214	26.00	-.82	19390.165	6.0	45294.830	5.0
385.9290	74.00	-.21	17986.627	0.0	43898.129	0.0
385.9309	23.01	-2.78	30267.460	2.0	56171.490	1.0
385.9343	23.00	-.77	8715.720	3.5	34619.520	2.5
385.9351	23.01	-3.23	8841.970	3.0	34745.720	3.0
385.9360	21.01	-3.64	177.630	3.0	26081.320	2.0
385.9373	13.01	-1.97	121365.200	0.0	147268.800	1.0
385.9397	25.00	-3.31	25265.740	5.5	51169.180	5.5
385.9450	29.01	-4.65	115639.020	2.0	141542.100	2.0
385.9580	92.01	-.24	241.973	0.0	26151.528	0.0
385.9588	24.00	-1.48	27382.180	2.0	53284.340	3.0
385.9621	21.01	.10	32349.980	3.0	58251.920	2.0
385.9656	13.01	-4.41	106918.200	1.0	132819.900	2.0
385.9656	13.01	-4.88	106918.200	1.0	132819.900	1.0
385.9664	25.00	-2.92	27201.540	2.5	53103.190	1.5
385.9680	24.00	-2.40	20520.920	3.0	46422.460	4.0
385.9712	18.01	-2.78	188766.150	2.5	214667.480	2.5
385.9731	30.02	-.50	238336.200	2.0	264237.400	1.0
385.9777	27.00	-3.83	25269.250	3.5	51170.140	4.5
385.9800	73.00	-1.65	9920.875	0.0	35828.953	0.0
385.9850	90.01	-1.17	8307.725	0.0	34215.468	0.0
385.9886	21.00	-3.12	16021.780	1.5	41921.940	1.5
385.9913	26.00	-.79	0.000	4.0	25899.974	4.0
385.9994	25.01	-4.87	49820.160	2.0	75719.590	1.0
386.0026	21.00	-4.35	16022.720	2.5	41921.940	1.5
386.0035	28.00	-2.09	32973.414	4.0	58872.570	4.0
386.0042	23.01	-2.36	47051.890	3.0	72951.000	4.0
386.0055	23.01	-1.98	20980.920	2.0	46879.940	2.0
386.0093	24.00	-1.89	20523.690	4.0	46422.460	4.0
386.0111	26.01	-4.03	36252.960	2.5	62151.610	2.5
386.0115	25.01	-3.80	81051.620	3.0	106950.240	3.0
386.0130	24.00	-1.95	20523.940	5.0	46422.460	4.0
386.0131	16.01	-1.14	125485.320	.5	151383.830	.5
386.0137	29.01	-1.64	123304.630	1.0	149203.100	0.0
386.0139	24.00	-2.54	31377.960	4.0	57276.420	3.0
386.0143	10.01	-4.03	281171.380	2.5	307069.810	1.5
386.0161	26.02	-3.10	179194.220	4.0	205092.530	4.0
386.0247	18.02	-2.24	226355.960	2.0	252253.690	2.0
386.0264	24.00	-1.39	27382.180	2.0	53279.800	2.0
386.0267	25.00	-2.74	35041.370	3.5	60938.970	4.5
386.0273	24.00	-2.39	24286.540	1.0	50184.100	2.0
386.0285	22.00	-1.92	16961.420	3.0	42858.900	3.0
386.0382	29.01	-1.19	122745.770	2.0	148642.600	2.0
386.0422	10.01	-4.46	281998.280	2.5	307894.840	2.5
386.0464	22.00	-3.78	15975.590	3.0	41871.870	2.0
386.0472	29.00	-.64	44926.239	0.0	70829.807	0.0
386.0504	25.01	-4.63	53017.160	1.0	78913.170	2.0
386.0522	25.01	-4.34	81054.350	2.0	106950.240	3.0
386.0614	28.01	-3.97	95332.530	2.5	121227.800	2.5
386.0625	16.01	-.42	130134.080	2.5	156029.280	1.5
386.0679	24.00	-1.62	27300.190	1.0	53195.030	2.0
386.0695	16.02	-.41	146736.540	1.0	172631.270	0.0
386.0695	16.02	-.76	146736.540	1.0	172631.270	0.0
386.0701	23.01	-6.17	25191.080	2.0	51085.770	3.0
386.0720	44.00	.06	14921.641	0.0	40823.545	0.0
386.0733	26.00	-2.22	27166.804	4.0	53061.280	5.0
386.0759	25.02	-3.47	192172.890	2.5	218067.190	2.5
386.0804	17.01	.73	128729.800	3.0	154623.800	4.0
386.0860	41.00	-.64	12259.943	0.0	38160.908	0.0
386.0910	72.00	-.84	8872.327	0.0	34772.957	0.0
386.0982	17.01	.14	128729.800	3.0	154622.600	3.0
386.1023	26.00	-4.19	31805.059	3.0	57697.590	4.0
386.1060	74.00	-.89	14840.984	0.0	40740.607	0.0
386.1081	25.02	-3.46	191915.430	.5	217807.570	1.5
386.1160	27.00	-1.09	8460.810	2.5	34352.420	1.5
386.1194	25.02	-4.38	109841.120	3.5	135732.500	4.5
386.1230	23.01	-4.80	47607.790	6.0	73498.930	6.0
386.1240	74.00	-1.54	12098.628	0.0	37997.044	0.0
386.1288	29.01	-1.61	120684.550	3.0	146575.300	2.0
386.1330	26.00	-.82	26406.490	1.0	52296.960	2.0
386.1347	26.00	-1.33	21715.735	5.0	47606.092	5.0
386.1415	19.01	-.50	186685.600	2.0	212575.500	2.0
386.1430	17.01	-.37	158768.600	2.0	184658.400	2.0
386.1430	17.01	-.70	128729.800	3.0	154619.600	2.0
386.1445	8.02	-2.19	374575.000	1.0	400464.700	1.0
386.1469	28.01	-3.08	105861.190	2.5	131750.730	3.5
386.1526	27.00	-3.80	26232.050	3.5	52121.210	4.5
386.1551	23.00	-2.47	15770.720	4.5	41659.710	5.5
386.1589	26.00	-1.47	26623.726	2.0	52512.460	1.0
386.1611	23.00	-1.78	14548.830	2.5	40437.420	1.5
386.1658	25.00	-1.88	38934.940	2.5	64823.210	2.5
386.1814	22.00	-3.48	20006.032	2.0	45893.260	3.0
386.1878	27.00	-2.83	29563.170	1.5	55449.970	2.5
386.1900	24.00	-3.87	35640.690	0.0	61527.340	1.0
386.1907	17.01	.53	158768.600	2.0	184655.200	3.0
386.2050	62.01	-1.17	806.575	0.0	26699.559	0.0
386.2082	29.01	-1.31	122745.770	2.0	148631.200	3.0
386.2136	26.01	-3.37	74606.970	2.5	100492.040	3.5
386.2145	24.01	-3.22	39824.520	4.5	65709.530	5.5
386.2152	26.02	-2.32	179207.570	5.0	205092.530	4.0
386.2173	6.01	-1.75	195813.660	4.5	221698.480	3.5
386.2219	23.00	-3.28	137.380	2.5	26021.890	3.5
386.2230	62.01	-1.23	2661.698	0.0	28553.476	0.0
386.2243	24.00	-3.13	27500.370	3.0	53384.720	3.0
386.2264	24.00	-4.45	24299.890	2.0	50184.100	2.0
386.2333	25.00	-3.45	25285.430	4.5	51169.180	5.5
386.2427	23.00	-.41	24992.880	3.5	50876.000	4.5
386.2428	10.01	.03	312810.670	4.5	338693.780	4.5
386.2432	22.00	-2.86	15156.787	4.0	41039.874	5.0
386.2434	10.01	.90	312810.710	5.5	338693.780	4.5
386.2442	27.00	-2.80	18775.010	.5	44658.030	1.5
386.2443	10.01	.51	312810.670	4.5	338693.680	3.5
386.2470	58.01	-.54	5646.026	0.0	31536.195	0.0
386.2525	28.00	-2.08	30392.052	1.0	56274.516	2.0
386.2534	24.00	-1.31	25177.390	4.0	51059.790	4.0
386.2548	22.00	-4.31	16106.080	4.0	41988.390	3.0
386.2575	10.01	-1.41	312811.650	3.5	338693.780	4.5
386.2575	10.01	-.45	312811.650	4.5	338693.780	4.5
386.2590	10.01	-0.00	312811.650	3.5	338693.680	3.5
386.2590	10.01	.51	312811.650	4.5	338693.680	3.5
386.2609	8.01	-3.39	232526.700	1.5	258408.600	.5
386.2659	22.00	-3.35	20126.055	3.0	46007.620	4.0
386.2690	44.00	.79	17018.737	0.0	42907.431	0.0
386.2801	24.00	-1.51	27825.450	5.0	53706.060	5.0
386.2849	22.00	-1.05	15877.180	2.0	41757.470	3.0
386.2869	24.00	-1.51	24303.940	3.0	50184.100	2.0
386.2870	28.00	-2.49	33112.368	3.0	58992.520	2.0
386.2930	41.00	-1.55	0.000	0.0	25887.086	0.0
386.3042	25.03	-2.24	152700.500	4.0	178579.500	4.0
386.3057	10.01	-4.38	302816.980	1.5	328695.880	1.5
386.3058	28.00	-.73	30922.763	5.0	56801.654	5.0
386.3107	24.00	-4.49	23933.900	4.0	49812.460	3.0
386.3169	28.00	-1.38	30979.789	4.0	56857.933	4.0
386.3263	23.01	-2.12	23391.090	5.0	49266.610	4.0
386.3330	60.01	-.45	0.000	0.0	25884.405	0.0
386.3352	26.02	-4.01	200504.990	3.0	226381.910	3.0
386.3375	23.00	-.40	15103.770	4.5	40980.540	4.5
386.3380	41.00	-.49	5242.739	0.0	31126.809	0.0
386.3382	26.01	-3.11	38164.240	2.5	64040.960	3.5
386.3385	29.01	-3.72	115665.400	1.0	141542.100	2.0
386.3395	25.01	-2.31	43339.100	2.0	69215.730	1.0
386.3410	90.01	-.88	6613.917	0.0	32497.786	0.0
386.3413	24.00	-3.09	27649.710	4.0	53526.220	4.0
386.3419	27.00	-4.12	27497.060	2.5	53373.530	3.5
386.3463	28.01	-4.65	107737.810	1.5	133613.990	1.5
386.3537	22.00	.10	18287.560	4.0	44163.240	5.0
386.3602	29.01	-1.59	120684.550	3.0	146559.800	4.0
386.3603	27.00	-1.31	21215.900	.5	47091.140	.5
386.3616	22.00	-3.94	19937.859	1.0	45613.010	2.0
386.3618	23.00	-1.07	15724.220	3.5	41599.360	4.5
386.3625	24.00	-1.44	27500.370	3.0	53375.460	4.0
386.3657	22.00	-3.94	18287.560	4.0	44162.440	4.0
386.3691	26.00	-1.60	26339.682	2.0	52214.330	1.0
386.3709	21.00	-3.36	16141.040	2.5	42015.570	3.5
386.3738	26.00	-.99	21715.735	5.0	47590.070	4.0
386.3757	21.00	-2.10	16210.800	3.5	42085.010	4.5
386.3787	23.01	-1.35	14556.090	4.0	40430.100	4.0
386.3830	23.01	-4.05	47420.100	4.0	73293.820	5.0
386.3865	26.00	-2.67	22249.430	3.0	48122.913	3.0
386.3870	40.00	-.24	564.603	0.0	26445.391	0.0
386.3879	10.01	-2.74	281025.940	2.5	306899.330	2.5
386.3912	24.00	-3.22	31364.330	3.0	57237.500	4.0
386.3938	26.01	-2.62	38214.500	1.5	64087.500	2.5
386.3964	24.00	-1.62	23305.010	2.0	49177.830	3.0
386.3982	26.01	-3.51	36252.960	2.5	62125.660	1.5
386.4079	29.01	-.72	120684.550	3.0	146556.600	3.0
386.4086	17.01	-1.90	158786.400	3.0	184658.400	2.0
386.4110	42.00	-.12	0.000	0.0	25879.180	0.0
386.4220	27.00	-4.29	29294.520	3.5	55165.630	2.5
386.4250	23.00	-2.16	10892.500	3.5	36763.410	2.5
386.4264	18.00	-3.41	95399.870	1.0	121270.682	2.0
386.4296	26.00	-1.67	25899.974	4.0	51770.577	3.0
386.4312	26.00	-3.26	20874.482	3.0	46744.975	3.0
386.4321	18.01	-3.54	189040.870	1.5	214911.300	2.5
386.4340	40.00	-.73	1209.863	0.0	27087.503	0.0
386.4340	74.00	-1.93	3306.958	0.0	29184.598	0.0
386.4490	57.01	.79	28391.447	0.0	54268.083	0.0
386.4520	15.01	-2.76	103756.900	1.0	129626.000	1.0
386.4541	9.02	-3.58	418188.480	.5	444057.440	1.5
386.4541	10.01	-1.25	312824.820	3.5	338693.780	4.5
386.4556	10.01	-1.64	312824.820	3.5	338693.680	3.5
386.4559	10.01	-1.29	312824.840	2.5	338693.680	3.5
386.4565	17.01	-.36	158786.400	3.0	184655.200	3.0
386.4568	25.02	-3.62	109841.120	3.5	135709.900	2.5
386.4583	25.02	-2.50	192948.290	1.5	218816.970	2.5
386.4604	25.00	-1.36	37420.240	5.5	63288.780	5.5
386.4647	24.00	-3.00	31352.420	1.0	57220.670	2.0
386.4662	26.01	-3.44	72261.830	5.5	98129.980	6.5
386.4693	9.02	-4.65	418188.480	.5	444056.420	.5
386.4699	10.01	.42	312810.670	4.5	338678.570	3.5
386.4711	24.00	-3.76	35807.900	2.0	61675.720	2.0
386.4735	26.01	-7.72	16369.390	3.5	42237.050	3.5
386.4767	26.02	-3.65	200514.460	4.0	226381.910	3.0
386.4790	64.00	-.82	967.890	0.0	26842.517	0.0
386.4828	18.02	-2.92	243145.760	2.0	269012.800	2.0
386.4846	10.01	-.54	312811.650	3.5	338678.570	3.5
386.4846	10.01	.53	312811.650	4.5	338678.570	3.5
386.4858	23.00	-.37	137.380	2.5	26004.220	2.5
386.5020	41.01	-.32	12985.861	0.0	38858.948	0.0
386.5064	24.00	-2.64	31355.210	2.0	57220.670	2.0
386.5240	62.01	-1.56	322.630	0.0	26194.245	0.0
386.5248	10.01	-2.48	318183.690	4.5	344047.920	3.5
386.5270	10.01	-3.48	302831.800	.5	328695.880	1.5
386.5282	21.00	-3.54	16096.860	1.5	41960.860	2.5
386.5297	13.01	-2.35	121480.300	3.0	147344.200	3.0
386.5333	10.01	.50	318184.260	3.5	344047.920	3.5
386.5334	10.01	1.56	318184.270	4.5	344047.920	3.5
386.5387	13.01	-1.45	121480.900	2.0	147344.200	3.0
386.5400	44.00	-.88	9114.300	0.0	34984.844	0.0
386.5458	26.00	-4.08	21038.987	2.0	46901.806	1.0
386.5466	28.01	-3.98	101357.200	4.5	127219.970	3.5
386.5470	76.00	.79	25165.146	0.0	51035.221	0.0
386.5526	26.00	-1.04	8154.713	1.0	34017.084	1.0
386.5535	26.02	-4.23	166144.630	2.0	192006.940	2.0
386.5570	63.00	.84	15486.244	0.0	41355.650	0.0
386.5583	24.00	-2.82	35813.730	3.0	61675.720	2.0
386.5640	77.00	-.73	11775.998	0.0	37644.936	0.0
386.5666	25.00	-1.63	35041.370	3.5	60902.800	3.5
386.5686	24.00	-2.90	27176.220	1.0	53037.520	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
386.5690	62.01	-1.83	2984.328	0.0	28852.931	0.0
386.5693	25.01	-4.58	53597.130	2.0	79458.380	2.0
386.5699	25.00	-1.13	27248.000	1.5	53109.210	2.5
386.5717	23.01	-1.92	13542.680	3.0	39403.770	4.0
386.5849	23.01	-3.20	26839.820	3.0	52700.030	2.0
386.5920	92.01	-.41	2258.411	0.0	28125.475	0.0
386.5949	24.00	-2.69	31377.960	4.0	57237.500	4.0
386.6021	24.01	-2.34	39684.000	3.5	65543.060	3.5
386.6023	22.00	-2.06	7255.369	2.0	33114.412	2.0
386.6050	74.00	-1.10	13711.778	0.0	39577.972	0.0
386.6056	23.01	-2.34	47420.100	4.0	73278.920	4.0
386.6149	13.01	-1.07	106918.200	1.0	132776.400	0.0
386.6209	19.02	-.91	237912.200	1.5	263770.000	.5
386.6251	29.01	-1.73	121078.960	3.0	146936.480	2.0
386.6270	27.00	-4.78	15184.040	2.5	41041.430	3.5
386.6275	18.00	-3.20	95399.870	1.0	121257.227	1.0
386.6324	23.00	-3.36	15571.900	2.5	41428.930	2.5
386.6332	10.01	-4.59	302961.070	1.5	328818.050	2.5
386.6367	23.00	-1.30	15062.940	6.5	40919.680	5.5
386.6373	24.02	-3.58	70291.800	2.0	96148.500	1.0
386.6386	10.01	-4.10	302839.280	2.5	328695.900	2.5
386.6427	24.00	-2.95	31364.330	3.0	57220.670	2.0
386.6436	23.01	-3.79	47051.890	3.0	72908.170	3.0
386.6439	22.00	-2.03	16267.510	5.0	42123.770	6.0
386.6481	10.01	-.50	318191.940	2.5	344047.920	3.5
386.6483	10.01	-2.03	318191.950	3.5	344047.920	3.5
386.6533	24.01	-1.86	39824.520	4.5	65680.150	4.5
386.6599	25.00	-1.62	27248.000	1.5	53103.190	1.5
386.6622	18.02	-3.70	243145.760	2.0	269000.800	3.0
386.6690	42.00	-.03	25649.091	0.0	51511.004	0.0
386.6740	23.01	-1.63	11514.760	1.0	37369.010	2.0
386.6815	10.01	.06	312824.820	3.5	338678.570	3.5
386.6818	10.01	-1.31	312824.840	2.5	338678.570	3.5
386.6820	58.01	-1.21	967.890	0.0	26828.933	0.0
386.6831	27.00	-2.02	13795.520	2.5	39649.160	3.5
386.6879	25.00	-2.59	27248.000	1.5	53101.320	.5
386.6912	23.00	-.56	24898.730	2.5	50751.830	3.5
386.6990	64.00	.36	1693.808	0.0	27553.715	0.0
386.6991	26.00	-3.69	20874.482	3.0	46727.055	2.0
386.7170	92.00	-.21	3790.903	0.0	29649.606	0.0
386.7218	26.00	-.67	24335.764	2.0	50186.814	2.0
386.7218	25.02	-4.51	109841.120	3.5	135692.170	3.5
386.7233	24.00	-2.82	20517.400	2.0	46368.350	3.0
386.7248	24.00	-2.94	27223.050	2.0	53073.900	3.0
386.7260	64.01	-1.20	3952.218	0.0	29810.319	0.0
386.7297	10.01	-4.65	312843.150	2.5	338693.680	3.5
386.7340	23.00	-2.58	8578.520	2.5	34428.760	1.5
386.7340	72.01	-.39	17744.654	0.0	43602.220	0.0
386.7344	28.01	-1.94	103653.030	3.5	129503.240	4.5
386.7483	25.01	-4.60	55371.300	3.0	81220.580	3.0
386.7500	2.00	-1.80	169087.000	0.0	194943.496	0.0
386.7537	22.00	-2.67	16875.190	2.0	42724.110	2.0
386.7564	23.01	-3.79	9097.810	4.0	34946.550	4.0
386.7594	23.00	-1.27	323.420	3.5	26171.960	4.5
386.7600	28.01	-2.39	105838.060	3.5	131686.560	4.5
386.7607	24.00	-3.21	27163.200	0.0	53011.650	1.0
386.7668	26.00	-3.44	24338.766	3.0	50186.814	2.0
386.7735	22.00	-1.31	15975.590	3.0	41823.190	3.0
386.7760	24.00	-2.38	20520.920	3.0	46368.350	3.0
386.7840	44.00	-.21	6452.602	0.0	32306.826	0.0
386.7920	41.00	-1.13	967.890	0.0	26821.579	0.0
386.7923	26.00	-1.83	20874.482	3.0	46720.824	4.0
386.7980	74.00	-.97	2903.671	0.0	28756.959	0.0
386.8001	26.01	-2.66	78137.530	3.5	103983.350	3.5
386.8009	22.00	-1.43	11776.806	4.0	37622.573	3.0
386.8035	23.01	-3.53	47181.170	3.0	73026.760	2.0
386.8044	10.01	-3.84	318202.390	2.5	344047.920	3.5
386.8140	58.01	-.80	3548.931	0.0	29401.149	0.0
386.8152	18.01	-4.48	147503.020	1.5	173347.830	1.5
386.8175	24.00	-2.34	20523.690	4.0	46368.350	3.0
386.8237	26.00	-1.84	23783.617	5.0	49627.861	4.0
386.8258	24.00	-3.49	31393.400	5.0	57237.500	4.0
386.8261	24.00	-1.42	25106.340	3.0	50950.420	3.0
386.8284	27.00	-3.56	29563.170	1.5	55407.100	1.5
386.8309	28.00	-2.03	30922.763	5.0	56766.523	4.0
386.8362	29.01	-2.16	119039.680	2.0	144883.090	2.0
386.8407	22.00	-.79	15975.590	3.0	41818.700	4.0
386.8420	92.01	-1.34	4355.506	0.0	30205.853	0.0
386.8500	58.01	-.63	5646.026	0.0	31495.839	0.0
386.8526	18.01	.29	161048.640	1.5	186890.950	2.5
386.8538	25.00	-1.86	35114.980	2.5	60957.210	3.5
386.8580	59.01	-1.95	0.000	0.0	25849.278	0.0
386.8601	27.00	-3.06	22475.360	4.5	48317.170	3.5
386.8608	28.00	-4.28	30979.789	4.0	56821.553	3.0
386.8617	17.01	.70	158786.400	3.0	184628.100	4.0
386.8658	24.01	-3.65	40415.340	.5	66256.770	.5
386.8660	28.01	-1.08	103025.580	2.5	128867.000	3.5
386.8694	27.00	-2.92	23184.230	2.5	49025.420	1.5
386.8713	22.00	-2.78	11776.806	4.0	37617.868	4.0
386.8784	25.02	-2.08	192665.800	4.5	218506.390	3.5
386.8835	28.01	-3.17	108368.050	2.5	134208.300	2.5
386.8845	26.00	-4.79	32133.977	2.0	57974.160	2.0
386.8940	22.00	-3.19	16267.510	5.0	42107.060	4.0
386.8974	28.01	-4.29	111120.540	1.5	136959.860	2.5
386.9006	26.01	-4.16	50076.100	1.5	75915.210	2.5
386.9061	9.02	.05	440202.480	2.5	466041.220	3.5
386.9070	60.01	-.92	1451.835	0.0	27297.839	0.0
386.9080	42.00	-.42	11372.710	0.0	37218.648	0.0
386.9206	23.00	-2.75	11100.650	4.5	36938.420	5.5
386.9218	27.00	-2.54	28845.220	5.5	54682.910	4.5
386.9255	9.02	-.60	440359.260	3.5	466196.700	3.5
386.9296	22.00	-.16	15877.180	2.0	41714.350	2.0
386.9321	13.01	-.57	123415.900	2.0	149252.900	3.0
386.9396	30.02	-1.59	257678.700	2.0	283515.200	3.0
386.9396	30.02	-2.74	257678.700	2.0	283515.200	2.0
386.9441	30.02	-4.71	257796.000	5.0	283632.200	5.0
386.9495	22.01	-3.43	39476.870	2.5	65312.710	2.5
386.9518	9.02	-1.13	440202.480	2.5	466038.170	2.5
386.9536	12.00	-2.76	35051.264	1.0	60886.830	2.0
386.9557	24.00	-3.58	27176.220	1.0	53011.650	1.0
386.9558	10.01	-1.23	312843.150	2.5	338678.570	3.5
386.9562	26.00	-2.02	21999.132	4.0	47834.529	5.0
386.9570	58.01	-.56	9678.902	0.0	35521.567	0.0
386.9602	26.00	-1.89	21999.132	4.0	47834.260	3.0
386.9603	22.00	-3.12	7255.369	2.0	33090.492	1.0
386.9621	18.01	-3.09	160239.350	1.5	186074.350	2.5
386.9636	13.01	-1.63	123418.000	3.0	149252.900	3.0
386.9636	13.01	-.65	123418.000	3.0	149252.900	4.0
386.9636	13.01	-.88	123418.000	3.0	149252.900	4.0
386.9658	25.00	-4.00	25265.740	5.5	51100.490	4.5
386.9660	28.01	-4.09	111120.540	1.5	136955.280	.5
386.9726	30.02	-3.26	235452.500	2.0	261286.800	1.0
386.9729	25.01	-4.55	81051.620	3.0	106885.900	4.0
386.9801	28.01	-3.61	67694.640	2.5	93528.440	3.5
386.9870	66.01	-.56	4274.849	0.0	30115.510	0.0
386.9888	24.00	-1.86	27382.180	2.0	53215.400	1.0
386.9906	21.00	-4.55	15672.550	1.5	41505.650	2.5
386.9915	18.02	-2.63	243145.760	2.0	268978.800	1.0
386.9940	75.00	-.50	16212.162	0.0	42052.356	0.0
386.9949	28.01	-3.68	105838.060	3.5	131670.870	2.5
387.0010	45.00	.37	16050.847	0.0	41890.574	0.0
387.0055	24.00	-2.93	20517.400	2.0	46349.500	2.0
387.0055	25.02	-3.73	86051.500	2.5	111883.600	2.5
387.0056	13.01	-3.42	123420.800	4.0	149252.900	3.0
387.0056	13.01	-1.86	123420.800	4.0	149252.900	4.0
387.0056	13.01	-2.00	123420.800	4.0	149252.900	4.0
387.0056	13.01	-.33	123420.800	4.0	149252.900	5.0
387.0105	9.02	-2.12	440359.260	3.5	466191.030	2.5
387.0135	24.00	-4.26	21856.940	3.0	47688.510	4.0
387.0162	24.00	-3.27	31355.210	2.0	57186.600	3.0
387.0276	24.00	-4.13	7593.160	2.0	33423.790	1.0
387.0460	12.02	-.23	562939.500	2.0	588768.900	2.0
387.0478	20.00	-1.65	20335.360	1.0	46164.644	2.0
387.0520	9.04	-.57	834547.000	1.5	860376.000	1.5
387.0532	27.00	-1.90	20500.710	1.5	46329.630	2.5
387.0574	23.00	-.74	15770.720	4.5	41599.360	4.5
387.0583	24.00	-2.93	20520.920	3.0	46349.500	2.0
387.0598	24.00	-2.16	24277.060	0.0	50105.540	1.0
387.0618	21.01	-3.24	39114.440	1.0	64942.790	0.0
387.0626	28.01	-1.01	103025.580	2.5	128853.870	2.5
387.0758	23.01	-2.65	46690.430	1.0	72517.840	1.0
387.0764	22.00	-5.75	11531.760	2.0	37359.130	2.0
387.0785	25.00	-.21	37630.620	4.5	63457.850	5.5
387.0812	28.01	-2.16	106007.890	2.5	131834.940	2.5
387.0836	28.00	-1.92	31031.042	3.0	56857.933	4.0
387.0870	58.01	-.66	5484.711	0.0	31318.697	0.0
387.0886	27.00	-3.53	29563.170	1.5	55389.730	1.5
387.0920	26.02	-4.87	92523.910	5.0	118350.240	4.0
387.1040	92.00	.10	0.000	0.0	25832.851	0.0
387.1085	23.00	-.84	11100.650	4.5	36925.880	3.5
387.1188	23.00	-.73	24830.180	1.5	50654.720	2.5
387.1190	41.00	-.75	8952.985	0.0	34784.835	0.0
387.1272	25.02	-3.61	192576.420	2.5	218400.400	3.5
387.1341	25.00	-2.10	41031.480	4.5	66855.000	4.5
387.1355	29.01	-2.77	118991.500	4.0	144814.930	3.0
387.1473	28.01	-3.90	75917.630	3.5	101740.270	3.5
387.1529	24.00	-2.83	31364.330	3.0	57186.600	3.0
387.1540	64.01	-1.62	564.603	0.0	26394.118	0.0
387.1589	28.00	-1.42	30979.789	4.0	56801.654	5.0
387.1604	26.01	-2.17	73751.340	4.5	99573.110	4.5
387.1640	57.01	-.61	967.890	0.0	26796.738	0.0
387.1668	25.00	-1.50	27281.850	.5	53103.190	1.5
387.1671	10.01	.07	321422.850	4.5	347244.170	4.5
387.1675	10.01	-.85	321422.880	5.5	347244.170	4.5
387.1677	10.01	-.57	321422.850	4.5	347244.130	5.5
387.1681	10.01	.71	321422.880	5.5	347244.130	5.5
387.1683	28.01	-1.75	103653.030	3.5	129474.270	3.5
387.1710	25.01	-3.69	44521.520	4.0	70342.580	3.0
387.1728	10.01	.45	321423.230	4.5	347244.170	4.5
387.1729	10.01	-.97	321423.240	3.5	347244.170	4.5
387.1734	24.00	-3.95	24833.860	3.0	50654.760	2.0
387.1734	10.01	-3.26	321423.230	4.5	347244.130	5.5
387.1745	27.00	-4.03	25739.930	2.5	51560.760	2.5
387.1751	26.00	-1.70	23783.617	5.0	49604.402	5.0
387.1780	62.01	-1.02	1451.835	0.0	27279.749	0.0
387.1790	2.00	-1.85	171135.000	0.0	196962.847	0.0
387.1810	58.01	-1.08	7178.519	0.0	33006.233	0.0
387.1845	27.00	-3.66	29735.180	3.5	55555.340	2.5
387.1850	24.00	-1.90	33040.100	2.0	58860.230	2.0
387.1896	21.00	-4.60	16141.040	2.5	41960.860	2.5
387.1914	24.00	-1.20	24282.340	4.0	50102.040	3.0
387.1946	22.00	-3.82	15220.390	5.0	41039.874	5.0
387.1949	25.00	-1.60	27281.850	.5	53101.320	.5
387.1976	25.01	-4.69	81147.650	2.0	106966.940	2.0
387.2019	24.00	-1.94	24286.540	1.0	50105.540	1.0
387.2093	25.00	-1.27	37630.620	4.5	63449.130	5.5
387.2130	66.01	-.16	0.000	0.0	25825.579	0.0
387.2134	18.01	-.78	158167.710	1.5	183985.940	1.5
387.2169	11.02	-3.36	442710.500	1.5	468528.500	1.5
387.2216	23.01	-2.71	26839.820	3.0	52657.510	4.0
387.2220	27.00	-2.32	23207.760	1.5	49025.420	1.5
387.2231	23.00	-4.56	15571.900	2.5	41389.490	1.5
387.2390	45.00	-1.76	5565.369	0.0	31389.214	0.0
387.2452	10.01	-1.30	321428.060	3.5	347244.170	4.5
387.2483	23.00	-1.70	15103.770	4.5	40919.680	5.5
387.2503	26.00	-.98	7985.783	2.0	33801.555	2.0
387.2540	20.00	-1.48	20349.260	2.0	46164.785	3.0
387.2550	72.01	-.69	12017.970	0.0	37840.748	0.0
387.2561	20.00	-2.39	20349.260	2.0	46164.644	2.0
387.2562	25.02	-2.37	192365.520	1.5	218180.900	1.5
387.2610	25.00	-3.58	25285.430	4.5	51100.490	4.5
387.2620	64.01	-1.28	3387.616	0.0	29209.928	0.0
387.2631	23.00	-3.20	15724.220	3.5	41539.140	4.5
387.2633	25.01	-3.50	81147.650	2.0	106962.560	1.0
387.2699	24.00	-3.87	27223.050	2.0	53037.520	2.0
387.2720	63.00	.24	15486.244	0.0	41307.889	0.0
387.2754	26.01	-4.25	21812.040	1.5	47626.140	.5
387.2756	23.00	-3.41	8715.720	3.5	34529.810	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
387.2765	25.01	-3.82	53698.700	2.0	79512.730	3.0
387.2771	25.00	-1.97	37630.620	4.5	63444.610	4.5
387.2822	23.00	-4.49	24770.620	.5	50584.270	1.5
387.2830	74.00	-1.78	3306.958	0.0	29127.869	0.0
387.2840	29.01	-1.47	122745.770	2.0	148559.300	2.0
387.2844	15.01	-2.52	103756.900	1.0	129570.400	1.0
387.2850	70.00	-.14	17905.969	0.0	43726.747	0.0
387.2899	10.01	1.69	321431.040	5.5	347244.170	4.5
387.2905	10.01	-.37	321431.040	5.5	347244.130	5.5
387.2908	10.01	1.76	321431.060	6.5	347244.130	5.5
387.2923	26.00	-2.09	21999.132	4.0	47812.104	4.0
387.2942	24.00	-4.02	27382.180	2.0	53195.030	2.0
387.2957	25.00	-3.73	25287.740	3.5	51100.490	4.5
387.3017	27.00	-2.73	18389.570	1.5	44201.920	2.5
387.3023	27.00	-.79	28345.860	4.5	54158.170	4.5
387.3114	27.00	-.54	3482.820	4.5	29294.520	3.5
387.3122	29.01	-2.28	120684.550	3.0	146496.200	3.0
387.3138	29.01	-2.08	108014.660	3.0	133826.200	2.0
387.3179	25.00	-3.91	37737.220	3.5	63548.490	4.5
387.3216	23.00	-.36	14514.750	1.5	40325.770	2.5
387.3220	62.01	-1.55	3468.273	0.0	29286.584	0.0
387.3224	22.00	-3.17	16106.080	4.0	41917.050	4.0
387.3260	58.01	-.51	10001.532	0.0	35819.577	0.0
387.3295	28.00	-2.79	27943.543	1.0	53754.036	2.0
387.3315	10.01	-2.32	318183.690	4.5	343994.050	4.5
387.3317	10.01	-.93	318183.690	4.5	343994.040	5.5
387.3321	10.01	-1.27	318183.730	5.5	343994.050	4.5
387.3323	10.01	.69	318183.730	5.5	343994.040	5.5
387.3401	10.01	-1.06	318184.260	3.5	343994.050	4.5
387.3402	10.01	.60	318184.270	4.5	343994.050	4.5
387.3404	10.01	-1.14	318184.270	4.5	343994.040	5.5
387.3417	28.01	-4.74	105861.190	2.5	131670.870	2.5
387.3507	25.00	-4.66	37737.220	3.5	63546.300	3.5
387.3520	44.00	-.60	9033.642	0.0	34849.954	0.0
387.3537	9.02	-3.65	418248.560	1.5	444057.440	1.5
387.3570	64.00	.19	6936.547	0.0	32752.526	0.0
387.3573	24.00	-3.35	31377.960	4.0	57186.600	3.0
387.3627	23.00	-1.67	10892.500	3.5	36700.780	2.5
387.3632	26.02	-3.89	179194.220	4.0	205002.470	3.0
387.3691	9.02	-4.96	418248.560	1.5	444056.420	.5
387.3762	26.00	-.95	19621.004	5.0	45428.385	4.0
387.3823	22.00	-4.48	20006.032	2.0	45813.010	2.0
387.3955	27.00	-.80	4142.660	3.5	29948.760	2.5
387.4000	66.01	-.84	806.575	0.0	26619.688	0.0
387.4022	24.00	-3.91	24299.890	2.0	50105.540	1.0
387.4057	26.00	-2.77	18378.187	2.0	44183.607	2.0
387.4154	21.00	-3.15	16210.800	3.5	42015.570	3.5
387.4218	10.01	-3.94	292451.780	1.5	318256.130	2.5
387.4276	18.02	-1.30	214346.700	1.0	240150.660	0.0
387.4347	23.00	-1.13	15688.800	2.5	41492.290	3.5
387.4410	74.00	-.15	19519.120	0.0	45329.501	0.0
387.4440	24.01	-2.72	39877.280	3.5	65680.150	4.5
387.4460	64.00	-.79	483.945	0.0	26293.993	0.0
387.4477	23.01	-2.86	47420.100	4.0	73222.720	4.0
387.4482	25.01	-4.23	81147.650	2.0	106950.240	3.0
387.4509	25.02	-2.96	192172.890	2.5	217975.300	2.5
387.4521	21.00	-3.59	15672.550	1.5	41474.880	1.5
387.4525	24.00	-.98	27825.450	5.0	53627.750	5.0
387.4541	8.02	-1.71	374662.500	2.0	400464.700	1.0
387.4545	24.00	-4.84	31352.420	1.0	57154.590	0.0
387.4548	24.00	.11	24299.890	2.0	50102.040	3.0
387.4552	23.01	-3.29	46879.940	2.0	72682.060	2.0
387.4554	28.01	-4.34	66571.340	2.5	92373.450	2.5
387.4587	10.01	-4.68	282375.330	1.5	308177.220	1.5
387.4610	71.00	-2.42	4113.534	0.0	29922.583	0.0
387.4635	28.01	-3.41	103025.580	2.5	128827.150	3.5
387.4646	10.01	-1.92	292651.320	1.5	318452.820	1.5
387.4657	27.00	-4.71	16467.900	4.5	42269.320	4.5
387.4680	58.01	-.11	8065.752	0.0	33874.335	0.0
387.4690	24.01	-2.98	64924.300	3.5	90725.500	3.5
387.4762	25.00	-2.62	34938.700	4.5	60739.420	3.5
387.4765	24.01	-2.27	39742.360	2.5	65543.060	3.5
387.4772	24.00	-3.99	35398.020	4.0	61198.680	3.0
387.4797	28.00	-4.32	31786.210	3.0	57586.700	2.0
387.4860	90.00	-.48	4920.109	0.0	30727.493	0.0
387.4947	24.00	-3.45	33060.740	3.0	58860.230	2.0
387.5007	22.01	-6.94	8744.270	2.5	34543.360	3.5
387.5015	28.01	-4.11	105838.060	3.5	131637.100	3.5
387.5040	58.01	-.62	3952.218	0.0	29758.403	0.0
387.5078	23.00	-.28	323.420	3.5	26122.040	3.5
387.5156	24.00	-.57	24303.940	3.0	50102.040	3.0
387.5163	28.00	-3.47	30912.838	1.0	56710.889	2.0
387.5176	27.01	-5.44	22009.230	4.0	47807.200	4.0
387.5231	22.00	-3.35	0.000	2.0	25797.600	3.0
387.5260	75.00	-1.09	11534.025	0.0	37338.745	0.0
387.5261	22.00	-.57	16106.080	4.0	41903.480	5.0
387.5265	18.01	-1.65	132630.650	1.5	158428.030	.5
387.5277	10.01	1.76	318196.750	5.5	343994.050	4.5
387.5278	10.01	-.08	318196.750	5.5	343994.040	5.5
387.5281	10.01	1.83	318196.770	6.5	343994.040	5.5
387.5287	23.00	-1.14	11100.650	4.5	36897.880	4.5
387.5370	90.00	-.81	2823.013	0.0	28627.001	0.0
387.5374	28.01	-1.36	103025.580	2.5	128822.230	1.5
387.5384	25.02	-2.92	192576.420	2.5	218373.000	1.5
387.5420	41.00	-.69	11937.313	0.0	37740.968	0.0
387.5428	23.00	-2.60	8578.520	2.5	34374.810	3.5
387.5460	64.01	-1.00	4194.191	0.0	29997.580	0.0
387.5540	62.01	-1.18	1451.835	0.0	27254.691	0.0
387.5554	28.01	-3.79	74283.330	.5	100078.780	1.5
387.5635	23.00	-.90	24789.360	.5	50584.270	1.5
387.5640	90.00	-1.12	7420.492	0.0	33222.682	0.0
387.5649	25.02	-4.61	192012.750	1.5	217807.570	1.5
387.5656	23.01	-2.08	13609.000	4.0	39403.770	4.0
387.5680	74.00	-.90	14840.984	0.0	40642.908	0.0
387.5713	22.00	-3.09	16817.190	1.0	42611.580	1.0
387.5721	23.01	-3.66	46879.940	2.0	72674.280	2.0
387.5734	24.00	-4.92	24833.860	3.0	50628.110	3.0
387.5760	41.00	-1.31	1129.205	0.0	26930.596	0.0
387.5776	20.00	-1.32	20371.000	3.0	46164.971	4.0
387.5786	25.00	-2.59	37789.930	2.5	63583.840	1.5
387.5804	20.00	-2.39	20371.000	3.0	46164.785	3.0
387.5811	28.01	-4.22	66579.710	1.5	92373.450	2.5
387.5825	22.00	-3.08	11531.760	2.0	37325.407	2.0
387.5825	20.00	-3.93	20371.000	3.0	46164.644	2.0
387.5873	26.01	-3.69	72651.910	3.5	98445.240	4.5
387.5877	24.02	-4.68	70980.200	1.0	96773.500	1.0
387.5903	23.00	-1.68	137.380	2.5	25930.510	1.5
387.5922	17.01	-2.24	161348.400	1.0	187141.400	2.0
387.6038	6.01	.47	195752.580	1.5	221544.810	2.5
387.6041	26.00	-4.18	8154.713	1.0	33946.920	2.0
387.6065	18.00	-3.05	95399.870	1.0	121191.920	2.0
387.6080	44.00	-.90	13873.093	0.0	39672.354	0.0
387.6085	23.00	-1.26	553.020	4.5	26344.940	4.5
387.6106	55.00	-1.85	0.000	0.0	25799.088	0.0
387.6130	92.00	-.69	0.000	0.0	25798.928	0.0
387.6140	58.01	-.70	4839.451	0.0	30638.313	0.0
387.6151	24.00	-1.47	23386.350	3.0	49177.830	3.0
387.6186	6.01	.83	195813.660	4.5	221604.900	5.5
387.6280	18.01	-4.95	173347.830	1.5	199138.450	1.5
387.6296	28.00	-3.79	31031.042	3.0	56821.553	3.0
387.6341	10.01	-.41	312810.670	4.5	338600.880	4.5
387.6344	10.01	-1.36	312810.670	4.5	338600.860	5.5
387.6347	10.01	-1.88	312810.710	5.5	338600.880	4.5
387.6350	10.01	-.06	312810.710	5.5	338600.860	5.5
387.6392	6.01	.72	195785.740	3.5	221575.610	4.5
387.6463	12.02	-3.73	534197.700	1.0	559987.100	1.0
387.6489	10.01	-1.56	312811.650	3.5	338600.880	4.5
387.6489	10.01	-.48	312811.650	4.5	338600.880	4.5
387.6492	10.01	-2.40	312811.650	4.5	338600.860	5.5
387.6630	24.00	-4.73	28637.000	3.0	54425.290	4.0
387.6639	28.01	-4.02	108368.050	2.5	134156.280	1.5
387.6648	26.02	-4.63	97041.380	3.0	122829.550	3.0
387.6650	71.01	-1.05	12340.601	0.0	38136.069	0.0
387.6653	6.01	.59	195765.850	2.5	221553.990	3.5
387.6666	26.00	-1.74	18378.187	2.0	44166.240	3.0
387.6689	13.01	-3.93	121480.900	2.0	147268.800	1.0
387.6701	25.00	-3.03	35114.980	2.5	60902.800	3.5
387.6734	13.01	-4.41	121481.200	1.0	147268.800	1.0
387.6770	76.00	-.31	10969.423	0.0	36764.092	0.0
387.6799	22.00	-2.13	18593.990	3.0	44381.160	4.0
387.6827	27.00	-.77	16195.680	.5	41982.660	1.5
387.6835	24.00	-3.62	35398.020	4.0	61184.950	5.0
387.6838	27.00	-2.11	3482.820	4.5	29269.730	4.5
387.6860	75.00	-.57	15647.559	0.0	41441.629	0.0
387.6864	28.00	-2.34	30979.789	4.0	56766.523	4.0
387.6884	25.00	-4.41	37737.220	3.5	63523.820	2.5
387.6960	41.00	-.05	12259.943	0.0	38053.348	0.0
387.6961	28.00	-4.26	879.813	2.0	26665.903	3.0
387.6970	58.01	-.21	4436.164	0.0	30229.503	0.0
387.7004	18.02	-1.78	226503.220	3.0	252289.020	3.0
387.7047	28.01	-4.56	68281.620	.5	94067.140	1.5
387.7056	27.00	-2.25	29735.180	3.5	55520.640	3.5
387.7100	72.01	.51	22987.393	0.0	48779.867	0.0
387.7116	23.00	-2.85	14514.750	1.5	40299.810	.5
387.7155	13.01	-.86	123468.100	3.0	149252.900	4.0
387.7155	13.01	-.63	123468.100	3.0	149252.900	4.0
387.7155	13.01	-4.26	123468.100	3.0	149252.900	3.0
387.7280	24.00	-1.75	27500.370	3.0	53284.340	3.0
387.7304	24.00	-2.06	25106.340	3.0	50890.150	2.0
387.7316	27.00	-3.70	25269.250	3.5	51052.980	3.5
387.7337	22.00	-2.48	17075.310	4.0	42858.900	3.0
387.7340	45.00	-1.03	5646.026	0.0	31436.903	0.0
387.7438	25.01	-3.77	82387.530	3.0	108170.450	2.0
387.7490	62.00	.15	3952.218	0.0	29742.098	0.0
387.7560	41.00	-.84	967.890	0.0	26757.304	0.0
387.7594	22.00	.07	15975.590	3.0	41757.470	3.0
387.7600	40.00	.21	7985.094	0.0	33774.242	0.0
387.7711	28.01	-3.06	113321.950	4.5	139103.050	5.5
387.7738	24.00	-4.15	20517.400	2.0	46298.320	1.0
387.7772	27.00	-2.42	18775.010	.5	44555.710	1.5
387.7851	24.00	-3.73	31352.420	1.0	57132.590	1.0
387.7907	8.02	-3.36	374575.000	1.0	400354.800	2.0
387.7963	24.00	-3.77	27500.370	3.0	53279.800	2.0
387.8021	26.00	-1.08	7728.058	3.0	33507.102	3.0
387.8030	25.00	-2.12	35041.370	3.5	60820.350	2.5
387.8033	6.01	-.33	195765.850	2.5	221544.810	2.5
387.8057	28.01	-2.55	111120.540	1.5	136899.340	2.5
387.8110	26.02	-4.43	179893.560	5.0	205672.010	4.0
387.8142	25.00	-4.50	41230.300	3.5	67008.540	2.5
387.8145	22.00	-3.18	11776.806	4.0	37555.021	3.0
387.8178	25.00	-2.40	38934.940	2.5	64712.940	2.5
387.8183	26.00	-1.65	26479.366	1.0	52257.330	0.0
387.8199	23.01	-3.70	46739.980	2.0	72517.840	1.0
387.8230	28.01	-3.10	103025.580	2.5	128803.230	2.5
387.8271	24.00	-2.86	31355.210	2.0	57132.590	1.0
387.8280	39.01	-1.56	1371.178	0.0	27155.804	0.0
387.8300	23.00	-2.70	15724.220	3.5	41501.410	4.5
387.8306	12.00	-2.46	35051.264	1.0	60828.410	2.0
387.8310	59.01	-1.60	1613.150	0.0	27397.577	0.0
387.8337	23.00	-1.12	14548.830	2.5	40325.770	2.5
387.8370	58.01	-.32	1371.178	0.0	27155.206	0.0
387.8414	10.01	-3.51	281998.280	2.5	307774.710	1.5
387.8465	28.01	-4.26	112719.750	3.5	138495.840	4.5
387.8470	10.01	-3.49	312824.820	3.5	338600.680	4.5
387.8474	29.01	-2.15	122745.770	2.0	148521.800	1.0
387.8492	28.01	-3.02	105861.190	2.5	131637.100	3.5
387.8514	26.00	-4.80	17550.180	3.0	43325.946	3.0
387.8574	26.00	-1.47	704.003	2.0	26479.366	1.0
387.8583	10.01	-4.63	303071.840	2.5	328847.150	3.5
387.8584	24.02	-4.29	71321.800	3.0	97097.100	4.0
387.8591	29.01	-2.56	119039.680	2.0	144814.930	3.0
387.8614	19.01	-.81	189243.700	1.0	215018.800	1.0
387.8619	29.01	-2.51	122867.530	1.0	148642.600	2.0
387.8650	25.00	-1.71	33825.490	2.5	59600.350	2.5
387.8673	26.00	-1.05	19788.248	4.0	45562.959	3.0
387.8686	28.01	-4.77	51557.850	3.5	77332.470	2.5
387.8709	23.01	-.68	14655.630	5.0	40430.100	4.0
387.8709	21.00	-3.74	15672.550	1.5	41447.020	.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
387.8730	26.00	-.41	26406.490	1.0	52180.820	1.0
387.8746	27.00	-1.40	16195.680	.5	41969.900	.5
387.8820	41.00	-.70	322.630	0.0	26103.667	0.0
387.8829	23.01	-3.97	20980.920	2.0	46754.590	1.0
387.8835	28.01	-4.08	91800.050	4.5	117573.680	4.5
387.8865	24.00	-4.63	21847.880	2.0	47621.310	3.0
387.8890	10.02	-4.37	409847.530	3.0	435620.800	4.0
387.8892	27.00	-2.38	29216.370	2.5	54989.620	3.5
387.8926	24.00	-2.05	25177.390	4.0	50950.420	3.0
387.8929	27.00	-3.49	25269.250	3.5	51042.260	2.5
387.8965	23.00	-1.17	25253.530	5.5	51026.300	5.5
387.9022	26.02	-4.48	157684.300	2.0	183456.690	3.0
387.9038	26.01	-4.02	50142.930	2.5	75915.210	2.5
387.9041	25.01	-1.84	44745.460	2.0	70517.720	3.0
387.9050	40.00	-1.41	564.603	0.0	26344.111	0.0
387.9100	66.01	-.81	4274.849	0.0	30054.025	0.0
387.9184	28.01	-3.26	92792.080	3.5	118563.390	3.5
387.9219	23.00	-2.46	8715.720	3.5	34486.800	2.5
387.9221	24.00	-.08	24286.540	1.0	50057.610	2.0
387.9261	24.00	-.93	27935.260	4.0	53706.060	5.0
387.9310	58.01	-1.09	5404.054	0.0	31181.834	0.0
387.9350	41.01	-.12	14679.669	0.0	40457.183	0.0
387.9356	29.01	-.62	120789.630	4.0	146559.800	4.0
387.9407	23.01	-3.29	47181.170	3.0	72951.000	4.0
387.9479	24.00	-4.53	35618.510	1.0	61387.860	0.0
387.9530	92.00	-.15	4355.506	0.0	30131.824	0.0
387.9592	23.03	.18	257690.800	3.0	283459.400	3.0
387.9610	58.01	-.24	12259.943	0.0	38035.730	0.0
387.9620	23.00	-3.14	15770.720	4.5	41539.140	4.5
387.9640	90.00	-.42	7420.492	0.0	33196.079	0.0
387.9645	6.01	-.21	195785.740	3.5	221553.990	3.5
387.9672	23.00	-.98	15724.220	3.5	41492.290	3.5
387.9768	10.01	.94	312833.450	5.5	338600.880	4.5
387.9771	10.01	-.87	312833.450	5.5	338600.860	5.5
387.9774	10.01	1.01	312833.470	6.5	338600.860	5.5
387.9802	22.00	-4.38	20126.055	3.0	45893.260	3.0
387.9838	29.01	-2.64	120789.630	4.0	146556.600	3.0
387.9901	28.01	-.71	103653.030	3.5	129419.580	4.5
387.9984	23.00	-1.80	14548.830	2.5	40314.830	3.5
388.0006	26.00	-2.95	27394.676	3.0	53160.530	3.0
388.0160	25.00	-3.57	37630.620	4.5	63395.450	3.5
388.0189	26.02	-4.43	179178.620	3.0	204943.260	2.0
388.0210	23.00	-.99	25111.500	4.5	50876.000	4.5
388.0258	23.00	-1.40	15664.750	1.5	41428.930	2.5
388.0333	18.01	-1.02	158428.030	.5	184191.710	.5
388.0345	28.01	-2.58	68965.650	1.5	94729.250	2.5
388.0386	24.00	-3.72	35398.020	4.0	61161.350	5.0
388.0398	23.01	-3.02	46754.590	1.0	72517.840	1.0
388.0410	58.01	0.00	14195.724	0.0	39966.197	0.0
388.0482	22.00	-2.30	16961.420	3.0	42724.110	2.0
388.0576	25.02	-3.01	192365.520	1.5	218127.590	.5
388.0594	6.01	-.32	195813.660	4.5	221575.610	4.5
388.0630	15.01	-2.24	106001.990	1.0	131763.700	1.0
388.0653	10.01	-2.57	282375.330	1.5	308136.890	1.5
388.0735	28.01	-4.06	94283.940	4.5	120044.950	4.5
388.0770	62.01	-1.10	806.575	0.0	26574.657	0.0
388.0780	60.01	-.90	483.945	0.0	26251.961	0.0
388.0819	26.00	-3.89	27394.676	3.0	53155.130	4.0
388.0820	72.01	-1.45	3629.588	0.0	29397.338	0.0
388.0834	28.00	-2.49	27943.543	1.0	53703.899	1.0
388.0857	28.00	-1.70	33112.368	3.0	58872.570	4.0
388.0931	28.00	-2.86	29013.228	2.0	54772.940	3.0
388.0936	25.01	-4.52	53698.700	2.0	79458.380	2.0
388.0992	27.00	-1.87	20500.710	1.5	46260.020	1.5
388.0999	28.01	-4.10	105861.190	2.5	131620.450	1.5
388.1028	6.01	-1.76	195785.740	3.5	221544.810	2.5
388.1029	23.01	-1.79	20980.920	2.0	46739.980	2.0
388.1046	23.00	-.96	24992.880	3.5	50751.830	3.5
388.1056	9.00	-3.28	104731.050	1.5	130489.930	.5
388.1231	24.00	-.44	24299.890	2.0	50057.610	2.0
388.1258	25.01	-4.90	39808.140	3.0	65565.680	4.0
388.1346	25.02	-2.35	192948.290	1.5	218705.250	2.5
388.1380	62.01	-1.12	2661.698	0.0	28425.730	0.0
388.1387	22.00	-2.28	170.132	3.0	25926.820	4.0
388.1390	74.00	-1.15	4758.794	0.0	30522.760	0.0
388.1460	92.01	-.40	4516.821	0.0	30280.322	0.0
388.1492	23.00	-1.02	24898.730	2.5	50654.720	2.5
388.1502	25.02	-4.97	90936.220	1.5	116692.140	2.5
388.1596	24.02	-4.67	71166.100	2.0	96921.400	2.0
388.1714	29.00	-1.76	46136.101	0.0	71897.917	0.0
388.1715	28.01	-2.33	66571.340	2.5	92325.850	3.5
388.1747	17.02	-4.82	178369.700	.5	204124.000	1.5
388.1762	26.02	-3.90	166252.740	3.0	192006.940	2.0
388.1763	28.01	-4.20	110573.360	2.5	136327.550	1.5
388.1775	9.02	-3.85	465414.140	2.5	491168.250	2.5
388.1778	23.00	-1.20	24830.180	1.5	50584.270	1.5
388.1840	64.01	-1.39	3387.616	0.0	29148.595	0.0
388.1842	24.00	-1.56	24303.940	3.0	50057.610	2.0
388.1845	24.00	-1.81	31048.850	1.0	56802.500	0.0
388.1855	28.00	-3.83	0.000	4.0	25753.578	4.0
388.1860	76.00	-.89	10082.190	0.0	35843.037	0.0
388.1870	58.01	-.99	2500.383	0.0	28261.163	0.0
388.1875	27.00	-1.11	4690.180	2.5	30443.630	1.5
388.2002	10.01	-4.47	224087.020	1.5	249839.630	.5
388.2010	44.00	-1.81	2661.698	0.0	28421.549	0.0
388.2077	14.02	-2.20	214532.170	1.0	240284.280	2.0
388.2137	22.00	-.46	16267.510	5.0	42019.220	6.0
388.2158	25.00	-1.40	41031.480	4.5	66783.050	3.5
388.2244	25.00	-3.17	41230.300	3.5	66981.300	3.5
388.2249	25.01	-2.70	82419.480	3.0	108170.450	2.0
388.2273	22.01	-1.90	8997.690	3.5	34748.500	4.5
388.2282	23.01	-3.95	8841.970	3.0	34592.720	2.0
388.2319	22.00	-2.78	16267.510	5.0	42018.010	5.0
388.2324	18.02	-3.02	226503.220	3.0	252253.690	2.0
388.2360	92.01	-1.07	1693.808	0.0	27451.337	0.0
388.2386	21.00	-4.54	16210.800	3.5	41960.860	2.5
388.2425	24.02	-3.57	71868.500	6.0	97618.300	5.0
388.2450	58.01	-.06	2581.041	0.0	28337.973	0.0
388.2455	30.02	-3.76	257796.000	5.0	283545.600	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
388.2455	30.02	-3.48	257796.000	5.0	283545.600	6.0
388.2520	72.00	-.08	15566.901	0.0	41323.368	0.0
388.2524	21.00	-3.34	15756.510	2.5	41505.650	2.5
388.2544	25.00	-2.78	38934.940	2.5	64683.950	1.5
388.2660	24.00	-3.44	31352.420	1.0	57100.660	2.0
388.2730	23.00	-3.82	15688.800	2.5	41436.580	3.5
388.2865	22.00	.84	16458.710	6.0	42205.590	7.0
388.2870	18.01	-3.54	158167.710	1.5	183914.560	.5
388.2870	68.00	.06	7097.862	0.0	32852.008	0.0
388.2874	24.01	-3.50	38315.000	2.5	64061.820	1.5
388.2964	10.01	-3.97	303071.840	2.5	328818.070	3.5
388.2967	10.01	-4.61	303071.840	2.5	328818.050	2.5
388.3081	24.00	-3.06	31355.210	2.0	57100.660	2.0
388.3089	26.01	-7.97	16369.390	3.5	42114.790	4.5
388.3130	69.00	.04	0.000	0.0	25752.421	0.0
388.3140	41.00	-.78	645.260	0.0	26397.615	0.0
388.3200	23.01	-2.59	11514.760	1.0	37259.420	1.0
388.3270	24.00	-3.16	31352.420	1.0	57096.620	1.0
388.3273	26.00	-2.52	26224.961	3.0	51969.140	3.0
388.3285	28.00	-3.49	29832.810	3.0	55576.905	3.0
388.3288	24.00	-1.26	7927.470	2.0	33671.550	3.0
388.3313	25.00	-4.11	37630.620	4.5	63374.530	4.5
388.3419	23.01	-2.25	13490.840	2.0	39234.050	3.0
388.3440	69.01	-1.35	161.315	0.0	25911.681	0.0
388.3570	58.01	-1.09	2581.041	0.0	28330.545	0.0
388.3607	27.00	-3.50	22475.360	4.5	48217.320	3.5
388.3615	25.02	-3.49	193235.430	2.5	218977.340	3.5
388.3641	24.00	-.41	24277.060	0.0	50018.800	1.0
388.3690	24.00	-3.47	31355.210	2.0	57096.620	1.0
388.3770	72.01	-.66	13389.148	0.0	39137.326	0.0
388.3797	17.01	-.48	145468.500	1.0	171209.200	2.0
388.3800	6.02	.24	321411.000	0.0	347158.979	0.0
388.3800	62.01	-2.36	2661.698	0.0	28409.677	0.0
388.3830	74.00	-.80	18147.942	0.0	43895.722	0.0
388.3853	6.01	-1.86	195813.660	4.5	221553.990	3.5
388.3884	23.00	-1.35	15688.800	2.5	41428.930	2.5
388.3890	25.00	-2.76	38669.600	3.5	64409.690	3.5
388.3970	23.00	-4.10	24915.160	1.5	50654.720	2.5
388.4020	44.00	-.21	14599.011	0.0	40345.531	0.0
388.4040	59.01	-2.00	1613.150	0.0	27359.538	0.0
388.4077	29.01	-.18	120684.550	3.0	146423.400	4.0
388.4090	22.00	-.89	15975.590	3.0	41714.350	2.0
388.4200	58.01	-.03	12340.601	0.0	38085.928	0.0
388.4218	22.00	-4.36	18061.540	1.0	43799.455	2.0
388.4296	27.00	-.72	28777.270	3.5	54514.670	3.5
388.4305	23.01	-3.63	47051.890	3.0	72789.230	3.0
388.4316	10.01	-3.62	281332.550	.5	307069.810	1.5
388.4342	10.01	-4.26	302831.800	.5	328568.890	1.5
388.4344	10.01	-3.95	302831.800	.5	328568.880	.5
388.4361	26.00	-2.95	21715.735	5.0	47452.702	4.0
388.4443	18.01	-1.37	186340.480	1.5	212076.900	2.5
388.4448	22.00	-2.69	16875.190	2.0	42611.580	1.0
388.4457	24.00	-3.32	31364.330	3.0	57100.660	2.0
388.4472	29.01	-.31	122745.770	2.0	148482.000	3.0
388.4477	27.01	-5.62	22414.500	3.0	48150.700	3.0
388.4486	28.01	-4.57	89100.490	3.5	114836.630	3.5
388.4520	90.01	-1.42	9678.902	0.0	35422.108	0.0
388.4585	28.00	-2.83	31031.042	3.0	56766.523	4.0
388.4597	27.00	-1.73	8460.810	2.5	34196.210	1.5
388.4616	24.00	-3.50	31352.420	1.0	57087.700	2.0
388.4635	28.01	-3.98	108548.610	1.5	134283.760	.5
388.4656	24.00	-3.90	27649.710	4.0	53384.720	3.0
388.4663	26.00	-2.30	26479.366	1.0	52214.330	1.0
388.4667	26.01	-3.35	37227.320	.5	62962.260	1.5
388.4680	44.00	-.46	13631.121	0.0	39373.267	0.0
388.4683	10.01	-4.13	302961.070	1.5	328695.900	2.5
388.4686	10.01	-4.40	302961.070	1.5	328695.880	1.5
388.4718	25.02	-2.79	192665.800	4.5	218400.400	3.5
388.4750	63.00	.62	14437.696	0.0	40179.378	0.0
388.4795	8.02	-1.88	366486.910	1.0	392221.000	2.0
388.4803	22.00	-2.11	12118.394	4.0	37852.434	4.0
388.4822	25.00	-4.34	25281.040	2.5	51014.950	3.5
388.4825	25.00	-4.77	37789.930	2.5	63523.820	2.5
388.4840	23.01	-1.44	14461.730	3.0	40195.520	3.0
388.4868	25.01	-3.70	43311.000	1.0	69044.610	2.0
388.4869	27.00	-4.44	29216.370	2.5	54949.970	1.5
388.4954	28.01	-3.09	104503.220	2.5	130236.260	2.5
388.5037	24.00	-4.11	31355.210	2.0	57087.700	2.0
388.5070	26.00	-2.70	27543.000	1.0	53275.270	2.0
388.5071	24.00	-.50	24286.540	1.0	50018.800	1.0
388.5126	28.01	-2.84	111120.540	1.5	136852.440	1.5
388.5142	26.00	-1.95	24118.815	4.0	49850.610	3.0
388.5177	25.02	-2.05	192576.420	2.5	218307.980	2.5
388.5190	59.01	-.94	1613.150	0.0	27351.917	0.0
388.5200	73.00	-1.00	11695.340	0.0	37434.041	0.0
388.5218	24.00	-1.33	7810.820	1.0	33542.110	2.0
388.5239	29.01	-2.02	120684.550	3.0	146415.700	2.0
388.5257	25.01	-4.25	53781.700	3.0	79512.730	3.0
388.5269	27.00	-2.70	7442.410	3.5	33173.360	3.5
388.5290	62.01	-.06	3871.561	0.0	29609.665	0.0
388.5308	23.00	-3.04	15770.720	4.5	41501.410	4.5
388.5328	24.00	-3.37	24897.550	4.0	50628.110	3.0
388.5333	27.00	-3.23	29216.370	2.5	54946.900	2.5
388.5367	25.02	-3.33	109780.400	2.5	135510.700	2.5
388.5396	14.02	-2.36	214532.170	1.0	240262.280	1.0
388.5405	25.01	-3.84	81236.890	1.0	106966.940	2.0
388.5420	40.00	-.59	0.000	0.0	25737.243	0.0
388.5440	41.00	.74	11453.368	0.0	37190.479	0.0
388.5444	25.00	-1.81	34938.700	4.5	60668.490	4.5
388.5458	19.02	-1.84	212725.400	1.5	238455.100	.5
388.5485	25.00	-4.05	25285.430	4.5	51014.950	3.5
388.5499	24.00	-2.18	24093.160	2.0	49822.590	2.0
388.5512	26.00	-1.01	19552.474	1.0	45281.816	2.0
388.5515	22.00	-2.10	18525.070	2.0	44254.390	3.0
388.5651	26.01	-4.83	73603.530	5.5	99331.950	4.5
388.5680	41.00	.51	11130.738	0.0	36866.259	0.0
388.5722	10.01	-3.18	281171.380	2.5	306899.330	2.5
388.5724	26.00	-3.14	34636.820	2.0	60364.760	3.0
388.5750	26.00	-1.18	26339.682	2.0	52067.450	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
388.5770	90.00	-.97	6291.287	0.0	32026.212	0.0
388.5827	26.01	-4.84	50187.950	3.5	75915.210	2.5
388.5834	25.00	-3.95	25287.740	3.5	51014.950	3.5
388.5849	9.01	-4.03	269548.970	3.0	295276.080	2.0
388.5862	28.00	-5.78	2216.519	2.0	27943.543	1.0
388.5866	23.01	-2.58	47181.170	3.0	72908.170	3.0
388.5890	28.01	-3.90	74283.330	.5	100010.170	.5
388.5910	62.01	-1.19	4355.506	0.0	30089.504	0.0
388.5923	26.00	-1.53	29798.960	4.0	55525.580	5.0
388.5990	6.02	.41	321427.000	0.0	347160.468	0.0
388.6055	24.00	-1.98	27649.710	4.0	53375.460	4.0
388.6067	25.01	-2.57	81236.890	1.0	106962.560	1.0
388.6070	41.00	-1.35	80.658	0.0	25813.596	0.0
388.6080	23.01	-1.96	47420.100	4.0	73145.680	3.0
388.6140	22.00	-3.75	21469.494	3.0	47194.680	4.0
388.6153	25.02	-4.10	86051.500	2.5	111776.600	1.5
388.6200	6.02	-.49	321427.000	0.0	347159.078	0.0
388.6207	23.00	-.72	15664.750	1.5	41389.490	1.5
388.6284	26.00	-1.14	415.932	3.0	26140.164	3.0
388.6364	24.00	-3.51	24833.860	3.0	50557.560	4.0
388.6370	57.01	-.72	2581.041	0.0	28311.993	0.0
388.6414	24.00	-2.92	31364.330	3.0	57087.700	2.0
388.6478	25.02	-2.65	192392.200	3.5	218115.150	3.5
388.6483	10.02	-3.22	409845.080	2.0	435568.000	3.0
388.6500	58.01	-1.00	4436.164	0.0	30166.255	0.0
388.6589	23.00	-.89	11100.650	4.5	36822.860	3.5
388.6640	9.01	-2.53	269548.970	3.0	295270.850	3.0
388.6676	26.02	-2.99	198337.060	3.0	224058.700	4.0
388.6686	23.00	-1.72	15770.720	4.5	41492.290	3.5
388.6727	27.01	-5.27	21624.400	5.0	47345.700	5.0
388.6727	25.03	-3.21	152858.200	3.0	178579.500	4.0
388.6750	76.00	-1.34	12905.203	0.0	38633.639	0.0
388.6777	25.02	-3.13	192948.290	1.5	218669.260	1.5
388.6795	24.00	-1.38	8095.210	3.0	33816.060	4.0
388.6820	42.00	-.38	11775.998	0.0	37503.971	0.0
388.6821	9.02	-2.94	440582.120	4.5	466302.800	3.5
388.6853	10.02	-2.61	409847.530	3.0	435568.000	3.0
388.6869	25.02	-2.94	192365.520	1.5	218085.880	.5
388.6910	90.00	-1.15	2823.013	0.0	28550.390	0.0
388.6911	26.02	-3.53	198338.620	4.0	224058.700	4.0
388.6940	27.00	-2.51	29269.730	4.5	54989.620	3.5
388.6946	27.00	-3.30	29563.170	1.5	55283.020	2.5
388.6994	25.01	-2.38	81236.890	1.0	106956.420	0.0
388.7008	24.00	-3.49	35807.900	2.0	61527.340	1.0
388.7025	22.00	-4.72	11639.804	3.0	37359.130	2.0
388.7028	23.00	-.97	10892.500	3.5	36611.810	2.5
388.7029	24.00	-3.18	24093.160	2.0	49812.460	3.0
388.7045	28.00	-3.41	29013.228	2.0	54732.425	2.0
388.7050	26.00	-1.38	7376.762	4.0	33095.922	4.0
388.7088	24.00	-1.48	24299.890	2.0	50018.800	1.0
388.7144	24.01	-3.04	39824.520	4.5	65543.060	3.5
388.7160	64.01	-1.90	564.603	0.0	26290.326	0.0
388.7170	21.00	-3.07	15756.510	2.5	41474.880	1.5
388.7189	9.02	-3.07	465414.140	2.5	491132.380	3.5
388.7215	26.02	-2.90	198333.560	2.0	224051.630	3.0
388.7333	25.00	-1.14	37630.620	4.5	63347.910	4.5
388.7350	69.00	-.06	0.000	0.0	25724.465	0.0
388.7356	26.00	-2.32	22249.430	3.0	47966.571	3.0
388.7360	22.00	-2.50	16106.080	4.0	41823.190	3.0
388.7450	2.01	-1.17	411477.918	0.0	437201.722	0.0
388.7480	24.00	-3.22	23933.900	4.0	49650.220	3.0
388.7490	75.00	.09	27020.269	0.0	52743.808	0.0
388.7567	7.00	-1.63	86137.320	.5	111853.061	1.5
388.7572	23.00	-1.86	15264.830	5.5	40980.540	4.5
388.7634	24.00	-2.56	31987.060	4.0	57702.360	5.0
388.7643	28.01	-4.34	110573.360	2.5	136288.600	2.5
388.7711	27.00	-2.75	29735.180	3.5	55449.970	2.5
388.7722	25.01	-2.77	82387.530	3.0	108102.250	3.0
388.7730	64.00	-1.12	483.945	0.0	26205.896	0.0
388.7744	26.02	-3.38	198337.060	3.0	224051.630	3.0
388.7770	39.00	-.99	11292.053	0.0	37013.739	0.0
388.7770	44.00	-.30	14921.641	0.0	40643.327	0.0
388.7791	25.00	-2.34	38934.940	2.5	64649.200	3.5
388.7807	9.01	-2.82	269563.930	2.0	295278.080	1.0
388.7808	24.00	-4.15	24940.610	2.0	50654.760	2.0
388.7870	60.01	-1.24	483.945	0.0	26204.970	0.0
388.7950	75.00	-.86	17180.052	0.0	42900.547	0.0
388.7980	26.02	-2.69	198338.620	4.0	224051.630	3.0
388.8039	22.00	.22	16106.080	4.0	41818.700	4.0
388.8110	9.01	-1.74	269563.930	2.0	295276.080	2.0
388.8133	27.00	-4.64	26450.020	2.5	52162.020	3.5
388.8180	42.00	-.26	20003.065	0.0	45722.039	0.0
388.8338	28.00	-3.98	30163.140	2.0	55873.780	2.0
388.8340	23.00	-3.24	14514.750	1.5	40225.380	1.5
388.8340	45.00	-.80	13389.148	0.0	39107.064	0.0
388.8390	58.01	-.57	5081.424	0.0	30799.009	0.0
388.8391	24.00	-1.43	31377.960	4.0	57088.250	5.0
388.8400	29.00	-1.87	46136.101	0.0	71853.620	0.0
388.8414	26.00	-1.56	26339.682	2.0	52049.820	2.0
388.8464	22.01	-3.40	39602.900	1.5	65312.710	2.5
388.8464	25.02	-2.50	192665.800	4.5	218375.610	4.5
388.8509	23.01	-2.44	20980.920	2.0	46690.430	1.0
388.8516	26.00	-.51	12968.552	2.0	38678.015	2.0
388.8565	55.00	-2.70	0.000	0.0	25716.428	0.0
388.8620	9.02	-1.29	440582.120	4.5	466290.900	4.5
388.8650	2.00	-.71	159856.000	0.0	185571.865	0.0
388.8689	23.01	-4.80	36425.070	4.0	62133.390	3.0
388.8760	22.01	-3.67	39476.870	2.5	65184.720	3.5
388.8816	26.00	-.81	24335.764	2.0	50043.250	1.0
388.8824	10.01	.28	312843.080	1.5	338550.510	.5
388.8830	25.00	-.24	37737.220	3.5	63444.610	4.5
388.8840	22.00	-4.88	18037.225	4.0	43744.550	4.0
388.8870	22.00	-3.34	21739.713	5.0	47446.840	6.0
388.8880	42.00	-.13	21051.613	0.0	46765.957	0.0
388.8900	25.01	-3.69	53805.800	4.0	79512.730	3.0
388.8901	9.01	-1.55	269563.930	2.0	295270.850	3.0
388.8918	28.01	-4.49	109675.720	.5	135382.530	1.5
388.8954	29.01	-1.30	120789.630	4.0	146496.200	3.0
388.8972	28.01	-3.35	103025.580	2.5	128732.030	1.5
388.8989	25.00	-1.16	41031.480	4.5	66737.820	3.5
388.9000	58.01	-.91	4436.164	0.0	30149.715	0.0
388.9028	28.01	-4.37	107737.810	1.5	133443.890	2.5
388.9042	24.00	-1.13	27820.230	3.0	53526.220	4.0
388.9042	26.00	-4.78	21038.987	2.0	46744.975	3.0
388.9102	20.00	-1.76	21849.634	2.0	47555.230	3.0
388.9114	25.01	-2.68	43339.100	2.0	69044.610	2.0
388.9136	25.00	-1.56	35114.980	2.5	60820.350	2.5
388.9160	62.01	-.96	2661.698	0.0	28374.191	0.0
388.9180	6.02	.57	321450.000	0.0	347162.361	0.0
388.9183	28.01	-4.85	105981.500	4.5	131686.560	4.5
388.9230	72.00	-.71	10485.478	0.0	36197.508	0.0
388.9236	23.00	-1.76	15724.220	3.5	41428.930	2.5
388.9270	26.00	-1.98	21715.735	5.0	47420.215	5.0
388.9276	9.01	-2.14	269573.640	1.0	295278.080	1.0
388.9290	22.00	-4.92	13981.750	1.0	39686.100	2.0
388.9300	58.01	-1.22	3710.246	0.0	29421.814	0.0
388.9317	26.00	-1.76	25899.974	4.0	51604.146	3.0
388.9330	56.00	-1.99	0.000	0.0	25711.369	0.0
388.9330	59.01	-1.09	403.288	0.0	26114.657	0.0
388.9330	72.00	-1.31	5565.369	0.0	31276.738	0.0
388.9419	37.00	-9.24	0.000	0.0	25710.781	0.0
388.9480	58.01	-1.36	2581.041	0.0	28291.419	0.0
388.9535	22.00	-3.30	22404.690	3.0	48107.420	2.0
388.9579	9.01	-2.25	269573.640	1.0	295276.080	2.0
388.9585	25.00	-1.47	33825.490	2.5	59527.890	1.5
388.9660	28.00	-.00	30922.763	5.0	56624.668	6.0
388.9674	28.00	-5.66	1713.080	1.0	27414.893	2.0
388.9676	28.01	-3.39	106133.140	1.5	131834.940	2.5
388.9696	25.02	-3.38	192365.520	1.5	218067.190	2.5
388.9700	6.02	-.50	321450.000	0.0	347158.924	0.0
388.9724	25.01	-3.94	52383.720	4.0	78085.200	5.0
388.9800	6.02	-2.05	321450.000	0.0	347158.263	0.0
388.9800	41.00	-1.97	2097.096	0.0	27805.359	0.0
388.9832	24.00	-2.55	27825.450	5.0	53526.220	4.0
388.9844	23.00	-1.13	15688.800	2.5	41369.490	1.5
388.9867	10.01	-4.11	281720.280	1.5	307420.820	2.5
388.9867	37.00	-9.41	0.000	0.0	25707.820	0.0
388.9909	26.00	-2.03	26339.682	2.0	52039.939	1.0
388.9932	26.02	-3.25	198338.620	4.0	224038.730	5.0
388.9942	24.01	-2.30	39684.000	3.5	65384.040	4.5
388.9956	22.00	-1.89	0.000	2.0	25699.950	2.0
388.9960	75.00	-.34	22019.503	0.0	47726.708	0.0
388.9979	27.00	-.19	28777.270	3.5	54477.070	3.5
388.9990	58.01	.14	5404.054	0.0	31111.061	0.0
389.0032	29.01	-.76	120875.850	2.0	146575.300	2.0
389.0060	24.01	-3.25	38362.560	1.5	64061.820	1.5
389.0080	62.01	-1.14	1451.835	0.0	27158.247	0.0
389.0112	27.00	-1.71	27497.060	2.5	53195.980	2.5
389.0180	23.00	-2.21	323.420	3.5	26021.890	3.5
389.0200	44.00	-.83	9114.300	0.0	34819.919	0.0
389.0243	25.00	-2.80	35041.370	3.5	60739.420	3.5
389.0266	23.00	-2.54	18120.120	.5	43818.020	1.5
389.0269	25.02	-2.05	193498.070	3.5	219195.950	4.5
389.0320	40.00	-.17	1209.863	0.0	26914.689	0.0
389.0339	24.00	-4.60	35501.260	3.0	61198.680	3.0
389.0360	92.01	-.61	241.973	0.0	25946.535	0.0
389.0385	26.00	-1.40	26140.164	3.0	51837.279	3.0
389.0530	69.01	-1.99	0.000	0.0	25703.439	0.0
389.0690	27.00	-4.40	29294.520	3.5	54989.620	3.5
389.0702	28.00	-2.72	28542.113	5.0	54237.136	4.0
389.0710	42.00	-.01	26052.379	0.0	51754.629	0.0
389.0713	28.01	-4.93	109269.830	1.5	134964.780	1.5
389.0728	24.00	-.80	31393.400	5.0	57088.250	5.0
389.0729	27.00	-3.31	28470.510	1.5	54165.350	1.5
389.0740	74.00	-.80	18147.942	0.0	43849.994	0.0
389.0757	24.00	-2.35	27500.370	3.0	53195.030	2.0
389.0760	58.01	-.96	2097.096	0.0	27799.015	0.0
389.0816	24.00	-1.19	31028.330	2.0	56722.600	1.0
389.0833	26.00	-1.11	21999.132	4.0	47693.289	3.0
389.0990	58.01	-.90	2581.041	0.0	28281.441	0.0
389.1050	90.01	-1.08	11050.080	0.0	36750.084	0.0
389.1085	24.00	-1.78	27935.260	4.0	53627.750	5.0
389.1099	24.00	-4.87	27825.450	5.0	53517.850	6.0
389.1114	8.02	-2.19	374662.500	2.0	400354.800	2.0
389.1130	22.00	-3.52	21588.496	4.0	47280.690	5.0
389.1194	29.01	-.74	122867.530	1.0	148559.300	2.0
389.1210	62.01	-1.42	1451.835	0.0	27150.782	0.0
389.1214	23.00	-4.18	8476.200	1.5	34167.840	2.5
389.1255	23.01	-2.29	13542.680	3.0	39234.050	3.0
389.1300	41.00	-.85	645.260	0.0	26343.613	0.0
389.1380	40.00	-.33	1209.863	0.0	26907.687	0.0
389.1399	18.01	-1.94	132737.610	.5	158428.030	.5
389.1410	44.00	-.34	16050.847	0.0	41748.473	0.0
389.1599	18.02	-1.62	214568.490	0.0	240257.590	1.0
389.1614	25.00	-1.86	34138.880	6.5	59827.880	5.5
389.1672	27.00	-.34	29216.370	2.5	54904.990	2.5
389.1696	28.00	-3.23	29084.478	4.0	54772.940	3.0
389.1705	28.00	-3.16	29888.505	2.0	55576.905	3.0
389.1755	26.00	-3.64	21038.987	2.0	46727.055	2.0
389.1770	58.01	-1.28	4678.136	0.0	30373.385	0.0
389.1776	56.01	.23	20261.562	0.0	45956.772	0.0
389.1777	28.00	-1.81	33500.854	3.0	59188.780	3.0
389.1780	11.02	-4.25	443261.600	.5	468949.500	.5
389.1841	24.00	-3.78	24940.610	2.0	50628.110	3.0
389.1856	22.00	-4.08	15156.787	4.0	40844.190	3.0
389.1864	23.01	-3.13	47101.880	2.0	72789.230	3.0
389.1922	22.00	-4.74	14028.470	2.0	39715.437	3.0
389.1926	26.00	-.74	27543.000	1.0	53229.940	1.0
389.1949	24.00	-3.77	23933.900	4.0	49620.690	4.0
389.1970	23.01	-8.53	11514.760	1.0	37201.410	0.0
389.1974	28.00	-3.35	29013.228	2.0	54699.852	3.0
389.1982	18.01	-1.40	132481.140	2.5	158167.710	1.5
389.2030	40.00	.08	15082.956	0.0	40776.489	0.0
389.2079	22.00	-1.56	18695.230	4.0	44361.160	4.0
389.2114	27.00	-1.88	20500.710	1.5	46186.410	1.5
389.2129	22.00	-1.98	11639.804	3.0	37325.407	2.0
389.2138	23.00	-2.16	24898.730	2.5	50564.270	1.5
389.2172	24.01	-2.13	42898.120	2.5	68583.440	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
389.2193	24.00	-1.63	33040.100	2.0	58725.280	1.0
389.2200	7.00	-1.31	86220.480	1.5	111905.609	2.5
389.2210	44.00	-.34	7985.094	0.0	33677.438	0.0
389.2265	15.01	-2.91	103941.300	0.0	129626.000	1.0
389.2300	90.01	-1.91	6210.629	0.0	31902.379	0.0
389.2328	16.01	.07	130134.080	2.5	155818.370	2.5
389.2354	12.00	-2.65	35051.264	1.0	60735.380	2.0
389.2393	22.00	-4.84	20006.032	2.0	45689.890	3.0
389.2416	24.00	-4.96	23933.900	4.0	49617.610	5.0
389.2470	72.00	-.05	19680.435	0.0	45371.063	0.0
389.2550	10.02	-2.72	409845.080	2.0	435527.900	2.0
389.2558	25.01	-2.56	82419.480	3.0	108102.250	3.0
389.2590	28.01	-4.99	98969.440	5.5	124652.000	4.5
389.2625	25.00	-2.87	27201.540	2.5	52883.870	1.5
389.2625	25.00	-2.35	27201.540	2.5	52883.870	2.5
389.2653	28.00	-4.37	28569.210	2.0	54251.353	3.0
389.2660	56.00	-.51	11292.053	0.0	36981.427	0.0
389.2680	92.01	-.54	5162.081	0.0	30851.323	0.0
389.2681	9.02	-2.89	440359.260	3.5	466041.220	3.5
389.2720	64.00	-.57	7017.204	0.0	32706.182	0.0
389.2720	74.00	-.93	13227.833	0.0	38916.811	0.0
389.2770	44.00	-.14	20083.723	0.0	45772.371	0.0
389.2857	23.00	-3.67	323.420	3.5	26004.220	2.5
389.2864	29.01	-.55	120875.850	2.0	146556.600	3.0
389.2894	26.00	-2.65	22249.430	3.0	47929.981	4.0
389.2917	22.00	-4.52	13981.750	1.0	39862.150	1.0
389.2922	10.02	-3.66	409847.530	3.0	435527.900	2.0
389.2923	27.01	-4.83	61260.100	2.0	86940.460	2.0
389.2948	27.00	-2.94	29216.370	2.5	54896.570	3.5
389.2974	26.00	-1.28	26339.682	2.0	52019.706	1.0
389.2979	26.00	-4.81	32133.977	2.0	57813.970	3.0
389.3001	28.00	-1.61	31031.042	3.0	56710.889	2.0
389.3030	73.00	-1.61	12743.888	0.0	38430.821	0.0
389.3054	27.00	-1.82	18775.010	.5	44454.510	.5
389.3131	24.00	-1.36	23498.840	4.0	49177.630	3.0
389.3143	9.02	-3.14	440359.260	3.5	466038.170	2.5
389.3189	25.00	-1.77	34463.370	1.5	60141.980	.5
389.3224	25.00	-4.65	34423.270	3.5	60101.650	2.5
389.3230	58.01	-.67	5242.739	0.0	30928.352	0.0
389.3289	27.00	-1.29	29269.730	4.5	54947.680	5.5
389.3307	26.00	-1.67	22838.320	2.0	48516.150	1.0
389.3320	42.00	-.56	20003.065	0.0	45688.084	0.0
389.3386	23.00	-4.23	14910.040	3.5	40587.350	3.5
389.3393	26.00	-.46	23783.617	5.0	49460.876	5.0
389.3433	28.02	-3.97	157375.700	4.0	183052.700	4.0
389.3453	28.00	-1.69	29084.478	4.0	54761.346	4.0
389.3459	9.02	-2.52	418188.480	.5	443865.310	1.5
389.3481	25.01	-4.63	53781.700	3.0	79458.380	2.0
389.3489	24.00	-2.94	23163.270	0.0	48839.900	1.0
389.3501	23.00	-1.72	14548.830	2.5	40225.380	1.5
389.3539	27.00	-3.95	23152.570	3.5	48828.870	2.5
389.3665	26.01	-4.81	61035.370	.5	86710.840	1.5
389.3730	41.00	-1.97	322.630	0.0	26004.945	0.0
389.3738	25.02	-2.61	192392.200	3.5	218067.190	2.5
389.3840	40.00	-.33	12663.231	0.0	38344.820	0.0
389.3870	58.01	-.72	7823.779	0.0	33505.171	0.0
389.3914	26.00	-1.77	19621.004	5.0	45294.830	5.0
389.3926	24.00	-4.38	31048.850	1.0	56722.600	1.0
389.3993	28.00	-3.94	28578.046	3.0	54251.353	3.0
389.4004	26.00	-.94	26623.726	2.0	52296.960	2.0
389.4024	23.00	-2.36	18174.060	1.5	43847.160	2.5
389.4030	41.00	-.66	10969.423	0.0	36649.759	0.0
389.4038	24.00	-1.60	7750.780	0.0	33423.790	1.0
389.4050	62.01	-1.14	2984.328	0.0	28664.532	0.0
389.4073	27.00	.06	8460.810	2.5	34133.590	3.5
389.4090	10.02	-4.85	409855.230	1.0	435527.900	2.0
389.4120	92.00	-.40	0.000	0.0	25679.743	0.0
389.4200	46.00	-.38	11614.683	0.0	37293.898	0.0
389.4240	44.00	-1.22	11372.710	0.0	37051.661	0.0
389.4320	10.01	-4.77	276276.850	1.5	301948.000	1.5
389.4320	58.01	-1.15	4274.849	0.0	29953.273	0.0
389.4334	26.00	-3.07	29320.050	1.0	54991.110	1.0
389.4414	25.01	-4.67	81279.710	4.0	106950.240	3.0
389.4439	22.00	-3.94	21469.494	3.0	47139.860	4.0
389.4466	26.00	-3.48	25899.974	4.0	51570.160	3.0
389.4558	25.02	-2.53	109841.120	3.5	135510.700	2.5
389.4566	24.00	-.31	37233.500	5.0	62903.030	6.0
389.4571	17.01	-1.82	119799.000	2.0	145468.500	1.0
389.4605	24.00	-2.71	31364.330	3.0	57033.600	4.0
389.4630	23.00	-4.58	24915.160	1.5	50584.270	1.5
389.4630	60.01	-1.07	483.945	0.0	26160.325	0.0
389.4637	26.01	-2.10	61041.780	2.5	86710.840	1.5
389.4656	18.00	-4.27	95399.870	1.0	121068.804	1.0
389.4700	41.00	-2.06	322.630	0.0	25998.549	0.0
389.4700	64.01	-.68	0.000	0.0	25675.919	0.0
389.4713	25.00	-1.81	27201.540	2.5	52870.100	3.5
389.4746	27.00	-3.94	28777.270	3.5	54445.610	2.5
389.4866	24.00	-4.97	33060.740	3.0	58728.290	4.0
389.4977	27.00	-1.45	5075.830	1.5	30742.650	.5
389.4980	24.01	-4.22	64924.300	3.5	90591.100	2.5
389.5026	26.00	-4.43	28604.610	2.0	54271.110	1.0
389.5120	58.01	-.35	3306.958	0.0	28980.108	0.0
389.5123	23.00	-4.31	15770.720	4.5	41436.580	3.5
389.5135	24.01	-2.25	39877.280	3.5	65543.060	3.5
389.5180	76.00	-1.07	15082.956	0.0	40755.711	0.0
389.5183	24.01	-3.37	38396.360	.5	64061.820	1.5
389.5230	64.01	-1.10	4194.191	0.0	29866.616	0.0
389.5244	22.00	-2.57	16458.710	6.0	42123.770	6.0
389.5248	18.01	-3.13	158428.030	.5	184093.060	.5
389.5270	92.01	-1.13	4355.506	0.0	30027.667	0.0
389.5426	26.00	-1.68	26550.466	0.0	52214.330	1.0
389.5611	18.01	-3.72	183675.570	3.5	209338.210	3.5
389.5658	26.00	-1.75	888.132	1.0	26550.466	0.0
389.5663	18.01	-2.34	183675.570	3.5	209337.870	4.5
389.5666	26.00	-2.78	31441.665	2.0	57103.946	3.0
389.5684	23.01	-4.85	13741.610	3.0	39403.770	4.0
389.5733	23.00	-2.05	24992.880	3.5	50654.720	2.5
389.5900	41.00	-.30	9356.272	0.0	35024.282	0.0
389.5952	22.00	-2.07	18593.990	3.0	44254.390	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
389.6006	20.02	-3.77	360207.160	2.0	385867.200	3.0
389.6011	24.00	-4.55	24897.550	4.0	50557.560	4.0
389.6059	28.01	-2.92	108548.610	1.5	134208.300	2.5
389.6085	24.01	-3.26	63849.110	5.5	89508.630	5.5
389.6105	26.01	-4.29	21308.080	1.5	46967.470	2.5
389.6110	75.00	-.47	20325.695	0.0	45992.321	0.0
389.6150	23.00	-1.59	8715.720	3.5	34374.810	3.5
389.6153	23.01	-1.54	11295.510	0.0	36954.580	1.0
389.6250	68.00	-.15	403.288	0.0	26068.992	0.0
389.6257	24.00	-4.47	35398.020	4.0	61056.410	4.0
389.6281	25.00	-1.78	37737.220	3.5	63395.450	3.5
389.6292	25.00	-1.81	37630.620	4.5	63288.780	3.5
389.6292	25.00	-.87	37630.620	4.5	63288.780	5.5
389.6372	22.00	-3.84	14028.470	2.0	39686.100	2.0
389.6380	42.00	-.55	20164.380	0.0	45829.228	0.0
389.6468	24.00	-3.12	20517.400	2.0	46174.400	3.0
389.6530	40.00	-1.53	564.603	0.0	26226.463	0.0
389.6599	28.00	-4.00	32973.414	4.0	58629.550	3.0
389.6609	27.00	-3.18	16778.160	2.5	42434.230	2.5
389.6620	69.00	-1.16	0.000	0.0	25663.267	0.0
389.6636	29.01	-.86	120919.410	1.0	146575.300	2.0
389.6642	24.00	-3.62	27728.870	2.0	53384.720	3.0
389.6674	24.00	-3.24	31377.960	4.0	57033.600	4.0
389.6725	25.00	-2.15	33825.490	2.5	59480.800	2.5
389.6726	25.00	-2.78	35165.050	1.5	60820.350	2.5
389.6760	28.00	-1.62	30619.440	2.0	56274.516	2.0
389.6780	92.01	-.26	8307.725	0.0	33969.938	0.0
389.6794	23.00	-.41	15264.830	5.5	40919.680	5.5
389.6800	58.01	-.23	4436.164	0.0	30098.246	0.0
389.6845	10.01	-3.02	283322.350	1.5	308976.870	.5
389.6850	42.00	-.44	21051.613	0.0	46713.365	0.0
389.6882	29.01	-2.04	122867.530	1.0	148521.800	1.0
389.6915	22.00	-2.95	18145.400	2.0	43799.455	2.0
389.6980	62.01	-.87	322.630	0.0	25983.526	0.0
389.7002	24.00	-2.79	20520.920	3.0	46174.400	3.0
389.7069	23.00	-2.20	18258.890	2.5	43911.930	3.5
389.7170	27.00	-3.09	29294.520	3.5	54946.900	2.5
389.7240	44.00	-1.03	9033.642	0.0	34692.826	0.0
389.7260	62.01	-1.80	5242.739	0.0	30901.792	0.0
389.7288	23.03	-1.68	258288.800	1.0	283940.400	2.0
389.7320	22.00	-.69	16106.080	4.0	41757.470	3.0
389.7320	64.00	-.38	7178.519	0.0	32837.177	0.0
389.7347	22.01	-2.10	39233.440	1.5	64884.650	2.5
389.7423	24.00	-3.58	20523.690	4.0	46174.400	3.0
389.7430	58.01	-.60	10162.848	0.0	35820.782	0.0
389.7451	26.00	-1.26	23783.617	5.0	49434.142	6.0
389.7473	25.00	-4.33	25281.040	2.5	50931.420	2.5
389.7601	22.00	-3.52	16267.510	5.0	41917.050	4.0
389.7657	29.01	-2.73	108335.430	2.0	133984.600	3.0
389.7660	40.00	-.10	14599.011	0.0	40255.430	0.0
389.7849	23.01	-4.36	9097.810	4.0	34745.720	3.0
389.7887	10.01	-3.50	282375.330	1.5	308022.990	.5
389.7888	26.00	-.18	21715.735	5.0	47363.390	6.0
389.7890	79.00	-.29	41941.910	0.0	67596.816	0.0
389.7902	28.00	-3.57	32982.280	1.0	58629.840	2.0
389.7927	19.01	-.07	162507.000	2.0	188154.400	2.0
389.7972	26.00	-4.36	29798.960	4.0	55446.060	4.0
389.7999	23.00	-1.80	18680.120	5.5	44327.040	6.5
389.8011	26.00	-2.22	8154.713	1.0	33801.555	2.0
389.8045	28.01	-4.51	92325.850	3.5	117972.470	3.5
389.8089	26.02	-4.56	109570.840	2.0	135217.170	1.0
389.8109	25.01	-1.67	44899.820	3.0	70546.020	4.0
389.8127	23.00	-1.34	10892.500	3.5	36538.580	4.5
389.8147	28.01	-4.70	111120.540	1.5	136766.490	2.5
389.8156	25.00	-2.76	35114.980	2.5	60760.870	1.5
389.8270	58.01	-.39	3710.246	0.0	29362.651	0.0
389.8280	41.01	-.07	13631.121	0.0	39283.460	0.0
389.8294	27.00	-4.52	26450.020	2.5	52095.000	3.5
389.8309	28.01	-.40	103653.030	3.5	129297.910	3.5
389.8344	25.00	-.29	33825.490	2.5	59470.140	3.5
389.8346	27.00	-2.31	23184.230	2.5	48828.870	2.5
389.8350	25.01	-3.84	81322.330	1.0	106966.940	2.0
389.8360	44.00	-1.16	7985.094	0.0	33636.907	0.0
389.8369	21.01	-1.60	39001.590	0.0	64646.080	1.0
389.8448	26.01	-3.22	72650.630	4.5	98294.600	5.5
389.8449	23.00	-2.84	18174.060	1.5	43818.020	1.5
389.8472	9.00	-1.55	104731.050	1.5	130374.860	1.5
389.8484	27.00	-1.66	15184.040	2.5	40827.770	1.5
389.8490	22.00	-2.18	0.000	2.0	25643.695	3.0
389.8492	25.00	-4.06	25287.740	3.5	50931.420	2.5
389.8522	28.00	-1.57	30619.440	2.0	56262.920	3.0
389.8540	66.01	.33	4678.136	0.0	30328.764	0.0
389.8560	41.00	-1.41	2097.096	0.0	27747.593	0.0
389.8600	57.00	-1.24	0.000	0.0	25650.233	0.0
389.8601	18.02	-2.11	226646.060	4.0	252289.020	3.0
389.8620	26.01	-2.00	60956.820	3.5	86599.660	2.5
389.8627	9.01	-2.18	211866.130	3.0	237508.920	2.0
389.8732	9.01	-.63	211866.130	3.0	237508.230	3.0
389.8820	9.01	.43	211866.130	3.0	237507.650	4.0
389.8826	28.01	-4.47	103653.030	3.5	129294.510	2.5
389.8837	16.02	-1.33	147550.320	1.0	173191.730	2.0
389.8871	22.00	-2.72	11531.760	2.0	37172.947	1.0
389.8940	58.01	-.89	1855.123	0.0	27503.120	0.0
389.9001	23.00	-2.16	25111.500	4.5	50751.830	3.5
389.9021	24.00	-1.75	31393.400	5.0	57033.600	4.0
389.9031	26.00	-1.77	19788.248	4.0	45428.385	4.0
389.9086	16.02	-.29	147146.000	2.0	172785.770	1.0
389.9086	16.02	-.68	147146.000	2.0	172785.770	1.0
389.9100	92.01	-1.16	4355.506	0.0	30002.450	0.0
389.9138	23.01	-.86	14556.090	4.0	40195.520	3.0
389.9155	23.01	-5.48	13594.730	2.0	39234.050	3.0
389.9158	30.02	-2.10	257962.500	2.0	283601.800	3.0
389.9184	24.00	-3.65	23933.900	4.0	49573.030	4.0
389.9240	23.00	-1.18	14514.750	1.5	40153.510	2.5
389.9250	41.00	0.00	15163.614	0.0	40809.572	0.0
389.9296	16.02	-1.96	148397.800	1.0	174036.190	1.0
389.9313	25.00	-.21	34463.370	1.5	60101.650	2.5
389.9325	17.01	-1.02	147605.700	3.0	173243.900	4.0
389.9348	23.00	-.81	14949.300	4.5	40587.350	3.5

ORIGINAL PAGE IS
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WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
389.9371	23.01	-3.50	46879.940	2.0	72517.840	1.0
389.9390	58.01	-1.18	5484.711	0.0	31129.748	0.0
389.9444	26.00	-3.70	22838.320	2.0	48475.740	3.0
389.9489	24.01	-4.52	52298.120	3.5	77935.240	2.5
389.9495	22.00	-4.46	18037.225	4.0	43674.310	4.0
389.9560	59.01	-1.64	1693.808	0.0	27337.727	0.0
389.9664	22.00	.32	16267.510	5.0	41903.480	5.0
389.9680	25.00	-2.40	27248.000	1.5	52883.870	1.5
389.9680	25.00	-2.37	27248.000	1.5	52883.870	2.5
389.9699	22.00	-1.56	0.000	2.0	25635.740	1.0
389.9709	26.00	-1.59	704.003	2.0	26339.682	2.0
389.9780	92.01	-.91	2258.411	0.0	27900.883	0.0
389.9797	25.00	-2.55	27248.000	1.5	52883.100	.5
389.9801	27.00	-3.54	25568.680	5.5	51203.750	5.5
389.9832	28.01	-4.56	87538.090	3.5	113172.960	4.5
389.9861	25.02	-2.80	192172.890	2.5	217807.570	1.5
389.9868	24.00	-3.05	27649.710	4.0	53284.340	3.0
389.9914	26.00	-1.26	29356.780	2.0	54991.110	1.0
389.9940	72.00	-1.52	0.000	0.0	25641.420	0.0
389.9950	25.01	-3.42	81322.330	1.0	106956.420	0.0
389.9961	27.00	-5.28	816.000	3.5	26450.020	2.5
389.9999	29.01	-1.33	120789.630	4.0	146423.400	4.0
390.0013	22.00	-4.50	14028.470	2.0	39662.150	1.0
390.0110	28.01	-1.87	106022.790	.5	131655.830	.5
390.0120	90.01	-1.39	12340.601	0.0	37980.838	0.0
390.0165	23.00	-2.05	18372.460	3.5	44005.140	4.5
390.0180	7.00	-2.33	86220.480	1.5	111853.061	1.5
390.0200	58.01	-.68	8065.752	0.0	33705.463	0.0
390.0273	28.01	-4.25	104503.220	2.5	130135.190	1.5
390.0329	10.01	-3.08	282375.330	1.5	308006.930	.5
390.0349	28.01	-.30	103653.030	3.5	129284.500	2.5
390.0370	25.02	-4.85	192741.670	.5	218373.000	1.5
390.0390	76.00	-2.07	2661.698	0.0	28300.160	0.0
390.0420	9.04	-.39	834547.000	1.5	860178.000	2.5
390.0431	26.00	-2.79	29798.960	4.0	55429.890	5.0
390.0503	24.00	-2.09	31355.210	2.0	56985.670	3.0
390.0510	26.00	-1.06	26140.164	3.0	51770.577	3.0
390.0510	63.00	.11	13147.176	0.0	38784.849	0.0
390.0519	22.01	-.27	9118.150	4.5	34748.500	4.5
390.0520	40.00	-1.19	0.000	0.0	25637.607	0.0
390.0547	23.01	-4.49	47051.890	3.0	72682.060	2.0
390.0573	9.02	-.85	441158.600	1.5	466788.600	2.5
390.0579	27.00	-3.51	23207.760	1.5	48837.720	.5
390.0626	18.01	-.97	158167.710	1.5	183797.360	2.5
390.0650	72.01	.30	30811.173	0.0	56447.926	0.0
390.0666	28.01	-3.75	94283.940	4.5	119913.330	4.5
390.0675	23.02	-3.31	63315.050	3.5	88944.380	2.5
390.0710	15.01	-3.54	103941.300	0.0	129570.400	1.0
390.0723	15.01	-4.33	77711.000	2.0	103340.010	2.0
390.0730	78.00	.49	33956.816	0.0	59593.043	0.0
390.0790	69.01	-.73	8711.012	0.0	34346.845	0.0
390.0860	70.00	.06	19599.777	0.0	45235.150	0.0
390.0874	18.01	-4.99	189437.690	.5	215065.710	.5
390.0880	90.01	-.94	7259.177	0.0	32894.418	0.0
390.0890	62.01	-1.45	1935.780	0.0	27570.956	0.0
390.0910	75.00	-1.25	14115.066	0.0	39750.110	0.0
390.0958	22.00	-2.86	170.132	3.0	25797.600	3.0
390.0991	9.02	-4.38	465541.000	1.5	491168.250	2.5
390.1011	25.00	-2.06	35041.370	3.5	60668.490	4.5
390.1031	8.02	-.71	366594.010	2.0	392221.000	2.0
390.1054	27.00	-2.74	29269.730	4.5	54896.570	3.5
390.1075	17.01	-1.82	121499.000	2.0	147125.700	3.0
390.1090	75.00	-1.85	11695.340	0.0	37329.201	0.0
390.1121	17.01	-3.83	119842.100	1.0	145468.500	1.0
390.1140	90.01	-1.12	12098.628	0.0	37732.161	0.0
390.1147	23.00	-1.92	18513.460	4.5	44139.690	5.5
390.1147	25.02	-1.88	192880.160	3.5	218506.390	3.5
390.1186	29.01	-1.81	123016.630	3.0	148642.600	2.0
390.1240	44.00	-1.81	1129.205	0.0	26762.081	0.0
390.1252	22.00	-.97	12118.394	4.0	37743.933	3.0
390.1300	58.01	-.73	5887.999	0.0	31520.480	0.0
390.1326	23.01	-3.83	13609.000	4.0	39234.050	3.0
390.1379	25.00	-3.59	41230.300	3.5	66855.000	4.5
390.1419	25.00	-3.94	35114.980	2.5	60739.420	3.5
390.1477	10.01	-4.36	303071.840	2.5	328695.900	2.5
390.1503	21.00	-2.84	15881.760	3.5	41505.650	2.5
390.1504	23.01	-4.28	47056.320	4.0	72680.200	5.0
390.1680	58.01	-.57	9678.902	0.0	35308.887	0.0
390.1684	24.02	-4.11	71736.000	5.0	97358.700	4.0
390.1710	76.00	-1.18	8630.355	0.0	34260.143	0.0
390.1719	23.00	-2.50	25253.530	5.5	50876.000	4.5
390.1731	23.01	-4.51	47051.890	3.0	72674.280	2.0
390.1770	42.00	-.51	12259.943	0.0	37889.337	0.0
390.1800	24.00	-4.78	35501.260	3.0	61123.200	4.0
390.1830	74.00	-.73	18873.860	0.0	44502.860	0.0
390.1832	9.01	-.64	211887.190	2.0	237508.920	2.0
390.1891	24.00	-2.17	31364.330	3.0	56985.670	3.0
390.1923	23.00	-1.53	13801.530	1.5	39422.660	2.5
390.1926	27.00	-4.95	23207.760	1.5	48828.870	2.5
390.1937	9.01	.27	211887.190	2.0	237508.230	3.0
390.1963	23.00	-4.19	25130.960	2.5	50751.830	3.5
390.2042	29.01	-2.90	120875.850	2.0	146496.200	3.0
390.2069	24.00	-2.81	29584.620	2.0	55204.790	3.0
390.2077	9.02	-3.23	418248.560	1.5	443868.680	2.5
390.2086	21.01	-3.71	2540.970	2.0	28161.030	3.0
390.2098	27.00	-4.89	26450.020	2.5	52070.000	2.5
390.2120	90.01	-.93	14195.724	0.0	39822.819	0.0
390.2251	24.01	-3.16	63706.620	4.5	89325.600	4.5
390.2257	23.00	-.26	553.020	4.5	26171.960	4.5
390.2295	28.01	-3.13	103653.030	3.5	129271.720	3.5
390.2320	62.01	-2.11	1451.835	0.0	27077.617	0.0
390.2400	64.01	-.56	3387.616	0.0	29012.872	0.0
390.2415	25.01	-2.77	44899.820	3.0	70517.720	3.0
390.2490	92.01	-1.09	2258.411	0.0	27883.076	0.0
390.2491	26.01	-3.97	61093.440	2.5	86710.840	1.5
390.2510	77.00	-1.41	2823.013	0.0	28447.547	0.0
390.2521	28.00	-2.06	33500.854	3.0	59118.060	2.0
390.2537	23.00	-2.61	8412.940	.5	34030.040	1.5
390.2552	17.01	-1.97	147605.700	3.0	173222.700	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
390.2560	28.01	-4.88	95573.390	3.5	121190.340	4.5
390.2580	57.00	-1.40	0.000	0.0	25624.074	0.0
390.2590	9.02	-3.06	418248.560	1.5	443865.310	1.5
390.2660	77.00	-.87	12824.546	0.0	38448.095	0.0
390.2710	64.00	-.47	967.890	0.0	26591.111	0.0
390.2715	29.01	-3.35	122745.770	2.0	148361.700	1.0
390.2800	28.00	-2.45	29084.478	4.0	54699.852	3.0
390.2808	26.02	-1.46	179579.830	5.0	205195.150	5.0
390.2826	17.01	-.47	147125.700	3.0	172740.900	4.0
390.2840	28.00	-1.22	33610.916	2.0	59226.030	1.0
390.2854	24.00	-2.39	33113.270	4.0	58728.290	4.0
390.2857	15.01	-3.64	104051.100	3.0	129666.100	2.0
390.2894	28.00	-2.45	32973.414	4.0	58588.168	3.0
390.2912	24.00	-1.49	7927.470	2.0	33542.110	2.0
390.2921	9.02	-3.24	440582.120	4.5	466196.700	3.5
390.2922	29.01	-.81	123016.630	3.0	148631.200	3.0
390.2948	26.00	-.37	12560.933	3.0	38175.332	3.0
390.2960	42.00	-.33	0.000	0.0	25621.580	0.0
390.2984	26.00	-4.34	33095.922	4.0	58710.090	3.0
390.3120	29.01	-.03	120789.630	4.0	146402.900	5.0
390.3166	24.00	-2.21	7810.820	1.0	33423.790	1.0
390.3262	23.01	-1.02	11908.270	2.0	37520.610	3.0
390.3340	58.01	-.71	4436.164	0.0	30055.249	0.0
390.3405	15.01	-3.39	104054.700	1.0	129666.100	2.0
390.3514	25.00	-1.20	37737.220	3.5	63347.910	4.5
390.3547	27.00	-3.75	29294.520	3.5	54904.990	2.5
390.3652	25.02	-2.05	192365.520	1.5	217975.300	2.5
390.3656	22.00	-3.44	14105.680	3.0	39715.437	3.0
390.3780	26.01	-1.91	60807.280	4.5	86416.220	3.5
390.3823	26.01	-4.30	44915.070	3.5	70523.730	3.5
390.3823	9.01	.10	211900.260	1.0	237508.920	2.0
390.3846	10.01	-4.69	224087.020	1.5	249695.530	1.5
390.3859	12.00	-2.35	35051.264	1.0	60659.690	2.0
390.3901	26.00	-3.03	24118.815	4.0	49726.964	4.0
390.3915	23.01	-2.25	47181.170	3.0	72789.230	3.0
390.3930	58.01	-.10	12259.943	0.0	37875.156	0.0
390.3951	10.01	-4.41	302961.070	1.5	328568.890	1.5
390.3953	10.01	-4.81	302961.070	1.5	328568.880	.5
390.3968	24.00	-3.38	31377.960	4.0	56985.670	3.0
390.3974	28.01	-4.10	108548.610	1.5	134156.280	1.5
390.3979	25.02	-1.51	192989.050	5.5	218596.690	5.5
390.3980	74.00	.17	29601.310	0.0	55216.195	0.0
390.4024	25.00	-1.19	41230.300	3.5	66837.640	2.5
390.4052	27.00	-1.21	28845.220	5.5	54452.380	6.5
390.4076	30.02	-3.02	257908.200	1.0	283515.200	2.0
390.4080	90.01	-1.72	4032.876	0.0	29647.105	0.0
390.4082	26.00	-1.56	21999.132	4.0	47606.092	5.0
390.4119	27.00	-1.29	27497.060	2.5	53103.780	3.5
390.4123	24.00	-4.29	35501.260	3.0	61107.950	2.0
390.4134	18.01	-1.51	186470.280	1.5	212076.900	2.5
390.4180	41.00	-.17	11937.313	0.0	37550.886	0.0
390.4200	25.01	-4.31	81279.710	4.0	106885.900	4.0
390.4201	22.00	-2.31	21588.496	4.0	47194.680	4.0
390.4201	23.00	-3.23	8412.940	.5	34019.120	1.5
390.4220	45.00	-1.19	13389.148	0.0	39002.459	0.0
390.4290	64.00	-.67	161.315	0.0	25774.167	0.0
390.4294	21.00	-3.16	11520.150	1.5	37125.720	.5
390.4300	28.01	-3.55	94283.940	4.5	119889.470	5.5
390.4302	25.00	-.35	37789.930	2.5	63395.450	3.5
390.4338	28.01	-3.40	108368.050	2.5	133973.330	2.5
390.4340	58.01	-.62	4436.164	0.0	30048.687	0.0
390.4381	24.00	-2.23	32097.360	6.0	57702.360	5.0
390.4396	30.02	-2.05	237506.800	1.0	263111.700	0.0
390.4410	10.01	-1.84	292651.320	1.5	318256.130	2.5
390.4430	23.00	-.76	14548.830	2.5	40153.510	2.5
390.4456	23.00	-1.41	14514.750	1.5	40119.260	2.5
390.4460	25.02	-3.17	192576.420	2.5	218180.900	1.5
390.4509	24.00	-4.18	23933.900	4.0	49538.060	5.0
390.4560	92.01	-.95	5162.081	0.0	30773.161	0.0
390.4580	58.01	-.97	7178.519	0.0	32789.468	0.0
390.4625	26.01	-3.46	73969.710	5.5	99573.110	4.5
390.4637	22.00	-3.70	18141.229	5.0	43744.550	4.0
390.4640	28.00	-4.77	3409.925	2.0	29013.228	2.0
390.4769	27.00	-.26	29563.170	1.5	55165.630	2.5
390.4785	22.00	.27	7255.369	2.0	32857.721	3.0
390.4820	70.01	-.51	38151.007	0.0	63760.382	0.0
390.4831	27.00	-3.63	29294.520	3.5	54896.570	3.5
390.4836	25.00	-4.04	27281.850	.5	52883.870	1.5
390.4853	18.01	-3.55	179592.130	2.5	205194.040	1.5
390.4863	26.01	-4.28	37227.320	.5	62829.160	.5
390.4921	27.00	-4.20	25568.680	5.5	51170.140	4.5
390.4953	25.00	-4.39	27281.850	.5	52883.100	.5
390.5022	26.00	-4.26	26224.961	3.0	51825.758	3.0
390.5113	29.01	-1.17	122416.100	0.0	148016.300	1.0
390.5144	12.02	-.93	583450.500	1.0	609050.500	2.0
390.5174	26.00	-2.19	26140.164	3.0	51739.964	2.0
390.5229	25.00	-.77	41031.480	4.5	66630.920	4.5
390.5302	26.00	-4.52	17726.985	2.0	43325.946	3.0
390.5501	28.01	-.86	106022.790	.5	131620.450	1.5
390.5507	25.01	-3.18	44899.820	3.0	70497.440	4.0
390.5523	14.00	-.71	15394.370	0.0	40991.884	1.0
390.5583	25.01	-4.69	44745.460	2.0	70342.580	3.0
390.5594	25.01	-2.86	79458.380	2.0	105055.430	2.0
390.5638	24.00	-2.10	37233.500	5.0	62830.260	5.0
390.5646	24.01	-.97	42986.730	1.5	68583.440	2.5
390.5650	64.00	-.21	1693.808	0.0	27297.741	0.0
390.5659	26.00	-4.60	19912.486	2.0	45509.112	1.0
390.5663	17.01	-1.80	147053.700	2.0	172650.300	3.0
390.5742	27.01	-4.99	25317.720	1.0	50913.800	2.0
390.5781	22.00	-3.56	20126.055	3.0	45721.878	4.0
390.5782	25.00	-1.80	35165.050	1.5	60760.870	1.5
390.5841	24.01	-3.63	39824.520	4.5	65419.950	5.5
390.5933	18.01	-3.55	186074.350	2.5	211669.180	2.5
390.5970	74.00	-.32	19680.435	0.0	45282.270	0.0
390.6038	26.01	-1.67	44929.590	2.5	70523.730	3.5
390.6064	24.01	-4.76	65257.030	3.5	90851.000	4.5
390.6285	27.00	-2.29	4142.660	3.5	29735.180	3.5
390.6340	28.01	-1.43	105439.850	1.5	131032.010	2.5
390.6371	27.01	-4.63	61348.500	1.0	86940.460	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
390.6386	24.00	-2.24	20517.400	2.0	46109.260	2.0
390.6467	28.01	-3.14	101740.270	3.5	127331.600	2.5
390.6481	26.00	-2.29	888.132	1.0	26479.366	1.0
390.6487	27.00	-.82	29269.730	4.5	54860.930	4.5
390.6523	24.00	-1.35	27935.260	4.0	53526.220	4.0
390.6527	26.00	-4.22	21999.132	4.0	47590.070	4.0
390.6560	21.01	-1.51	39114.440	1.0	64705.160	2.0
390.6569	25.00	-3.01	33825.490	2.5	59416.150	1.5
390.6710	28.01	-3.49	104646.520	3.5	130236.260	2.5
390.6749	26.00	-.90	26623.726	2.0	52213.207	3.0
390.6760	23.00	-1.57	8476.200	1.5	34065.610	2.5
390.6774	23.00	-3.23	8578.520	2.5	34167.840	2.5
390.6795	10.01	-4.89	281720.280	1.5	307309.460	.5
390.6799	18.01	-1.07	186074.350	2.5	211663.500	3.5
390.6810	62.01	-2.21	1451.835	0.0	27048.166	0.0
390.6890	72.00	-.88	14437.696	0.0	40033.502	0.0
390.6910	41.00	-.68	8711.012	0.0	34306.687	0.0
390.6920	58.01	.18	12179.286	0.0	37774.896	0.0
390.6923	24.00	-2.80	20520.920	3.0	46109.260	2.0
390.6934	23.00	-2.66	18258.890	2.5	43847.160	2.5
390.6938	18.01	-4.85	147227.970	.5	172816.210	.5
390.6962	26.00	-1.84	26479.366	1.0	52067.450	2.0
390.6963	23.00	-4.12	9636.960	1.5	35225.040	2.5
390.7001	18.02	-3.10	243424.970	3.0	269012.800	2.0
390.7100	63.01	.03	1613.150	0.0	27207.581	0.0
390.7123	28.01	-3.88	92792.080	3.5	118379.110	2.5
390.7194	29.01	-3.95	110365.980	2.0	135952.550	2.0
390.7267	24.00	-.32	37244.170	4.0	62830.260	5.0
390.7290	58.01	.37	8872.327	0.0	34465.513	0.0
390.7308	24.00	-2.47	23933.900	4.0	49519.720	3.0
390.7342	26.00	-3.64	26627.612	4.0	52213.207	3.0
390.7450	58.01	-.91	4113.534	0.0	29705.672	0.0
390.7459	26.00	-2.08	22249.430	3.0	47834.260	3.0
390.7488	21.00	.37	0.000	1.5	25584.640	2.5
390.7526	23.01	-1.97	25191.080	2.0	50775.470	2.0
390.7649	22.01	-6.58	16625.250	1.5	42208.840	2.5
390.7650	76.00	-1.28	13953.751	0.0	39544.579	0.0
390.7670	28.00	-2.79	29084.478	4.0	54667.928	4.0
390.7702	27.00	-4.80	26450.020	2.5	52033.260	1.5
390.7724	25.02	-4.78	192392.200	3.5	217975.300	2.5
390.7757	24.00	-1.47	31009.000	3.0	56591.880	2.0
390.7890	25.00	-4.20	25281.040	2.5	50863.050	1.5
390.7937	26.00	-1.01	22249.430	3.0	47831.132	2.0
390.7962	25.02	-3.54	193235.430	2.5	218816.970	2.5
390.8030	59.01	-.37	4355.506	0.0	29943.846	0.0
390.8090	58.01	-1.03	4758.794	0.0	30346.741	0.0
390.8104	26.01	-1.72	73751.340	4.5	99331.950	4.5
390.8133	22.00	-4.26	14105.680	3.0	39686.100	2.0
390.8170	23.01	-3.13	47101.880	2.0	72682.060	2.0
390.8176	10.01	-3.88	303237.910	1.5	328818.050	2.5
390.8210	75.00	.19	27020.269	0.0	52607.430	0.0
390.8250	42.00	0.00	20003.065	0.0	45589.965	0.0
390.8319	29.01	-3.98	115665.400	1.0	141244.600	1.0
390.8322	27.00	-2.81	28777.270	3.5	54356.450	4.5
390.8342	24.00	-4.32	24056.110	5.0	49635.160	6.0
390.8410	58.01	-.02	6855.889	0.0	32441.741	0.0
390.8523	28.00	-.99	33610.916	2.0	59188.780	3.0
390.8524	27.00	-3.45	27497.060	2.5	53074.920	1.5
390.8536	27.00	-1.56	29735.180	3.5	55312.960	4.5
390.8536	26.01	-4.89	21812.040	1.5	47389.820	1.5
390.8539	27.00	-4.01	17233.680	3.5	42811.440	3.5
390.8540	58.01	-.57	3629.588	0.0	29214.589	0.0
390.8590	41.00	-.48	13308.491	0.0	38893.165	0.0
390.8600	25.00	-3.94	34250.520	5.5	59827.880	5.5
390.8662	23.00	-3.57	14548.830	2.5	40125.790	3.5
390.8684	26.00	-3.51	19757.020	3.0	45333.834	2.0
390.8756	24.00	-1.03	8095.210	3.0	33671.550	3.0
390.8760	44.00	-.23	14599.011	0.0	40182.572	0.0
390.8825	18.01	-2.86	183675.570	3.5	209251.460	3.5
390.8835	18.02	-4.51	243424.970	3.0	269000.800	3.0
390.8900	26.00	-4.58	20019.648	1.0	45595.046	0.0
390.8918	28.00	-1.14	29084.478	4.0	54659.759	5.0
390.8957	27.00	-3.18	28777.270	3.5	54352.300	3.5
390.8970	41.00	-1.24	1129.205	0.0	26711.392	0.0
390.9050	58.01	-1.04	8307.725	0.0	33889.388	0.0
390.9080	44.00	.42	13631.121	0.0	39212.588	0.0
390.9102	23.01	-4.21	47107.980	1.0	72682.060	2.0
390.9137	27.00	-3.07	25568.680	5.5	51142.530	6.5
390.9180	72.00	0.00	19680.435	0.0	45261.247	0.0
390.9262	24.01	-3.67	39684.000	3.5	65257.030	3.5
390.9270	18.01	-4.21	183675.570	3.5	209248.550	2.5
390.9282	24.01	-3.28	63601.200	3.5	89174.100	3.5
390.9310	58.01	-.75	3548.931	0.0	29128.893	0.0
390.9359	23.01	-2.22	47101.880	2.0	72674.280	2.0
390.9431	22.00	-2.67	12118.394	4.0	37690.320	5.0
390.9438	27.00	-4.62	29948.760	2.5	55520.640	3.5
390.9527	15.01	-2.79	104054.700	1.0	129626.000	1.0
390.9600	41.00	-.28	12905.203	0.0	38483.267	0.0
390.9656	26.00	-1.37	26479.366	1.0	52049.820	2.0
390.9660	23.00	-2.30	14548.830	2.5	40119.260	2.5
390.9730	24.00	-2.28	31987.060	4.0	57557.030	3.0
390.9750	58.01	-1.00	4113.534	0.0	29690.617	0.0
390.9826	26.00	-1.99	22946.810	1.0	48516.150	1.0
390.9875	23.00	-1.10	553.020	4.5	26122.040	3.5
390.9910	56.00	-.25	9033.000	0.0	34609.036	0.0
390.9915	23.00	-.46	10892.500	3.5	36461.260	2.5
390.9915	23.00	-.35	10892.500	3.5	36461.260	3.5
390.9927	27.00	-2.44	0.000	4.5	25568.680	5.5
390.9930	22.00	-2.27	21469.494	3.0	47038.160	3.0
390.9930	24.01	-4.98	65156.840	2.5	90725.500	3.5
390.9930	58.01	-.63	7178.519	0.0	32754.424	0.0
390.9950	62.00	-.46	3064.986	0.0	28640.761	0.0
391.0090	62.01	-1.89	2661.698	0.0	28236.557	0.0
391.0218	25.00	-4.41	31001.150	2.5	56567.930	1.5
391.0275	27.00	-3.59	29294.520	3.5	54860.930	4.5
391.0291	23.01	-2.93	47107.980	1.0	72674.280	2.0
391.0313	21.00	-4.12	11520.150	1.5	37086.310	1.5
391.0494	10.01	-4.85	277325.600	1.5	302890.570	2.5
391.0507	26.00	-1.51	26140.164	3.0	51705.052	2.0
391.0554	24.00	-2.64	24056.110	5.0	49620.690	4.0
391.0568	24.00	-1.33	27820.230	3.0	53384.720	3.0
391.0585	26.02	-2.56	179630.770	4.0	205195.150	5.0
391.0591	18.02	-4.06	225147.930	2.0	250712.270	2.0
391.0670	9.02	-.88	441158.600	1.5	466722.420	2.5
391.0700	58.01	-.29	9517.587	0.0	35088.457	0.0
391.0712	24.00	-1.87	31028.330	2.0	56591.880	2.0
391.0719	15.01	-3.94	104102.600	2.0	129666.100	2.0
391.0735	17.01	-1.66	121635.000	3.0	147198.400	4.0
391.0784	23.00	-1.67	8412.940	.5	33976.020	1.5
391.0810	57.01	-2.36	2581.041	0.0	28151.191	0.0
391.0846	26.00	-1.28	22249.430	3.0	47812.104	4.0
391.0864	24.00	-3.35	35398.020	4.0	60960.580	4.0
391.0905	25.01	-3.20	79458.380	2.0	105020.670	1.0
391.0920	62.01	-1.80	5242.739	0.0	30812.170	0.0
391.0978	26.00	-3.36	21038.987	2.0	46600.800	1.0
391.0990	26.00	-.68	25899.974	4.0	51461.707	4.0
391.1039	28.00	-3.67	29013.228	2.0	54574.640	1.0
391.1090	42.00	-.68	16696.107	0.0	42264.427	0.0
391.1135	22.00	-3.87	21469.494	3.0	47030.280	3.0
391.1168	26.00	-2.61	26479.366	1.0	52039.939	1.0
391.1177	22.00	.39	16458.710	6.0	42019.220	6.0
391.1179	14.02	-3.67	214989.270	2.0	240549.770	2.0
391.1300	58.01	-.65	6533.259	0.0	32100.206	0.0
391.1303	24.00	-4.28	20517.400	2.0	46077.090	1.0
391.1316	24.00	-4.78	24093.160	2.0	49652.760	2.0
391.1329	24.01	-2.26	39824.520	4.5	65384.040	4.5
391.1362	22.00	-3.13	16458.710	6.0	42018.010	5.0
391.1384	22.00	-1.94	18695.230	4.0	44254.390	3.0
391.1388	23.00	-3.80	18258.890	2.5	43818.020	1.5
391.1414	25.00	-.70	33825.490	2.5	59384.450	1.5
391.1451	26.00	-3.76	17550.180	3.0	43108.899	4.0
391.1575	18.01	-1.09	158428.030	.5	183985.940	1.5
391.1580	26.01	-2.85	61041.780	2.5	86599.660	2.5
391.1700	26.00	-3.90	26623.726	2.0	52180.820	1.0
391.1701	18.02	-4.47	225155.180	1.0	250712.270	2.0
391.1705	24.00	-4.03	24093.160	2.0	49650.220	3.0
391.1724	28.00	-2.32	32973.414	4.0	58530.350	3.0
391.1791	30.02	-3.14	258075.700	3.0	283632.200	4.0
391.1809	21.00	.52	168.340	2.5	25724.720	3.5
391.1810	76.00	-1.45	12663.231	0.0	38226.845	0.0
391.1837	8.02	-1.44	374798.600	3.0	400354.800	2.0
391.1840	24.00	-.41	37205.880	3.0	62762.060	4.0
391.1940	42.00	0.00	26213.694	0.0	51776.458	0.0
391.1949	24.00	-1.89	27728.870	2.0	53284.340	3.0
391.1959	8.01	.06	206971.300	2.5	232526.700	1.5
391.1985	24.00	-1.54	27820.230	3.0	53375.460	4.0
391.1998	24.00	-3.80	35501.260	3.0	61056.410	4.0
391.2002	14.02	-1.66	214994.650	1.0	240549.770	2.0
391.2051	30.02	.46	235452.500	2.0	261007.300	2.0
391.2051	30.02	-.69	235452.500	2.0	261007.300	2.0
391.2066	17.01	-1.30	121499.000	2.0	147053.700	2.0
391.2092	23.00	-3.16	9824.580	2.5	35379.110	3.5
391.2110	44.00	-.99	9436.930	0.0	34998.583	0.0
391.2112	8.01	-.85	206972.300	1.5	232526.700	1.5
391.2130	73.00	-.78	17099.394	0.0	42660.917	0.0
391.2190	58.01	-.71	4436.164	0.0	29997.295	0.0
391.2198	23.00	-3.09	8476.200	1.5	34030.040	1.5
391.2207	23.00	-1.52	8412.940	.5	33966.720	.5
391.2213	24.00	-3.00	29420.900	1.0	54974.640	2.0
391.2224	25.00	-4.18	37586.030	1.5	63139.700	2.5
391.2280	90.01	-1.03	10485.478	0.0	36046.021	0.0
391.2286	28.00	-.28	30619.440	2.0	56172.704	3.0
391.2318	22.01	-4.38	16515.790	.5	42068.850	1.5
391.2353	24.00	-1.11	33934.880	3.0	59487.710	4.0
391.2373	30.02	-4.60	257962.500	2.0	283515.200	3.0
391.2373	30.02	-3.45	257962.500	2.0	283515.200	2.0
391.2402	28.00	-3.62	25753.578	4.0	51306.085	3.0
391.2430	68.00	-1.79	0.000	0.0	25559.563	0.0
391.2440	58.01	-1.33	2339.068	0.0	27898.565	0.0
391.2461	23.01	-3.54	26839.820	3.0	52391.940	3.0
391.2518	29.01	-1.28	120875.850	2.0	146427.600	1.0
391.2547	25.00	-1.12	37737.220	3.5	63288.780	3.5
391.2557	13.01	-1.07	124792.000	2.0	150343.500	3.0
391.2577	22.00	-3.39	21588.496	4.0	47139.860	4.0
391.2604	22.00	-.69	16267.510	5.0	41818.700	4.0
391.2644	24.00	-3.61	27728.870	2.0	53279.800	2.0
391.2719	20.02	-4.33	360207.160	2.0	385757.600	3.0
391.2728	25.00	-.56	34845.260	.5	60395.640	1.5
391.2750	64.00	-.32	7178.519	0.0	32735.991	0.0
391.2785	24.00	-1.58	27825.450	5.0	53375.460	4.0
391.2830	45.00	-2.54	3226.301	0.0	28783.251	0.0
391.2835	26.02	-3.45	105895.350	1.0	131445.030	2.0
391.2840	9.02	-1.83	441158.600	1.5	466708.250	1.5
391.2860	23.00	-1.81	8578.520	2.5	34128.040	3.5
391.2900	59.01	-.80	1613.150	0.0	27169.643	0.0
391.2930	28.01	-4.63	94283.940	4.5	119833.000	5.5
391.2971	28.00	-5.50	204.786	3.0	25753.578	4.0
391.2980	62.01	-1.56	4355.506	0.0	29911.476	0.0
391.3010	41.00	-.22	11211.395	0.0	36767.169	0.0
391.3028	24.00	-3.30	25106.340	3.0	50654.760	2.0
391.3117	27.00	-3.13	29735.180	3.5	55283.020	2.5
391.3120	23.00	-5.19	9544.540	.5	35092.360	1.5
391.3128	28.01	-4.84	78955.450	1.5	104503.220	2.5
391.3132	23.01	-3.29	25191.080	2.0	50738.820	1.0
391.3168	28.00	-1.31	32973.414	4.0	58520.923	5.0
391.3246	24.02	-3.59	71166.100	2.0	96713.100	3.0
391.3256	28.01	-2.04	92325.850	3.5	117872.780	2.5
391.3360	42.00	.32	26455.667	0.0	52009.156	0.0
391.3405	27.00	-2.88	23207.760	1.5	48753.720	1.5
391.3412	22.00	-4.01	18037.225	4.0	43583.140	3.0
391.3449	22.01	-.37	8997.690	3.5	34543.360	3.5
391.3510	45.00	-2.06	1451.835	0.0	27004.344	0.0
391.3552	9.02	-.47	441276.720	2.5	466821.720	3.5
391.3599	28.00	-2.46	32973.414	4.0	58518.110	4.0
391.3634	26.00	-1.59	18378.187	2.0	43922.652	3.0
391.3780	64.01	-.49	12663.231	0.0	38213.977	0.0
391.3820	90.01	-2.40	1774.465	0.0	27324.950	0.0
391.3824	28.00	-3.79	32982.280	1.0	58525.507	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
391.3854	24.00	-3.26	31048.850	1.0	56591.880	2.0
391.3871	23.00	-3.16	8476.200	1.5	34019.120	1.5
391.3904	25.01	-2.62	79512.730	3.0	105055.430	2.0
391.3909	29.01	-1.95	123016.630	3.0	148559.300	2.0
391.3920	75.00	-.86	15647.559	0.0	41197.391	0.0
391.3935	17.01	.27	147198.400	4.0	172740.900	4.0
391.3990	58.01	-1.01	4436.164	0.0	29985.539	0.0
391.3993	25.00	-3.12	41031.480	4.5	66573.600	5.5
391.4114	29.01	-2.79	115662.770	4.0	141204.100	3.0
391.4168	22.00	-3.22	21739.713	5.0	47280.690	5.0
391.4187	9.02	-.95	441167.400	.5	466708.250	1.5
391.4187	18.01	-3.00	183797.360	2.5	209338.210	3.5
391.4189	22.01	-2.17	15257.530	4.5	40798.370	3.5
391.4266	26.00	-1.23	26479.366	1.0	52019.706	1.0
391.4326	22.00	-1.16	386.874	4.0	25926.820	4.0
391.4329	23.01	-.96	14461.730	3.0	40001.660	2.0
391.4330	23.01	-4.13	47297.080	5.0	72837.000	6.0
391.4340	40.01	.07	19357.805	0.0	44904.896	0.0
391.4341	29.01	-2.08	120875.850	2.0	146415.700	2.0
391.4350	25.00	-1.95	38008.700	5.5	63548.490	4.5
391.4395	22.00	.55	15975.590	3.0	41515.090	4.0
391.4399	23.00	-2.60	18372.460	3.5	43911.930	3.5
391.4494	26.01	-4.61	13474.430	2.5	39013.280	1.5
391.4496	28.00	-1.02	33500.854	3.0	59039.693	4.0
391.4513	25.02	-1.70	192576.420	2.5	218115.150	3.5
391.4700	41.00	.46	10808.108	0.0	36352.850	0.0
391.4735	24.00	-3.88	20520.920	3.0	46058.200	4.0
391.4736	22.00	-1.69	0.000	2.0	25537.276	1.0
391.4754	26.00	-2.15	26224.961	3.0	51762.120	2.0
391.4769	18.01	-1.82	132630.650	1.5	158167.710	1.5
391.4839	30.02	-.09	238205.500	1.0	263742.100	2.0
391.4839	30.02	-1.25	238205.500	1.0	263742.100	2.0
391.4850	44.00	-.98	7985.094	0.0	33528.857	0.0
391.4860	66.01	-.78	4274.849	0.0	29818.547	0.0
391.4924	24.00	-2.38	24286.540	1.0	49822.590	2.0
391.4950	58.01	-1.17	3710.246	0.0	29253.356	0.0
391.5031	28.01	-4.91	101144.630	3.5	126679.980	4.5
391.5040	24.01	-3.19	63802.410	.5	89337.700	1.5
391.5049	25.00	-4.05	33825.490	2.5	59360.720	2.5
391.5083	24.00	-4.50	35572.940	2.0	61107.950	2.0
391.5118	23.00	-1.12	15000.840	5.5	40535.620	6.5
391.5160	24.00	-2.98	20523.690	4.0	46058.200	4.0
391.5198	24.00	-2.58	20523.940	5.0	46058.200	4.0
391.5298	24.01	-4.48	39684.000	3.5	65217.610	4.5
391.5304	27.00	-.94	29735.180	3.5	55268.750	3.5
391.5379	22.00	-2.44	18141.229	5.0	43674.310	4.0
391.5380	77.00	-.55	9759.560	0.0	35299.865	0.0
391.5397	28.01	-1.69	105499.050	3.5	131032.010	2.5
391.5427	22.01	-4.50	15265.600	3.5	40798.370	3.5
391.5440	42.00	.19	22745.421	0.0	48285.335	0.0
391.5496	27.00	-1.51	18389.570	1.5	43921.890	2.5
391.5520	58.01	-.33	5646.026	0.0	31185.418	0.0
391.5526	18.01	-1.76	186074.350	2.5	211606.470	3.5
391.5572	22.01	-3.92	39926.830	2.5	65458.650	3.5
391.5580	66.01	-.73	4678.136	0.0	30217.137	0.0
391.5600	21.01	-1.73	39114.440	1.0	64646.080	1.0
391.5609	28.00	-2.26	26665.903	3.0	52197.482	3.0
391.5713	23.01	-2.61	47420.100	4.0	72951.000	4.0
391.5833	24.00	-.10	24282.340	4.0	49812.460	3.0
391.5836	17.01	-1.62	127726.900	1.0	153257.000	2.0
391.5879	22.00	-.90	170.132	3.0	25699.950	2.0
391.5940	40.01	-.89	4194.191	0.0	29730.844	0.0
391.6050	57.01	-.94	1855.123	0.0	27391.058	0.0
391.6055	21.00	-3.73	11557.640	2.5	37086.310	1.5
391.6072	24.00	-2.96	37233.500	5.0	62762.060	4.0
391.6140	58.01	-.50	4194.191	0.0	29729.540	0.0
391.6146	25.00	-3.87	37586.030	1.5	63114.110	1.5
391.6253	24.00	-1.64	7810.820	1.0	33338.200	0.0
391.6312	10.03	-1.79	648060.000	1.5	673587.000	2.5
391.6404	25.00	-2.02	34463.370	1.5	59989.770	1.5
391.6411	23.01	-1.16	11514.760	1.0	37041.110	2.0
391.6420	90.00	-1.82	0.000	0.0	25533.523	0.0
391.6450	30.02	-1.80	258075.700	3.0	283601.800	4.0
391.6450	30.02	-3.02	258075.700	3.0	283601.800	3.0
391.6465	26.02	-3.88	109570.840	2.0	135096.840	3.0
391.6480	69.00	.81	8711.012	0.0	34244.144	0.0
391.6510	64.01	.06	4758.794	0.0	30291.730	0.0
391.6640	40.00	-1.45	1209.863	0.0	26741.952	0.0
391.6651	8.00	-4.86	106785.213	2.0	132310.000	1.0
391.6680	17.01	-.02	147125.700	3.0	172650.300	3.0
391.6723	26.00	-.44	26105.908	6.0	51630.230	5.0
391.6790	90.01	-1.10	9114.300	0.0	34645.411	0.0
391.6809	23.00	-4.65	25130.960	2.5	50654.720	2.5
391.6864	15.01	-3.43	104102.600	2.0	129626.000	1.0
391.6900	58.01	-1.18	2339.068	0.0	27869.462	0.0
391.6920	42.00	.03	22745.421	0.0	48275.685	0.0
391.6971	24.00	-1.49	24299.890	2.0	49822.590	2.0
391.7019	14.01	-2.98	101023.310	1.5	126545.700	.5
391.7047	27.00	-1.81	28845.220	5.5	54367.430	5.5
391.7111	27.00	-1.05	18389.570	1.5	43911.360	1.5
391.7114	24.00	-3.50	25106.340	3.0	50628.110	3.0
391.7141	17.02	-4.30	216524.600	2.5	242046.200	3.5
391.7183	26.00	-2.45	7985.783	2.0	33507.102	3.0
391.7250	58.01	-1.34	3468.273	0.0	28996.386	0.0
391.7250	92.00	.28	8065.752	0.0	33593.865	0.0
391.7258	26.02	-3.52	114325.350	5.0	139846.180	6.0
391.7270	75.00	-.29	16534.792	0.0	42062.774	0.0
391.7290	63.00	.60	12985.861	0.0	38513.713	0.0
391.7318	28.01	-4.48	108763.320	.5	134283.760	.5
391.7318	25.01	-1.37	55759.270	3.0	81279.710	4.0
391.7337	24.00	-3.47	27597.220	3.0	53117.540	4.0
391.7349	25.02	-2.74	192880.160	3.5	218400.400	3.5
391.7380	24.00	-2.61	23933.900	4.0	49453.940	4.0
391.7440	62.01	-1.28	806.575	0.0	26333.450	0.0
391.7444	21.00	-6.41	11520.150	1.5	37039.770	2.5
391.7450	72.01	.05	21535.558	0.0	47062.368	0.0
391.7462	10.01	-4.30	282375.330	1.5	307894.840	2.5
391.7524	13.01	-1.20	124792.000	2.0	150311.100	3.0
391.7540	42.00	.05	20245.038	0.0	45771.261	0.0
391.7547	24.00	-2.47	25038.610	5.0	50557.560	4.0
391.7555	17.01	-.15	147053.700	2.0	172572.600	2.0
391.7593	24.00	-1.08	24303.940	3.0	49822.590	2.0
391.7601	8.01	-4.38	229946.600	2.5	255465.200	3.5
391.7640	58.01	-.64	5081.424	0.0	30606.996	0.0
391.7700	63.01	-2.04	9840.217	0.0	35365.398	0.0
391.7710	24.00	-1.48	37244.170	4.0	62762.060	4.0
391.7766	18.01	-3.90	147875.860	2.5	173393.380	2.5
391.7774	28.00	-1.58	33112.368	3.0	58629.840	2.0
391.7780	42.00	-.17	20809.640	0.0	46334.299	0.0
391.7818	28.00	-1.94	33112.368	3.0	58629.550	3.0
391.7859	24.00	-2.48	24056.110	5.0	49573.030	4.0
391.8060	92.01	-1.54	4355.506	0.0	29878.341	0.0
391.8064	24.00	-2.87	23512.000	1.0	49027.580	2.0
391.8090	72.01	-1.26	3629.588	0.0	29152.228	0.0
391.8204	24.01	-2.72	39742.360	2.5	65257.030	3.5
391.8240	64.01	-1.20	4758.794	0.0	30280.457	0.0
391.8249	26.01	-3.46	47674.780	1.5	73189.160	1.5
391.8250	39.00	-.83	10888.765	0.0	36410.363	0.0
391.8261	14.01	-3.13	131677.400	2.5	157191.700	2.5
391.8280	58.01	-.04	5565.369	0.0	31086.771	0.0
391.8298	25.00	-.28	33825.490	2.5	59339.550	3.5
391.8304	25.00	-.44	34138.880	6.5	59652.900	5.5
391.8317	26.00	-1.27	20037.815	0.0	45551.748	1.0
391.8341	26.01	-3.61	73054.970	2.5	98568.750	3.5
391.8413	29.01	-2.38	95565.650	4.0	121078.960	3.0
391.8413	26.00	-1.14	22946.810	1.0	48460.120	0.0
391.8445	28.01	-2.55	106283.160	2.5	131796.260	2.5
391.8507	26.02	-2.47	179579.830	5.0	205092.530	4.0
391.8510	26.01	-2.49	47674.780	1.5	73187.460	.5
391.8510	73.00	-2.16	0.000	0.0	25519.904	0.0
391.8520	63.00	-.06	13711.778	0.0	39231.617	0.0
391.8522	17.01	-3.90	161348.400	1.0	186861.000	2.0
391.8527	24.00	-1.85	24299.890	2.0	49812.460	3.0
391.8568	26.00	-1.71	22838.320	2.0	48350.620	1.0
391.8600	74.00	-1.27	12098.628	0.0	37617.946	0.0
391.8605	27.00	-4.15	16470.600	1.5	41982.660	1.5
391.8620	62.01	-1.71	1451.835	0.0	26971.023	0.0
391.8632	9.02	-.79	441276.720	2.5	466788.600	2.5
391.8638	26.00	-.69	24338.766	3.0	49850.610	3.0
391.8651	18.01	-1.76	186074.350	2.5	211586.110	2.5
391.8733	27.00	-2.52	28845.220	5.5	54356.450	4.5
391.8837	28.01	-3.28	109148.050	4.5	134658.600	4.5
391.8860	59.01	-.34	2984.328	0.0	28501.953	0.0
391.8970	76.00	.13	27826.844	0.0	53343.753	0.0
391.8998	14.01	-1.99	131677.400	2.5	157186.900	1.5
391.9000	41.00	-.74	9275.615	0.0	34792.328	0.0
391.9001	7.01	-.16	164610.760	1.0	190120.240	1.0
391.9020	90.00	-1.01	3629.588	0.0	29146.171	0.0
391.9068	26.00	-.73	24118.815	4.0	49627.861	4.0
391.9149	24.00	-1.15	24303.940	3.0	49812.460	3.0
391.9154	24.00	-.69	8307.570	4.0	33816.060	4.0
391.9160	41.00	-.37	12259.943	0.0	37775.615	0.0
391.9200	29.01	-.84	120919.410	1.0	146427.600	1.0
391.9259	8.01	-.19	206972.300	1.5	232480.100	.5
391.9291	26.00	-3.36	28604.610	2.0	54112.203	2.0
391.9303	25.00	-1.10	41230.300	3.5	66737.820	3.5
391.9323	24.01	-3.90	40202.140	6.5	65709.530	5.5
391.9360	28.00	-1.29	33610.916	2.0	59118.060	2.0
391.9362	29.01	-4.74	111218.800	4.0	136725.930	5.0
391.9419	24.01	-3.46	39877.280	3.5	65384.040	4.5
391.9447	26.00	-4.80	19788.248	4.0	45294.830	5.0
391.9502	26.01	-4.09	61093.440	2.5	86599.660	2.5
391.9619	27.00	-.51	28777.270	3.5	54282.730	2.5
391.9702	24.00	-2.68	24093.160	2.0	49598.080	2.0
391.9720	41.01	-.61	13389.148	0.0	38901.174	0.0
391.9767	9.02	-2.17	418248.560	1.5	443753.060	2.5
391.9810	58.01	-.25	5565.369	0.0	31076.810	0.0
391.9816	22.00	-.88	12118.394	4.0	37622.573	3.0
391.9985	23.00	-1.02	14949.300	4.5	40452.380	5.5
392.0030	14.01	-3.77	101023.310	1.5	126526.100	1.5
392.0073	28.01	-3.47	105439.850	1.5	130942.360	1.5
392.0080	92.00	-.60	0.000	0.0	25509.683	0.0
392.0082	28.01	-.71	105439.850	1.5	130942.300	1.5
392.0132	27.00	-3.43	20500.710	1.5	46002.830	2.5
392.0179	26.02	-2.80	114325.350	5.0	139827.170	4.0
392.0200	41.00	.61	12905.203	0.0	38414.106	0.0
392.0229	14.01	-2.81	101024.610	2.5	126526.100	1.5
392.0260	26.00	-1.81	978.076	0.0	26479.366	1.0
392.0272	27.00	-4.17	29948.760	2.5	55449.970	2.5
392.0322	23.01	-2.36	47181.170	3.0	72682.060	2.0
392.0329	21.01	-1.60	39114.440	1.0	64615.280	0.0
392.0340	28.01	-4.89	101357.200	4.5	126857.970	5.5
392.0345	16.02	-.62	147690.990	2.0	173191.730	2.0
392.0351	22.01	-1.35	39476.870	2.5	64977.570	3.5
392.0486	23.00	-1.37	8476.200	1.5	33976.020	1.5
392.0520	59.01	-1.41	0.000	0.0	25506.821	0.0
392.0539	22.00	-1.63	12118.394	4.0	37617.868	4.0
392.0561	28.01	-3.41	92373.450	2.5	117872.780	2.5
392.0566	27.00	-2.52	16470.600	1.5	41969.900	.5
392.0617	29.01	-.14	123016.630	3.0	148515.600	4.0
392.0620	23.00	-2.39	13801.530	1.5	39300.480	2.5
392.0635	25.00	-2.34	37789.930	2.5	63288.780	3.5
392.0635	26.00	-3.04	19562.435	4.0	45061.287	3.0
392.0663	26.01	-1.56	60625.470	5.5	86124.140	4.5
392.0712	23.01	-3.13	30673.140	2.0	56171.490	1.0
392.0721	27.00	-1.65	16470.600	1.5	41968.890	2.5
392.0779	18.01	-3.04	186074.350	2.5	211572.270	1.5
392.0828	26.00	-2.37	26339.682	2.0	51837.279	3.0
392.0850	75.00	-.03	27100.927	0.0	52605.601	0.0
392.0920	44.00	-.68	8469.040	0.0	33973.258	0.0
392.0926	25.01	-3.28	82605.290	4.0	108102.250	3.0
392.1024	24.00	-1.37	7927.470	2.0	33423.790	1.0
392.1069	26.00	-3.06	20641.110	4.0	46137.140	3.0
392.1089	17.01	-4.30	161348.400	1.0	186844.300	1.0
392.1103	24.00	-3.36	24093.160	2.0	49588.970	1.0
392.1158	25.02	-1.51	192880.160	3.5	218375.610	4.5
392.1189	25.00	-3.23	37586.030	1.5	63081.280	2.5
392.1212	27.01	-3.65	24886.500	2.0	50381.600	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
392.1228	9.02	-.65	441276.720	2.5	466771.720	3.5
392.1256	26.00	-2.46	20641.110	4.0	46135.920	5.0
392.1267	29.00	-1.42	46620.047	0.0	72122.008	0.0
392.1355	29.01	-.83	122867.530	1.0	148361.700	1.0
392.1375	28.01	-4.70	109148.050	4.5	134642.090	3.5
392.1424	22.00	-1.60	0.000	2.0	25493.722	2.0
392.1452	25.00	-2.02	38351.780	.5	63845.320	1.5
392.1518	23.01	-2.75	47181.170	3.0	72674.280	2.0
392.1532	24.00	-4.72	35572.940	2.0	61065.960	1.0
392.1540	57.01	-1.01	1855.123	0.0	27355.309	0.0
392.1621	23.01	-6.67	13741.610	3.0	39234.050	3.0
392.1730	58.01	-.15	5646.026	0.0	31144.977	0.0
392.1738	23.00	-2.63	18513.460	4.5	44005.140	4.5
392.1740	28.00	-2.59	33500.854	3.0	58992.520	2.0
392.1764	25.00	-4.94	31076.420	1.5	56567.930	1.5
392.1790	40.00	-.94	564.603	0.0	26063.164	0.0
392.1821	25.00	-2.07	41031.480	4.5	66522.620	4.5
392.1858	28.00	-2.60	28212.997	0.0	53703.899	1.0
392.1878	29.01	-4.86	108335.430	2.0	133826.200	2.0
392.1878	25.02	-2.72	192576.420	2.5	218067.190	2.5
392.1888	17.01	-.98	121635.000	3.0	147125.700	3.0
392.1916	23.00	-1.54	8476.200	1.5	33966.720	.5
392.1985	9.00	-3.69	104731.050	1.5	130221.120	1.5
392.2003	23.01	-2.72	47027.880	0.0	72517.840	1.0
392.2030	76.00	-1.45	12663.231	0.0	38160.231	0.0
392.2033	26.01	-1.55	73603.530	5.5	99093.290	5.5
392.2050	62.01	-1.65	1935.780	0.0	27432.650	0.0
392.2052	25.00	-4.61	31001.150	2.5	56490.790	2.5
392.2078	26.00	-2.19	26550.466	0.0	52039.939	1.0
392.2079	26.00	-3.69	20019.648	1.0	45509.112	1.0
392.2190	45.00	-1.26	5565.369	0.0	31061.329	0.0
392.2220	90.01	-1.50	9194.957	0.0	34690.722	0.0
392.2271	22.00	-4.43	8492.421	1.0	33980.639	2.0
392.2293	23.01	-2.32	47420.100	4.0	72908.170	3.0
392.2320	42.00	-.30	19841.750	0.0	45336.865	0.0
392.2350	41.00	-.20	12017.970	0.0	37512.890	0.0
392.2356	18.01	-4.15	135601.650	.5	161089.310	.5
392.2400	62.01	-.40	2984.328	0.0	28478.923	0.0
392.2420	73.01	-.97	6775.232	0.0	32269.697	0.0
392.2424	26.02	-4.48	114339.950	4.0	139827.170	4.0
392.2444	23.00	-1.13	8578.520	2.5	34065.610	2.5
392.2466	10.01	-4.84	302831.170	3.5	328318.120	3.5
392.2467	18.01	-2.45	179592.130	2.5	205079.070	2.5
392.2492	10.01	-4.47	302831.170	3.5	328317.950	2.5
392.2519	17.01	-3.81	161654.800	1.0	187141.400	2.0
392.2530	24.00	-4.09	27728.870	2.0	53215.400	1.0
392.2530	18.01	-2.19	158428.030	.5	183914.560	.5
392.2672	25.01	-3.80	44745.460	2.0	70231.070	2.0
392.2676	26.00	-1.61	24118.815	4.0	49604.402	5.0
392.2700	62.01	-2.04	1451.835	0.0	26944.480	0.0
392.2744	23.00	-1.97	14514.750	1.5	39999.890	2.5
392.2752	27.00	-1.78	8460.810	2.5	33945.900	2.5
392.2780	73.00	-1.58	5968.656	0.0	31460.781	0.0
392.2908	12.00	-2.53	35051.264	1.0	60535.340	2.0
392.2913	26.00	-1.70	415.932	3.0	25899.974	4.0
392.2920	73.00	-1.13	9678.902	0.0	35170.118	0.0
392.2923	25.00	-2.05	34343.900	4.5	59827.880	5.5
392.2940	21.00	-1.93	16021.780	1.5	41505.650	2.5
392.2960	78.00	.80	30004.597	0.0	55495.553	0.0
392.2985	23.00	-2.90	15103.770	4.5	40587.350	3.5
392.3017	26.00	-2.25	26224.961	3.0	51708.330	2.0
392.3028	19.01	-.60	189243.700	1.0	214727.000	0.0
392.3080	24.00	-4.00	20517.400	2.0	46000.360	3.0
392.3085	21.00	-.95	16022.720	2.5	41505.650	2.5
392.3108	28.01	-3.47	108368.050	2.5	133850.830	3.5
392.3110	58.01	-.32	4436.164	0.0	29926.145	0.0
392.3208	24.00	-1.90	33934.880	3.0	59417.010	3.0
392.3208	21.00	-7.95	11557.640	2.5	37039.770	2.5
392.3235	24.00	-2.51	24056.110	5.0	49538.060	5.0
392.3250	64.01	-.66	4436.164	0.0	29925.236	0.0
392.3270	28.00	-3.37	30392.052	1.0	55873.780	2.0
392.3308	27.00	-2.35	28777.270	3.5	54258.750	2.5
392.3317	25.00	-.86	34250.520	5.5	59731.940	4.5
392.3321	26.00	-3.44	28819.966	5.0	54301.360	4.0
392.3326	24.00	-1.52	33935.650	2.0	59417.010	3.0
392.3360	28.01	-3.46	110573.360	2.5	136054.500	1.5
392.3368	24.01	-4.64	40228.440	5.5	65709.530	5.5
392.3389	22.01	-4.15	16515.790	.5	41996.740	.5
392.3406	29.01	-.70	121078.960	3.0	146559.800	4.0
392.3470	44.00	.60	12743.888	0.0	38231.530	0.0
392.3485	16.01	.32	130641.000	1.5	156121.330	2.5
392.3488	2.01	-1.07	411477.918	0.0	436965.443	0.0
392.3499	21.01	-2.51	2540.970	2.0	28021.210	2.0
392.3536	15.01	-3.76	103630.600	2.0	129110.600	1.0
392.3582	28.01	-3.70	101740.270	3.5	127219.970	3.5
392.3622	24.00	-2.95	20520.920	3.0	46000.360	3.0
392.3648	25.02	-1.96	193498.070	3.5	218977.340	3.5
392.3674	12.02	-2.15	559987.100	1.0	585466.200	1.0
392.3674	12.02	-2.15	559987.100	1.0	585466.200	1.0
392.3741	24.00	-4.98	27820.230	3.0	53298.900	4.0
392.3750	42.00	.30	23551.996	0.0	49037.820	0.0
392.3764	20.02	-4.68	360388.680	3.0	385867.200	3.0
392.3800	90.00	-1.71	2823.013	0.0	28308.512	0.0
392.3807	25.00	-1.86	34138.880	6.5	59617.120	6.5
392.3878	24.01	-1.92	64030.850	6.5	89508.630	5.5
392.3899	29.01	-2.22	121078.960	3.0	146556.600	3.0
392.3900	72.01	-.61	12824.546	0.0	38309.395	0.0
392.3972	28.01	-3.45	110573.360	2.5	136050.530	2.5
392.3990	26.01	-4.64	73091.700	4.5	98568.750	3.5
392.4047	24.00	-4.53	27597.220	3.0	53073.900	3.0
392.4049	24.00	-2.68	20523.690	4.0	46000.360	3.0
392.4076	24.01	-2.03	63849.110	5.5	89325.600	4.5
392.4115	22.00	-3.91	8602.340	2.0	34078.580	3.0
392.4183	28.00	-1.47	33112.368	3.0	58588.168	3.0
392.4267	26.02	-4.47	114351.920	3.0	139827.170	4.0
392.4270	92.01	-1.15	4516.821	0.0	29999.267	0.0
392.4283	26.02	-4.47	157982.000	3.0	183457.150	4.0
392.4344	25.00	-3.86	38934.940	2.5	64409.690	3.5
392.4352	23.00	-3.69	18372.460	3.5	43847.160	2.5

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
392.4370	74.00	-.56	20325.695	0.0	45807.492	0.0
392.4386	24.01	-4.28	59130.510	1.5	84604.990	2.5
392.4396	22.00	-3.17	21469.494	3.0	46943.910	2.0
392.4411	27.00	-3.63	30102.960	2.5	55577.280	1.5
392.4468	14.02	.69	204828.060	3.0	230302.010	4.0
392.4485	10.01	-4.92	302844.110	2.5	328317.950	2.5
392.4490	41.00	-.37	12259.943	0.0	37740.961	0.0
392.4522	14.02	.48	204828.060	3.0	230301.660	4.0
392.4527	22.00	-.86	170.132	3.0	25643.695	3.0
392.4590	14.02	-2.70	204828.060	3.0	230301.220	3.0
392.4630	44.00	.12	19922.407	0.0	45402.516	0.0
392.4640	58.01	-.42	4436.164	0.0	29916.208	0.0
392.4646	26.00	-5.00	17550.180	3.0	43022.969	4.0
392.4663	23.00	.17	15062.940	6.5	40535.620	6.5
392.4700	74.00	-.74	18873.860	0.0	44353.514	0.0
392.4706	30.02	-1.18	237047.800	2.0	262520.200	2.0
392.4800	58.01	-1.25	4274.849	0.0	29753.854	0.0
392.4877	26.01	-1.45	78137.530	3.5	103608.820	4.5
392.5000	41.00	-1.39	645.260	0.0	26122.967	0.0
392.5007	27.00	-.91	28845.220	5.5	54315.670	5.5
392.5090	90.00	-.91	3629.588	0.0	29106.711	0.0
392.5100	76.00	-1.45	12663.231	0.0	38140.289	0.0
392.5101	26.02	-2.09	179725.310	6.0	205195.150	5.0
392.5104	25.02	-2.57	193235.430	2.5	218705.250	2.5
392.5149	27.00	-4.63	21215.900	.5	46685.430	1.5
392.5193	26.00	-1.61	26550.466	0.0	52019.706	1.0
392.5220	62.00	-.22	806.575	0.0	26282.854	0.0
392.5250	23.00	-3.17	553.020	4.5	26021.890	3.5
392.5274	29.00	-1.33	46620.047	0.0	72095.976	0.0
392.5283	23.00	-1.16	14910.040	3.5	40378.700	4.5
392.5312	24.01	-3.37	65257.030	3.5	90725.500	3.5
392.5327	23.00	-4.05	9544.540	.5	35012.910	.5
392.5451	28.01	-2.74	106283.160	2.5	131750.730	3.5
392.5460	59.01	-.82	0.000	0.0	25474.721	0.0
392.5465	24.01	-2.14	63706.620	4.5	89174.100	3.5
392.5466	24.01	-3.50	63802.410	.5	89269.880	.5
392.5545	24.01	-3.10	65384.040	4.5	90851.000	4.5
392.5614	28.00	-3.20	32982.280	1.0	58448.790	0.0
392.5616	28.01	-3.28	109148.050	4.5	134614.550	5.5
392.5646	26.00	-.91	22838.320	2.0	48304.623	2.0
392.5668	24.00	-1.79	27728.870	2.0	53195.030	2.0
392.5720	18.01	-.05	170400.940	2.5	195866.760	1.5
392.5790	29.01	-1.47	123016.630	3.0	148482.000	3.0
392.5821	21.00	-1.68	16009.710	.5	41474.880	1.5
392.5831	17.02	-4.42	179076.100	1.5	204541.200	2.5
392.5836	23.00	-2.34	13801.530	1.5	39266.600	1.5
392.5887	25.00	-1.38	33825.490	2.5	59290.230	3.5
392.5920	44.00	-.64	0.000	0.0	25471.737	0.0
392.5939	26.00	-1.16	23051.744	0.0	48516.150	1.0
392.5984	24.00	-1.85	27820.230	3.0	53284.340	3.0
392.5987	18.01	-4.02	179592.130	2.5	205056.220	1.5
392.6004	26.00	-.57	26140.164	3.0	51604.146	3.0
392.6030	74.00	-1.17	15324.929	0.0	40795.952	0.0
392.6047	18.01	-1.17	170400.940	2.5	195864.640	2.5
392.6157	27.00	-1.59	23152.570	3.5	48615.560	2.5
392.6161	25.01	-2.27	48317.850	4.0	73780.810	3.0
392.6220	92.00	-.59	0.000	0.0	25469.790	0.0
392.6317	23.01	-1.31	23391.090	5.0	48853.040	5.0
392.6340	19.01	-.47	187531.100	1.0	212992.900	1.0
392.6347	26.02	-1.62	179630.770	4.0	205092.530	4.0
392.6416	25.01	-1.83	55759.270	3.0	81220.580	3.0
392.6420	72.00	-.94	10485.478	0.0	35953.971	0.0
392.6464	30.02	-4.09	258171.200	5.0	283632.200	4.0
392.6464	30.02	-2.37	258171.200	5.0	283632.200	5.0
392.6495	28.01	-3.69	105439.850	1.5	130900.650	2.5
392.6504	23.01	-2.12	11908.270	2.0	37369.010	2.0
392.6515	27.00	-4.22	25739.930	2.5	51200.600	1.5
392.6530	2.00	-1.65	171135.000	0.0	196602.779	0.0
392.6544	25.01	-4.93	81051.620	3.0	106512.100	4.0
392.6590	24.00	-1.95	38537.680	5.0	63997.860	6.0
392.6610	41.00	-1.62	2097.096	0.0	27564.357	0.0
392.6638	24.00	-.45	36577.730	4.0	62037.600	5.0
392.6672	27.00	-4.62	25739.930	2.5	51199.580	3.5
392.6680	64.00	-.14	7339.834	0.0	32806.641	0.0
392.6684	24.00	-1.96	27820.230	3.0	53279.800	2.0
392.6684	23.00	-2.82	18680.120	5.5	44139.690	5.5
392.6710	26.01	-2.65	60956.820	3.5	86416.220	3.5
392.6723	28.01	-2.33	109148.050	4.5	134607.370	4.5
392.6723	24.00	-4.70	35501.260	3.0	60960.580	4.0
392.6730	92.00	.11	5726.684	0.0	31193.166	0.0
392.6757	9.02	-2.62	440582.120	4.5	466041.220	3.5
392.6770	76.00	-.76	18309.257	0.0	43775.480	0.0
392.6780	40.00	.01	15647.559	0.0	41113.717	0.0
392.6874	27.00	-3.14	29948.760	2.5	55407.100	1.5
392.6889	24.00	-4.82	27935.260	4.0	53393.500	5.0
392.6916	28.01	-3.03	110573.360	2.5	136031.430	2.5
392.6926	26.01	-4.73	50142.930	2.5	75600.930	3.5
392.6928	10.01	-3.18	303237.910	1.5	328695.900	2.5
392.6942	25.01	-4.82	82712.550	3.0	108170.450	2.0
392.7000	58.01	-1.19	7178.519	0.0	32643.250	0.0
392.7145	27.00	-4.10	20500.710	1.5	45957.290	.5
392.7198	10.01	-4.97	282680.650	.5	308136.890	1.5
392.7281	23.00	-2.00	13810.900	.5	39266.600	1.5
392.7328	23.00	-3.99	9636.960	1.5	35092.360	1.5
392.7332	15.01	-1.39	77711.000	2.0	103166.370	1.0
392.7390	58.01	-1.22	2823.013	0.0	28285.216	0.0
392.7394	22.00	-.82	21739.713	5.0	47194.680	4.0
392.7405	24.01	-2.22	63601.200	3.5	89056.100	2.5
392.7450	59.01	-.91	1693.808	0.0	27155.622	0.0
392.7528	18.01	-2.65	183797.360	2.5	209251.460	3.5
392.7554	9.02	-4.26	466038.170	2.5	491492.100	3.5
392.7559	30.02	-4.19	258178.300	4.0	283632.200	4.0
392.7559	30.02	-2.54	258178.300	4.0	283632.200	5.0
392.7560	57.00	-.75	0.000	0.0	25461.101	0.0
392.7570	58.01	-.34	11614.683	0.0	37075.719	0.0
392.7570	72.00	-.35	14599.011	0.0	40060.047	0.0
392.7574	27.01	-5.63	21624.400	5.0	47078.200	6.0
392.7590	75.00	-1.32	14115.066	0.0	39575.972	0.0
392.7610	26.00	-4.84	21999.132	4.0	47452.702	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
392.7682	21.00	-.87	16021.780	1.5	41474.880	1.5
392.7794	27.00	-2.79	30102.960	2.5	55555.340	2.5
392.7798	23.00	-1.35	14548.830	2.5	40001.180	3.5
392.7827	21.00	-.56	16022.720	2.5	41474.880	1.5
392.7828	28.00	-.68	29320.782	3.0	54772.940	3.0
392.7834	23.00	-4.08	8715.720	3.5	34167.840	2.5
392.7868	17.01	-.87	147198.400	4.0	172650.300	3.0
392.7897	24.01	-3.44	40228.440	5.5	65680.150	4.5
392.7922	26.00	-1.60	888.132	1.0	26339.682	2.0
392.7923	23.00	.05	15000.840	5.5	40452.380	5.5
392.7924	26.00	-2.57	22838.320	2.0	48289.852	1.0
392.7926	23.00	-2.73	8578.520	2.5	34030.040	1.5
392.7968	24.00	-1.77	33906.650	1.0	59357.900	2.0
392.7971	25.01	-2.95	65567.070	2.0	91018.300	3.0
392.7973	24.00	-3.48	25106.340	3.0	50557.560	4.0
392.7977	18.01	-3.09	183797.360	2.5	209248.550	2.5
392.7997	23.00	-2.28	14548.830	2.5	39999.890	2.5
392.8050	24.00	-2.62	25177.390	4.0	50628.110	3.0
392.8079	26.00	-.67	25899.974	4.0	51350.505	4.0
392.8122	22.00	.64	16106.080	4.0	41556.330	5.0
392.8148	24.00	-4.09	31352.420	1.0	56802.500	0.0
392.8213	22.00	-.93	21588.496	4.0	47038.160	3.0
392.8233	28.00	-3.48	33590.159	4.0	59039.693	4.0
392.8244	24.00	-2.16	27935.260	4.0	53384.720	3.0
392.8257	28.01	-2.26	109148.050	4.5	134597.430	5.5
392.8261	25.02	-4.58	192665.800	4.5	218115.150	3.5
392.8280	62.01	-.71	1451.835	0.0	26908.269	0.0
392.8292	25.00	-1.29	38008.700	5.5	63457.850	5.5
392.8307	24.00	-2.86	20517.400	2.0	45966.450	2.0
392.8320	58.01	-.89	4436.164	0.0	29892.339	0.0
392.8410	76.00	-1.50	11292.053	0.0	36747.644	0.0
392.8540	76.00	-2.26	5081.424	0.0	30536.173	0.0
392.8554	24.00	-4.62	35618.510	1.0	61065.960	1.0
392.8559	23.00	-1.41	14514.750	1.5	39962.170	2.5
392.8567	23.00	-1.89	13801.530	1.5	39248.900	1.5
392.8595	16.02	-.19	147744.540	3.0	173191.730	2.0
392.8626	18.01	-.44	135601.650	.5	161048.640	1.5
392.8627	26.02	-2.17	179748.170	5.0	205195.150	5.0
392.8639	24.00	-1.28	8095.210	3.0	33542.110	2.0
392.8640	17.01	-1.05	147125.700	3.0	172572.600	2.0
392.8660	69.01	-1.46	8872.327	0.0	34326.299	0.0
392.8790	42.00	-.16	21454.900	0.0	46908.029	0.0
392.8825	9.02	-1.28	441276.720	2.5	466722.420	2.5
392.8851	24.00	-2.94	20520.920	3.0	45966.450	2.0
392.8870	63.01	-1.78	10001.532	0.0	35454.143	0.0
392.8968	22.00	-.88	16458.710	6.0	41903.480	5.0
392.9072	24.02	-4.91	71676.200	4.0	97120.300	3.0
392.9109	26.00	-1.85	22249.430	3.0	47693.289	3.0
392.9149	22.01	-3.66	16625.250	1.5	42068.850	1.5
392.9192	26.01	-4.78	50157.610	4.5	75600.930	3.5
392.9209	26.00	-1.53	26224.961	3.0	51668.175	4.0
392.9220	57.01	-.78	1371.178	0.0	26821.522	0.0
392.9245	25.00	-4.43	31124.950	.5	56567.930	1.5
392.9254	27.00	-.03	28345.860	4.5	53788.780	4.5
392.9279	25.01	-3.78	44899.820	3.0	70342.580	3.0
392.9279	26.01	-2.81	61156.900	3.5	86599.660	2.5
392.9290	41.00	-1.35	2097.096	0.0	27546.986	0.0
392.9388	25.02	-3.01	192365.520	1.5	217807.570	1.5
392.9429	22.00	-3.11	21588.496	4.0	47030.280	3.0
392.9447	18.01	-4.47	185093.230	4.5	210534.900	4.5
392.9530	40.00	-.65	564.603	0.0	26012.939	0.0
392.9540	72.01	.70	27907.502	0.0	53355.773	0.0
392.9580	69.01	-.79	8872.327	0.0	34320.339	0.0
392.9612	23.00	-5.31	8578.520	2.5	34019.120	1.5
392.9618	28.00	-1.48	29320.782	3.0	54761.346	4.0
392.9639	25.00	-.57	38008.700	5.5	63449.130	5.5
392.9642	25.00	-.84	34343.900	4.5	59784.310	3.5
392.9659	24.00	-3.66	27597.220	3.0	53037.520	2.0
392.9670	90.01	-1.61	0.000	0.0	25447.429	0.0
392.9674	24.00	-1.30	27935.260	4.0	53375.460	4.0
392.9696	28.01	-4.76	114052.040	3.5	139492.100	2.5
392.9728	24.01	-3.64	38362.560	1.5	63802.410	.5
392.9733	23.01	-1.68	11514.760	1.0	36954.580	1.0
392.9771	28.01	-2.83	75917.630	3.5	101357.200	4.5
392.9782	30.02	-3.02	258075.700	3.0	283515.200	3.0
392.9782	30.02	-4.27	258075.700	3.0	283515.200	2.0
392.9824	25.02	-2.59	192741.670	.5	218180.900	1.5
392.9835	25.02	-1.91	193756.790	4.5	219195.950	4.5
392.9840	26.00	-3.90	20874.482	3.0	46313.610	2.0
392.9850	75.00	-.43	14115.066	0.0	39561.330	0.0
392.9866	26.00	-3.79	29371.860	3.0	54810.820	4.0
392.9875	22.00	-1.10	0.000	2.0	25438.898	2.0
392.9910	25.01	-3.73	41204.340	5.0	66643.010	4.0
392.9941	18.01	-.56	185093.230	4.5	210531.700	5.5
392.9960	58.01	-1.08	5565.369	0.0	31010.921	0.0
392.9977	28.01	-3.92	94705.930	3.5	120144.170	2.5
393.0000	76.00	-.72	14760.326	0.0	40205.619	0.0
393.0014	23.00	-2.02	13810.900	.5	39248.900	1.5
393.0025	23.00	-.15	11100.650	4.5	36538.580	4.5
393.0054	22.00	-4.18	18145.400	2.0	43583.140	3.0
393.0079	27.00	-3.23	15184.040	2.5	40621.620	1.5
393.0121	21.00	-.96	16009.710	.5	41447.020	.5
393.0127	28.01	-3.90	94729.250	2.5	120166.520	1.5
393.0130	25.01	-3.88	82735.290	2.0	108172.540	1.0
393.0142	26.02	-3.32	179757.980	4.0	205195.150	5.0
393.0199	24.00	-1.89	23933.900	4.0	49370.700	3.0
393.0226	22.00	-2.86	12118.394	4.0	37555.021	3.0
393.0250	74.00	-.39	19680.435	0.0	45124.109	0.0
393.0298	26.00	-1.57	704.003	2.0	26140.164	3.0
393.0303	26.01	-4.56	13673.210	1.5	39109.340	.5
393.0337	25.00	-2.32	38008.700	5.5	63444.610	4.5
393.0389	23.00	-2.79	13801.530	1.5	39237.100	.5
393.0453	25.01	-3.24	82735.290	2.0	108170.450	2.0
393.0480	63.01	.09	1613.150	0.0	27055.335	0.0
393.0480	74.00	-.88	14840.984	0.0	40283.169	0.0
393.0488	24.00	-2.88	24200.230	6.0	49635.160	6.0
393.0592	24.01	-3.77	65156.840	2.5	90591.100	2.5
393.0647	23.03	-1.08	258288.800	1.0	283722.700	1.0
393.0658	25.02	-3.09	193235.430	2.5	218669.260	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
393.0660	39.01	-1.66	3226.301	0.0	28667.321	0.0
393.0680	28.01	-4.96	113407.310	2.5	138841.000	3.5
393.0686	9.00	-2.09	105056.282	.5	130489.930	.5
393.0810	58.01	-.71	7017.204	0.0	32457.253	0.0
393.0862	24.01	-3.53	39824.520	4.5	65257.030	3.5
393.0877	26.00	-2.85	19788.248	4.0	45220.662	3.0
393.0884	20.02	-.79	325467.670	2.0	350900.040	2.0
393.0940	73.00	-1.92	5968.656	0.0	31407.864	0.0
393.0952	25.01	-2.35	52653.270	4.0	78085.200	5.0
393.0970	74.00	-.85	17986.627	0.0	43425.641	0.0
393.1014	9.02	-1.67	441276.720	2.5	466708.250	1.5
393.1045	27.00	-3.88	23184.230	2.5	48615.560	2.5
393.1088	26.02	-1.78	179661.480	3.0	205092.530	4.0
393.1090	58.01	-.56	1371.178	0.0	26809.415	0.0
393.1112	26.00	-1.24	26339.682	2.0	51770.577	3.0
393.1154	24.00	-2.70	24833.860	3.0	50264.480	3.0
393.1158	30.02	-3.64	258171.200	5.0	283601.800	4.0
393.1160	62.01	-2.18	3468.273	0.0	28906.057	0.0
393.1181	27.00	-1.41	29735.180	3.5	55165.630	2.5
393.1200	75.00	-.46	21616.215	0.0	47053.740	0.0
393.1235	18.01	-1.90	132737.610	.5	158167.710	1.5
393.1251	26.00	-3.80	26140.164	3.0	51570.160	3.0
393.1323	21.00	-4.04	11610.240	3.5	37039.770	2.5
393.1343	23.00	-.06	14949.300	4.5	40378.700	4.5
393.1370	58.01	-.84	2339.068	0.0	27775.493	0.0
393.1380	72.00	-1.27	4516.821	0.0	29953.182	0.0
393.1400	42.00	-.63	20164.380	0.0	45600.611	0.0
393.1460	41.00	-1.03	9356.272	0.0	34792.115	0.0
393.1512	25.00	-.56	38120.180	4.5	63548.490	4.5
393.1520	76.00	-1.26	11292.053	0.0	36727.508	0.0
393.1550	66.01	-.20	4274.849	0.0	29710.110	0.0
393.1587	25.02	-3.75	192880.160	3.5	218307.980	2.5
393.1707	16.01	.16	133399.820	1.5	158826.870	2.5
393.1720	28.01	-3.82	106369.300	1.5	131796.260	2.5
393.1754	26.01	-2.34	60989.480	4.5	86416.220	3.5
393.1760	44.00	-.20	9517.587	0.0	34951.489	0.0
393.1782	24.00	-3.00	24093.160	2.0	49519.720	3.0
393.1838	23.00	-3.32	13810.900	.5	39237.100	.5
393.1850	25.00	-4.93	38120.180	4.5	63546.300	3.5
393.1982	24.00	-4.98	35640.690	0.0	61065.960	1.0
393.1986	21.00	-.95	16021.780	1.5	41447.020	.5
393.1991	22.01	-1.60	9118.150	4.5	34543.360	3.5
393.2030	92.01	-1.65	241.973	0.0	25674.129	0.0
393.2067	28.01	-3.06	108548.610	1.5	133973.330	2.5
393.2068	25.02	-2.90	192948.290	1.5	218373.000	1.5
393.2121	24.00	-.32	36552.130	3.0	61976.500	4.0
393.2138	26.00	-3.04	33095.922	4.0	58520.180	4.0
393.2150	58.01	-.74	5565.369	0.0	30996.749	0.0
393.2230	90.01	-1.33	9194.957	0.0	34625.819	0.0
393.2280	68.00	-.15	7097.862	0.0	32528.401	0.0
393.2330	24.00	-2.36	33934.880	3.0	59357.900	2.0
393.2365	25.00	-1.87	41031.480	4.5	66454.270	3.5
393.2404	10.01	-2.69	281998.280	2.5	307420.820	2.5
393.2449	24.00	-2.44	33935.650	2.0	59357.900	2.0
393.2457	28.01	-1.56	104081.040	4.5	129503.240	4.5
393.2544	18.01	.01	161048.640	1.5	186470.280	1.5
393.2568	24.00	-4.17	35398.020	4.0	60819.500	3.0
393.2588	26.00	-4.02	19912.486	2.0	45333.834	2.0
393.2629	26.00	-.68	21999.132	4.0	47420.215	5.0
393.2747	23.00	-2.07	14514.750	1.5	39935.070	1.5
393.2774	26.01	-4.61	74498.150	1.5	99918.300	1.5
393.2803	8.02	.07	366801.040	3.0	392221.000	2.0
393.2970	66.01	-.91	4678.136	0.0	30104.213	0.0
393.2970	62.01	-1.69	4355.506	0.0	29781.583	0.0
393.2998	17.01	-.78	121635.000	3.0	147053.700	2.0
393.3027	29.00	-1.65	46620.047	0.0	72045.756	0.0
393.3030	92.01	-1.91	0.000	0.0	25425.690	0.0
393.3103	9.00	-2.65	104731.050	1.5	130149.070	.5
393.3109	28.00	-1.33	33112.368	3.0	58530.350	3.0
393.3156	27.00	-2.01	30102.960	2.5	55520.640	3.5
393.3185	26.00	-2.44	28819.966	5.0	54237.460	4.0
393.3185	18.01	-1.38	157673.320	2.5	183090.810	1.5
393.3202	24.00	-2.63	24200.230	6.0	49617.610	5.0
393.3224	29.01	-.77	121078.960	3.0	146496.200	3.0
393.3228	18.01	-3.57	189414.960	3.5	214832.170	3.5
393.3290	16.01	.45	131186.860	2.5	156603.670	3.5
393.3369	21.00	-.75	168.340	2.5	25584.640	2.5
393.3374	24.01	-3.76	40202.140	6.5	65618.410	6.5
393.3408	27.00	-8.85	816.000	3.5	26232.050	3.5
393.3422	23.01	-2.97	47101.880	2.0	72517.840	1.0
393.3458	23.00	-.64	14910.040	3.5	40325.770	2.5
393.3465	10.01	-1.70	283322.350	1.5	308738.030	1.5
393.3530	9.02	-.57	441406.460	3.5	466821.720	3.5
393.3550	44.00	-1.41	2016.438	0.0	27438.766	0.0
393.3580	62.01	-1.17	4355.506	0.0	29777.641	0.0
393.3593	26.00	-1.56	26339.682	2.0	51754.534	1.0
393.3602	26.00	-1.37	24772.019	1.0	50186.814	2.0
393.3651	24.01	-3.70	39742.360	2.5	65156.840	2.5
393.3663	20.01	.15	0.000	.5	25414.400	1.5
393.3668	25.00	-4.45	31076.420	1.5	56490.790	2.5
393.3725	21.00	-6.91	11520.150	1.5	36934.150	1.5
393.3730	58.01	-.44	5646.026	0.0	31067.191	0.0
393.3762	28.00	-4.08	30163.140	2.0	55576.905	3.0
393.3772	24.00	-3.65	27703.840	4.0	53117.540	4.0
393.3818	26.02	-4.20	89697.520	3.0	115110.920	4.0
393.3828	23.00	-1.51	14548.830	2.5	39962.170	2.5
393.3840	24.01	-2.98	64061.820	1.5	89475.080	2.5
393.3852	27.00	-2.00	29269.730	4.5	54682.910	4.5
393.3883	26.01	-3.90	50187.950	3.5	75600.930	3.5
393.3899	8.00	-4.49	106785.172	5.0	132198.046	4.0
393.3914	27.00	-2.83	4690.180	2.5	30102.960	2.5
393.3927	28.01	-2.85	110573.360	2.5	135986.060	3.5
393.3985	23.00	-1.04	8715.720	3.5	34128.040	3.5
393.4064	29.01	-2.20	121524.670	3.0	146936.480	2.0
393.4090	28.00	-1.27	29320.782	3.0	54732.425	2.0
393.4120	40.01	-1.30	2500.383	0.0	27919.028	0.0
393.4140	41.00	-.85	10808.108	0.0	36226.624	0.0
393.4230	45.00	-.33	5646.026	0.0	31063.960	0.0
393.4232	22.00	-1.19	386.874	4.0	25797.600	3.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
393.4252	9.00	-2.60	104731.050	1.5	130141.650	1.5
393.4303	28.01	-3.56	77332.470	2.5	102742.740	1.5
393.4366	23.01	-2.50	47107.980	1.0	72517.640	1.0
393.4366	28.01	-3.81	110573.360	2.5	135983.220	1.5
393.4410	41.00	-1.59	1129.205	0.0	26545.977	0.0
393.4498	22.00	-1.32	16106.080	4.0	41515.090	4.0
393.4685	27.00	-3.14	23207.760	1.5	48615.560	2.5
393.4688	22.01	-1.58	39476.870	2.5	64884.650	2.5
393.4695	29.01	-3.19	116326.160	3.0	141733.900	2.0
393.4715	24.01	-3.23	42898.120	2.5	68305.730	1.5
393.4750	58.01	-1.39	5565.369	0.0	30979.944	0.0
393.4790	40.01	-.91	5726.684	0.0	31141.001	0.0
393.4790	64.00	.05	483.945	0.0	25898.262	0.0
393.4840	77.00	-.95	7017.204	0.0	32431.198	0.0
393.4884	10.01	-4.82	277344.290	2.5	302750.810	3.5
393.4956	24.01	-3.44	38396.360	.5	63802.410	.5
393.4963	22.00	-4.50	18061.540	1.0	43467.550	2.0
393.4980	30.02	.45	238336.200	2.0	263742.100	2.0
393.4980	30.02	-.71	238336.200	2.0	263742.100	2.0
393.4980	45.00	-.90	14276.381	0.0	39689.471	0.0
393.4986	23.01	-2.89	26839.820	3.0	52245.680	2.0
393.5004	28.00	-1.00	33112.368	3.0	58518.110	4.0
393.5011	24.02	-3.57	70980.200	1.0	96385.900	2.0
393.5020	42.00	-.21	23390.681	0.0	48803.512	0.0
393.5040	74.00	-.78	13711.778	0.0	39124.480	0.0
393.5060	26.02	-4.34	109570.840	2.0	134976.220	3.0
393.5096	25.02	-3.47	109841.120	3.5	135246.270	2.5
393.5151	23.00	-.10	14910.040	3.5	40314.830	3.5
393.5175	24.01	-7.36	21822.860	2.5	47227.500	3.5
393.5180	62.01	-1.99	3871.561	0.0	29283.359	0.0
393.5279	27.00	-2.18	20500.710	1.5	45904.680	1.5
393.5280	18.01	-1.84	179592.130	2.5	204996.090	3.5
393.5303	26.00	-1.58	22946.810	1.0	48350.620	1.0
393.5339	24.00	-4.34	35501.260	3.0	60904.840	3.0
393.5380	64.00	-.76	0.000	0.0	25410.507	0.0
393.5450	41.00	-.29	12017.970	0.0	37428.025	0.0
393.5472	9.02	-.25	441385.880	1.5	466788.600	2.5
393.5509	25.00	-2.07	37737.220	3.5	63139.700	2.5
393.5525	25.00	-1.15	34250.520	5.5	59652.900	5.5
393.5553	24.00	-1.02	29584.620	2.0	54986.820	3.0
393.5585	25.00	-4.95	43314.230	5.5	68716.220	4.5
393.5650	72.01	-.28	17260.709	0.0	42669.472	0.0
393.5720	56.00	-.12	9215.000	0.0	34623.312	0.0
393.5723	24.00	-2.72	31048.000	7.0	56449.100	6.0
393.5737	18.01	-2.01	186171.260	.5	211572.270	1.5
393.5760	62.01	-1.23	2177.753	0.0	27585.806	0.0
393.5798	25.00	-1.86	41230.300	3.5	66630.920	4.5
393.5814	26.00	-1.76	22838.320	2.0	48238.832	2.0
393.5820	59.01	-1.19	403.288	0.0	25810.954	0.0
393.5822	23.00	-6.61	9824.580	2.5	35225.040	2.5
393.5840	45.00	-1.19	11856.655	0.0	37264.192	0.0
393.5850	26.00	-2.06	26339.682	2.0	51739.964	2.0
393.5861	26.00	-2.97	28604.610	2.0	54004.820	3.0
393.5871	22.00	-3.31	21739.713	5.0	47139.860	4.0
393.5892	29.01	-2.64	110084.290	1.0	135484.300	0.0
393.5910	2.00	-2.78	171135.000	0.0	196542.085	0.0
393.5930	58.01	-1.24	5646.026	0.0	31052.982	0.0
393.5945	26.01	-1.67	44915.070	3.5	70314.740	4.5
393.5959	27.00	-.70	7442.410	3.5	32841.990	4.5
393.5990	10.01	-3.40	282375.330	1.5	307774.710	1.5
393.6000	6.03	-.32	445366.000	0.0	470772.504	0.0
393.6060	40.01	-1.30	6371.944	0.0	31778.061	0.0
393.6067	25.02	-2.80	192576.420	2.5	217975.300	2.5
393.6084	24.00	-2.18	36577.730	4.0	61976.500	4.0
393.6131	23.00	-3.80	18513.460	4.5	43911.930	3.5
393.6157	30.02	-2.12	237047.800	2.0	262446.100	3.0
393.6216	16.01	-.11	133268.530	.5	158666.450	1.5
393.6220	57.01	-1.91	967.890	0.0	26372.974	0.0
393.6230	24.00	-1.80	24056.110	5.0	49453.940	4.0
393.6230	74.00	-.85	17986.627	0.0	43391.647	0.0
393.6258	24.00	-1.45	29420.900	1.0	54818.550	2.0
393.6281	23.00	-1.50	8578.520	2.5	33976.020	1.5
393.6288	12.00	-3.23	35051.264	1.0	60448.720	0.0
393.6323	28.01	-2.87	68131.210	3.5	93528.440	3.5
393.6338	24.01	-4.68	55023.300	2.5	80420.430	2.5
393.6349	26.01	-4.44	49101.090	.5	74498.150	1.5
393.6450	41.00	-1.76	1532.493	0.0	26936.093	0.0
393.6543	23.01	-3.56	30267.460	2.0	55663.270	1.0
393.6550	73.00	-1.41	12179.286	0.0	37582.240	0.0
393.6557	25.01	-3.37	82774.730	1.0	108170.450	2.0
393.6757	25.00	-.82	34423.270	3.5	59817.700	2.5
393.6779	26.00	-2.80	25899.974	4.0	51294.262	3.0
393.6900	75.00	-.84	15647.559	0.0	41048.255	0.0
393.6918	21.01	-3.25	32349.980	3.0	57743.370	3.0
393.6937	22.00	-2.65	15975.590	3.0	41368.860	4.0
393.6943	28.01	-1.30	104081.040	4.5	129474.270	3.5
393.6950	10.02	-3.15	410134.720	1.0	435527.900	2.0
393.6965	24.01	-4.33	39824.520	4.5	65217.610	4.5
393.6980	74.00	-.23	18873.860	0.0	44274.040	0.0
393.7005	26.02	-4.26	198658.800	3.0	224051.630	3.0
393.7025	27.01	-5.52	22414.500	3.0	47807.200	4.0
393.7040	90.01	-.93	10566.135	0.0	35965.928	0.0
393.7041	30.02	-2.44	258239.600	4.0	283632.200	4.0
393.7041	30.02	-4.08	258239.600	4.0	283632.200	5.0
393.7063	9.02	-.14	441315.800	.5	466708.250	1.5
393.7150	58.01	-.38	12179.286	0.0	37578.369	0.0
393.7331	26.00	-1.33	21715.735	5.0	47106.463	4.0
393.7372	28.01	-3.15	92373.450	2.5	117763.910	1.5
393.7440	41.00	-.76	967.890	0.0	26365.102	0.0
393.7441	24.00	-2.71	29584.620	2.0	54974.640	2.0
393.7490	25.01	-2.85	82712.550	3.0	108102.250	3.0
393.7507	24.00	-1.88	38537.680	5.0	63927.270	5.0
393.7531	23.00	-.75	15062.940	6.5	40452.380	5.5
393.7570	60.01	-2.23	0.000	0.0	25396.374	0.0
393.7630	58.01	-1.22	5726.684	0.0	31122.671	0.0
393.7630	74.00	-.67	19438.462	0.0	44834.449	0.0
393.7694	27.00	-3.97	29294.520	3.5	54682.910	4.5
393.7695	25.01	-2.75	55759.270	3.0	81147.650	2.0
393.7710	16.01	-3.70	130641.000	1.5	156029.280	1.5
393.7723	26.00	-1.27	24338.766	3.0	49726.964	4.0
393.7748	25.00	-1.54	34343.900	4.5	59731.940	4.5
393.7754	26.01	-3.89	50212.930	2.5	75600.930	3.5
393.7799	28.01	-.81	106283.160	2.5	131670.870	2.5
393.7840	73.00	-.98	12743.888	0.0	38138.521	0.0
393.7870	56.00	-.90	9215.000	0.0	34609.439	0.0
393.7898	25.00	-3.89	41031.480	4.5	66418.550	5.5
393.7900	44.00	-1.09	7985.094	0.0	33379.340	0.0
393.7920	90.01	-1.38	7743.122	0.0	33137.239	0.0
393.7937	20.02	-4.90	360388.680	3.0	385775.500	4.0
393.7940	27.00	-4.89	29563.170	1.5	54949.970	1.5
393.7948	22.00	-2.86	18287.560	4.0	43674.310	4.0
393.7960	41.00	-.25	12017.970	0.0	37411.829	0.0
393.7977	25.02	-3.21	192989.050	5.5	218375.610	4.5
393.8027	23.00	-4.24	14548.830	2.5	39935.070	1.5
393.8049	9.02	-.52	441158.600	1.5	466544.700	1.5
393.8077	25.02	-4.22	192741.670	.5	218127.590	.5
393.8083	22.01	-3.10	39926.830	2.5	65312.710	2.5
393.8090	58.01	-.32	4436.164	0.0	29829.184	0.0
393.8148	18.01	-2.47	179592.130	2.5	204977.590	2.5
393.8281	30.02	-4.81	257566.100	1.0	282950.700	2.0
393.8292	26.01	-4.19	13474.430	2.5	38858.960	2.5
393.8297	13.01	-1.54	123415.900	2.0	148800.400	3.0
393.8334	24.00	-.73	29824.750	3.0	55209.010	4.0
393.8384	22.01	-3.17	40074.710	3.5	65458.650	3.5
393.8393	24.00	-2.54	24093.160	2.0	49477.040	2.0
393.8400	12.00	-2.23	35051.264	1.0	60435.099	2.0
393.8407	24.00	-2.93	29420.900	1.0	54804.690	1.0
393.8416	27.00	-4.73	29563.170	1.5	54946.900	2.5
393.8430	62.01	-2.38	2661.698	0.0	28052.526	0.0
393.8468	30.02	-.41	235623.900	3.0	261007.300	2.0
393.8468	30.02	-1.57	235623.900	3.0	261007.300	2.0
393.8559	10.01	-4.18	302935.310	4.5	328318.120	3.5
393.8590	76.00	-1.09	8630.355	0.0	34020.152	0.0
393.8623	13.01	-2.60	123418.000	3.0	148800.400	3.0
393.8623	13.01	-1.62	123418.000	3.0	148800.400	4.0
393.8623	13.01	-1.85	123418.000	3.0	148800.400	4.0
393.8663	9.02	-1.35	441406.460	3.5	466788.600	2.5
393.8676	26.02	-4.49	89907.850	4.0	115289.910	5.0
393.8746	28.00	-2.17	33610.916	2.0	58992.520	2.0
393.8845	18.01	-3.38	161089.310	.5	186470.280	1.5
393.8856	27.00	-.07	28777.270	3.5	54158.170	4.5
393.8899	9.02	.58	441406.460	3.5	466787.080	4.5
393.8966	26.01	-1.89	47674.780	1.5	73054.970	2.5
393.8969	24.00	-3.42	25177.390	4.0	50557.560	4.0
393.8989	24.00	-2.97	29824.750	3.0	55204.790	3.0
393.9034	24.01	-2.98	39877.280	3.5	65257.030	3.5
393.9040	72.00	-1.43	6533.259	0.0	31920.155	0.0
393.9057	13.01	-4.39	123420.800	4.0	148800.400	3.0
393.9057	13.01	-2.83	123420.800	4.0	148800.400	4.0
393.9057	13.01	-2.97	123420.800	4.0	148800.400	4.0
393.9057	13.01	-1.30	123420.800	4.0	148800.400	5.0
393.9098	27.00	-3.15	28345.860	4.5	53725.200	4.5
393.9121	28.01	-2.61	109148.050	4.5	134527.240	3.5
393.9140	28.00	-1.50	29320.782	3.0	54699.852	3.0
393.9174	9.02	-4.20	441158.600	1.5	466537.450	.5
393.9183	25.00	-3.62	43314.230	5.5	68693.020	5.5
393.9259	22.00	-5.62	8602.340	2.0	33980.639	2.0
393.9303	21.00	-3.12	16096.860	1.5	41474.880	1.5
393.9318	24.00	-1.78	36552.130	3.0	61930.050	3.0
393.9327	23.00	-.61	15000.840	5.5	40378.700	4.5
393.9415	9.02	-.18	441167.400	.5	466544.700	1.5
393.9459	24.00	-2.95	24833.860	3.0	50210.870	4.0
393.9467	24.00	-3.17	23933.900	4.0	49310.860	3.0
393.9494	16.01	-1.20	127824.930	.5	153201.720	1.5
393.9500	9.02	-4.00	418248.560	1.5	443625.310	2.5
393.9505	21.01	-3.36	2540.970	2.0	27917.690	1.0
393.9520	58.01	-.83	8469.040	0.0	33852.843	0.0
393.9537	21.00	-3.94	11557.640	2.5	36934.150	1.5
393.9554	30.02	-2.61	236560.000	0.0	261936.400	1.0
393.9570	76.00	-.96	13308.491	0.0	38691.972	0.0
393.9624	23.00	-4.48	9636.960	1.5	35012.910	.5
393.9640	62.01	-2.37	806.575	0.0	26189.605	0.0
393.9660	58.01	-1.65	1855.123	0.0	27238.024	0.0
393.9764	22.00	-2.67	16106.080	4.0	41481.130	5.0
393.9802	24.00	-1.40	27820.230	3.0	53195.030	2.0
393.9823	28.00	-3.68	26665.903	3.0	52040.568	2.0
393.9834	25.03	-3.67	152700.500	4.0	178075.100	3.0
393.9858	26.01	-4.67	61041.780	2.5	86416.220	3.5
393.9865	30.02	-3.22	258171.200	5.0	283545.600	5.0
393.9865	30.02	-1.42	258171.200	5.0	283545.600	6.0
393.9880	17.02	-2.64	179663.000	1.5	205037.300	1.5
394.0039	26.00	-3.33	27543.000	1.0	52916.278	2.0
394.0189	28.01	-3.90	94283.940	4.5	119656.250	3.5
394.0281	28.00	-1.36	33500.854	3.0	58872.570	4.0
394.0284	26.02	-1.93	179630.770	4.0	205002.470	3.0
394.0315	24.00	-.48	36558.550	2.0	61930.050	3.0
394.0316	22.01	-3.36	16625.250	1.5	41996.740	.5
394.0334	26.00	-4.82	21038.987	2.0	46410.366	1.0
394.0340	58.01	-.43	2500.383	0.0	27878.904	0.0
394.0386	28.01	-3.34	110573.360	2.5	135944.400	3.5
394.0452	9.02	-4.96	466038.170	2.5	491408.790	3.5
394.0520	24.00	-3.34	31352.420	1.0	56722.600	1.0
394.0539	24.00	-3.20	27703.840	4.0	53073.900	3.0
394.0541	9.02	-4.35	441167.400	.5	466537.450	.5
394.0598	23.00	-.97	14514.750	1.5	39884.430	1.5
394.0613	25.00	-4.43	24788.050	2.5	50157.630	3.5
394.0640	58.01	-1.15	3952.218	0.0	29328.807	0.0
394.0683	23.01	-3.04	47420.100	4.0	72789.230	3.0
394.0715	20.02	-4.86	360388.680	3.0	385757.600	3.0
394.0800	38.00	-.91	14195.724	0.0	39571.282	0.0
394.0877	24.00	-1.17	24282.340	4.0	49650.220	3.0
394.0880	26.00	-3.00	7728.058	3.0	33095.922	4.0
394.0890	27.00	-2.10	5075.830	1.5	30443.630	1.5
394.0918	29.01	-2.58	110365.980	2.0	135733.600	3.0
394.0970	58.01	-.73	3306.958	0.0	28681.422	0.0
394.1014	26.02	-3.97	109570.840	2.0	134937.840	2.0
394.1014	10.03	-2.34	648060.000	1.5	673427.000	1.5
394.1020	25.01	-2.92	82735.290	2.0	108102.250	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
394.1025	24.00	-2.77	24897.550	4.0	50264.480	3.0
394.1076	25.00	-3.37	34250.520	5.5	59617.120	6.5
394.1087	9.02	-4.39	466041.220	3.5	491407.750	4.5
394.1135	24.00	-1.90	24286.540	1.0	49652.760	2.0
394.1135	24.00	-1.29	27597.220	3.0	52963.440	4.0
394.1196	25.00	-3.74	38008.700	5.5	63374.530	4.5
394.1242	23.00	-.85	14949.300	4.5	40314.830	3.5
394.1267	26.00	-.62	26339.682	2.0	51705.052	2.0
394.1270	41.00	-1.40	645.260	0.0	26017.792	0.0
394.1277	25.01	-2.66	43850.420	2.0	69215.730	1.0
394.1284	25.01	-4.27	48317.850	4.0	73683.110	4.0
394.1284	9.02	-.15	441406.460	3.5	466771.720	3.5
394.1329	25.01	-4.16	43131.400	2.0	68496.370	1.0
394.1385	21.00	-4.08	16141.040	2.5	41505.650	2.5
394.1479	27.00	-3.09	23207.760	1.5	48571.770	.5
394.1480	42.01	.31	25165.146	0.0	50536.326	0.0
394.1483	24.00	-1.38	8307.570	4.0	33671.550	3.0
394.1510	60.01	-.69	483.945	0.0	25854.932	0.0
394.1540	75.00	-.72	19599.777	0.0	44970.571	0.0
394.1600	28.01	-1.01	105668.780	2.5	131032.010	2.5
394.1620	40.00	-.82	7985.094	0.0	33355.373	0.0
394.1650	44.00	-1.35	7985.094	0.0	33355.180	0.0
394.1656	23.00	-1.80	14514.750	1.5	39877.620	.5
394.1729	27.00	-1.96	3482.820	4.5	28845.220	5.5
394.1754	26.01	-3.06	73969.710	5.5	99331.950	4.5
394.1760	30.02	-3.73	258239.600	4.0	283601.800	3.0
394.1800	64.00	-.23	1693.808	0.0	27062.929	0.0
394.1816	27.00	-3.85	23184.230	2.5	48546.070	1.5
394.1841	28.00	-.67	30912.838	1.0	56274.516	2.0
394.1870	62.01	-1.08	0.000	0.0	25368.670	0.0
394.1940	25.00	-1.59	34423.270	3.5	59784.310	3.5
394.2007	23.00	-.49	11100.650	4.5	36461.260	3.5
394.2060	44.00	-1.84	3064.986	0.0	28432.433	0.0
394.2061	21.01	-1.03	39344.900	2.0	64705.160	2.0
394.2150	25.02	-4.94	192948.290	1.5	218307.980	2.5
394.2150	58.01	-.34	0.000	0.0	25366.868	0.0
394.2161	24.00	-9.26	0.000	3.0	25359.620	4.0
394.2210	63.01	-2.03	10001.532	0.0	35368.014	0.0
394.2223	6.00	-2.42	61981.820	1.0	87341.040	0.0
394.2231	23.00	-1.63	15078.250	.5	40437.420	1.5
394.2240	73.00	-2.47	5968.656	0.0	31334.945	0.0
394.2262	10.01	-3.14	224087.020	1.5	249445.990	2.5
394.2263	18.01	-1.62	179592.130	2.5	204951.090	3.5
394.2279	22.00	-4.76	15108.121	3.0	40466.979	2.0
394.2442	26.00	-1.48	22946.810	1.0	48304.623	2.0
394.2520	66.01	-.74	4678.136	0.0	30042.624	0.0
394.2550	92.01	-1.72	0.000	0.0	25364.295	0.0
394.2553	19.01	-.17	189661.700	2.0	215018.800	1.0
394.2630	64.00	-.29	161.315	0.0	25525.095	0.0
394.2640	90.01	-1.29	10082.190	0.0	35445.906	0.0
394.2662	13.01	-1.14	124792.000	2.0	150148.400	3.0
394.2682	27.00	-.40	28345.860	4.5	53702.130	3.5
394.2720	45.00	-.30	10243.505	0.0	35606.706	0.0
394.2731	28.01	-2.14	104147.290	5.5	129503.240	4.5
394.2750	58.01	.64	6855.889	0.0	32218.897	0.0
394.2767	24.00	-2.37	24897.550	4.0	50253.270	5.0
394.2777	24.01	-3.96	65156.840	2.5	90512.500	1.5
394.2781	26.00	-.71	26406.490	1.0	51762.120	2.0
394.2809	24.00	-3.17	27816.880	5.0	53172.330	5.0
394.2820	25.00	-4.15	24802.250	3.5	50157.630	3.5
394.2870	25.00	-4.25	31001.150	2.5	56356.210	3.5
394.2904	25.00	-.80	38008.700	5.5	63363.540	6.5
394.2926	8.01	-5.00	229946.600	2.5	255301.300	2.5
394.2957	30.02	-4.38	258277.700	3.0	283632.200	4.0
394.2982	9.02	-2.99	466041.220	3.5	491395.560	4.5
394.2983	25.00	-2.10	34463.370	1.5	59817.700	2.5
394.3035	30.02	.05	238205.500	1.0	263559.500	1.0
394.3035	30.02	-1.11	238205.500	1.0	263559.500	1.0
394.3040	42.00	.23	20164.380	0.0	45525.523	0.0
394.3044	28.01	-.17	106283.160	2.5	131637.100	3.5
394.3069	18.01	-2.47	185093.230	4.5	210447.010	3.5
394.3080	63.01	.20	23632.653	0.0	48993.538	0.0
394.3081	15.01	-3.86	103756.900	1.0	129110.600	1.0
394.3100	25.01	-4.04	62587.500	3.0	87941.080	4.0
394.3140	58.01	-1.12	2500.383	0.0	27860.883	0.0
394.3210	24.00	-1.99	24299.890	2.0	49652.760	2.0
394.3240	62.01	-1.29	806.575	0.0	26166.431	0.0
394.3240	64.00	-.66	0.000	0.0	25359.856	0.0
394.3296	24.00	-3.27	36577.730	4.0	61930.050	3.0
394.3341	26.00	-1.50	17726.985	2.0	43079.013	1.0
394.3390	90.01	-1.17	8307.725	0.0	33666.617	0.0
394.3478	23.01	-3.75	11908.270	2.0	37259.420	1.0
394.3500	58.01	-.80	8711.012	0.0	34069.196	0.0
394.3510	42.00	-.48	20809.640	0.0	46167.760	0.0
394.3606	24.00	-1.79	24299.890	2.0	49650.220	3.0
394.3620	24.00	-2.73	24833.860	3.0	50184.100	2.0
394.3620	64.00	.13	7178.519	0.0	32535.932	0.0
394.3632	21.00	-2.83	16096.860	1.5	41447.020	.5
394.3649	25.01	-2.09	48333.060	5.0	73683.110	4.0
394.3654	26.02	-3.43	204907.130	1.0	230257.150	2.0
394.3655	28.01	-3.78	113753.040	4.5	139103.050	5.5
394.3670	41.00	-.81	1532.493	0.0	26889.584	0.0
394.3674	23.00	-1.70	8715.720	3.5	34065.610	2.5
394.3693	25.00	-1.20	37789.930	2.5	63139.700	2.5
394.3730	10.01	-3.39	281720.280	1.5	307069.810	1.5
394.3800	24.00	-1.40	27935.260	4.0	53284.340	3.0
394.3820	92.00	-.03	0.000	0.0	25356.127	0.0
394.3840	24.00	-1.91	24303.940	3.0	49652.760	2.0
394.3858	27.00	-2.37	28345.860	4.5	53694.570	3.5
394.3873	23.00	-3.02	15103.770	4.5	40452.380	5.5
394.3890	58.01	.04	6291.287	0.0	31646.964	0.0
394.3903	25.01	-2.58	43696.190	3.0	69044.610	2.0
394.4006	13.00	-.75	0.000	.5	25347.756	.5
394.4044	22.00	.72	16267.510	5.0	41615.020	6.0
394.4101	28.00	-.22	29320.782	3.0	54667.928	4.0
394.4122	27.00	-2.82	30102.960	2.5	55449.970	2.5
394.4128	27.00	-1.52	21215.900	.5	46562.870	1.5
394.4130	92.01	-1.05	4516.821	0.0	29870.955	0.0
394.4190	44.00	-1.35	7985.094	0.0	33338.842	0.0
394.4197	6.01	-1.27	195752.580	1.5	221099.110	2.5
394.4236	24.00	-1.62	24303.940	3.0	49650.220	3.0
394.4273	18.01	-1.41	132327.280	3.5	157673.320	2.5
394.4295	29.01	-4.48	116388.000	2.0	141733.900	2.0
394.4370	26.00	-1.44	26623.726	2.0	51969.140	3.0
394.4393	18.01	-1.38	185093.230	4.5	210438.500	4.5
394.4426	26.01	-3.73	38214.500	1.5	63559.560	.5
394.4522	29.01	-1.51	121078.960	3.0	146423.400	4.0
394.4535	26.02	-1.96	179748.170	5.0	205092.530	4.0
394.4558	25.02	-2.50	192741.670	.5	218085.880	.5
394.4575	30.02	-1.84	235452.500	2.0	260796.600	3.0
394.4575	30.02	-.69	235452.500	2.0	260796.600	3.0
394.4581	25.00	-1.91	37737.220	3.5	63081.280	2.5
394.4700	66.01	-.04	0.000	0.0	25350.470	0.0
394.4720	75.00	.25	27342.899	0.0	52693.241	0.0
394.4740	26.00	-2.58	22946.810	1.0	48289.852	1.0
394.4748	28.01	-1.08	104081.040	4.5	129424.030	5.5
394.4840	58.01	-.54	10001.532	0.0	35351.103	0.0
394.4849	10.01	-2.68	282680.650	.5	308022.990	.5
394.4850	26.02	-2.38	201164.210	2.0	226506.540	1.0
394.4892	26.00	-2.09	24118.815	4.0	49460.876	5.0
394.4910	26.01	-2.63	73751.340	4.5	99093.290	5.5
394.4920	58.01	-1.39	2500.383	0.0	27849.440	0.0
394.4930	27.00	-1.19	29563.170	1.5	54904.990	2.5
394.4975	26.00	-2.10	26627.612	4.0	51969.140	3.0
394.4986	24.01	-3.47	65384.040	4.5	90725.500	3.5
394.5000	6.01	-.67	195752.580	1.5	221093.950	1.5
394.5042	26.02	-3.49	198717.600	4.0	224058.700	4.0
394.5042	8.01	-.67	188888.380	.5	214229.480	1.5
394.5057	9.04	-1.51	854971.000	2.5	880312.000	2.5
394.5057	9.04	-.21	854971.000	2.5	880312.000	3.5
394.5059	26.02	-1.98	179661.480	3.0	205002.470	3.0
394.5114	26.00	-.83	22249.430	3.0	47590.070	4.0
394.5123	22.01	-4.93	43740.770	3.5	69081.350	4.5
394.5132	26.02	-3.41	114339.950	4.0	139680.470	3.0
394.5162	24.01	-3.44	39877.280	3.5	65217.610	4.5
394.5202	26.01	-4.50	13673.210	1.5	39013.280	1.5
394.5232	6.01	-1.15	195765.850	2.5	221105.730	3.5
394.5237	29.01	-4.90	120875.850	2.0	146215.700	1.0
394.5250	42.00	-.70	16615.449	0.0	41962.385	0.0
394.5265	23.01	-4.87	23391.090	5.0	48730.760	4.0
394.5322	27.00	-1.87	7442.410	3.5	32781.710	2.5
394.5336	25.00	-4.26	38008.700	5.5	63347.910	4.5
394.5352	28.01	-.56	104503.220	2.5	129842.330	2.5
394.5366	28.01	-3.59	94705.930	3.5	120044.950	4.5
394.5441	28.01	-.36	104081.040	4.5	129419.580	4.5
394.5470	24.00	-1.01	24282.340	4.0	49620.690	4.0
394.5476	27.00	-2.62	23207.760	1.5	48546.070	1.5
394.5487	28.01	-1.94	76402.030	2.5	101740.270	3.5
394.5529	29.01	-.66	123304.630	1.0	148642.600	2.0
394.5540	64.00	.17	967.890	0.0	26312.963	0.0
394.5551	24.00	-1.66	24200.230	6.0	49536.060	5.0
394.5570	44.00	.71	16131.504	0.0	41476.384	0.0
394.5576	25.00	-1.56	38120.180	4.5	63457.850	5.5
394.5635	28.01	-1.80	106283.160	2.5	131620.450	1.5
394.5696	30.02	-4.89	258178.300	4.0	283515.200	3.0
394.5721	29.01	-1.18	121078.960	3.0	146415.700	2.0
394.5752	9.02	-1.12	441385.880	1.5	466722.420	2.5
394.5763	27.01	-5.05	22009.230	4.0	47345.700	5.0
394.5768	26.02	-.59	201170.100	0.0	226506.540	1.0
394.5774	25.02	-2.76	109780.400	2.5	135116.800	1.5
394.5867	17.02	-1.14	216710.400	3.5	242046.200	3.5
394.5898	23.00	-1.60	14548.830	2.5	39884.430	1.5
394.5910	75.00	-.92	14115.066	0.0	39457.763	0.0
394.5950	24.00	-1.58	24282.340	4.0	49617.610	5.0
394.6062	26.02	-4.45	179757.980	4.0	205092.530	4.0
394.6096	18.01	.11	170530.310	3.5	195864.640	2.5
394.6107	27.00	-3.56	29948.760	2.5	55283.020	2.5
394.6137	24.01	-3.76	65257.030	3.5	90591.100	2.5
394.6143	26.02	-4.56	198717.600	4.0	224051.630	3.0
394.6173	21.00	-2.06	16141.040	2.5	41474.880	1.5
394.6187	28.00	-4.86	1332.153	3.0	26665.903	3.0
394.6263	6.01	-.56	195765.850	2.5	221099.110	2.5
394.6270	77.00	-.31	16534.792	0.0	41875.177	0.0
394.6288	8.01	-4.08	229968.200	1.5	255301.300	2.5
394.6296	25.01	-3.85	82839.490	0.0	108172.540	1.0
394.6310	44.00	-1.14	11695.340	0.0	37035.468	0.0
394.6314	24.00	-2.50	21856.940	3.0	47189.870	4.0
394.6367	28.01	-4.46	112422.190	5.5	137754.780	5.5
394.6383	23.00	-2.28	14514.750	1.5	39847.240	1.5
394.6412	13.01	-1.83	123468.100	3.0	148800.400	4.0
394.6412	13.01	-1.60	123468.100	3.0	148800.400	4.0
394.6475	24.00	-4.01	35572.940	2.0	60904.840	3.0
394.6490	24.02	-4.85	128753.900	2.0	154085.700	3.0
394.6509	28.01	-4.06	112422.190	5.5	137754.870	4.5
394.6510	62.01	-1.30	1451.835	0.0	26790.679	0.0
394.6576	25.01	-4.21	44899.820	3.0	70231.070	2.0
394.6618	10.01	-3.54	303237.910	1.5	328568.890	1.5
394.6620	10.01	-4.61	303237.910	1.5	328568.880	.5
394.6627	27.00	-2.33	15774.040	1.5	41104.960	2.5
394.6680	58.01	-.62	7743.122	0.0	33080.874	0.0
394.6718	27.00	-4.52	25937.590	4.5	51267.930	4.5
394.6811	28.01	-3.81	75917.630	3.5	101247.370	2.5
394.6934	25.00	-2.26	38120.180	4.5	63449.130	5.5
394.6938	29.00	-1.84	46620.047	0.0	71956.143	0.0
394.6969	16.01	-.89	127824.930	.5	153153.660	.5
394.6972	27.00	-4.45	26232.050	3.5	51560.760	2.5
394.6974	18.01	-1.82	186340.480	1.5	211669.180	2.5
394.6986	26.00	-4.82	25899.974	4.0	51228.595	5.0
394.6989	28.01	-3.23	110573.360	2.5	135901.960	2.5
394.6997	26.02	-2.08	114351.920	3.0	139680.470	3.0
394.7000	26.02	-.38	201178.010	1.0	226506.540	1.0
394.7028	9.00	-2.52	104731.050	1.5	130059.400	.5
394.7067	6.01	-1.27	195765.850	2.5	221093.950	1.5
394.7098	24.00	-2.65	23512.000	1.0	48839.900	1.0
394.7120	27.00	-1.68	15774.040	1.5	41101.800	.5
394.7170	42.00	-.59	20003.065	0.0	45337.672	0.0
394.7295	8.00	-1.97	73768.212	2.0	99094.849	3.0
394.7330	90.00	-.27	9759.560	0.0	35093.140	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
394.7382	26.00	-2.82	19350.882	5.0	44676.963	4.0
394.7411	26.01	-4.02	74498.150	1.5	99824.040	2.5
394.7460	26.02	-2.39	179676.890	2.0	205002.470	3.0
394.7482	8.00	-2.12	73768.212	2.0	99093.653	2.0
394.7494	14.02	-.85	214989.270	2.0	240314.630	3.0
394.7501	18.00	-3.89	93143.800	2.0	118469.117	2.0
394.7510	26.00	-4.83	23783.617	5.0	49108.876	4.0
394.7530	41.00	-.27	11937.313	0.0	37269.609	0.0
394.7533	26.00	-1.34	22838.320	2.0	48163.427	2.0
394.7547	23.00	-4.14	18680.120	5.5	44005.140	4.5
394.7562	25.00	-1.30	41031.480	4.5	66356.400	4.5
394.7586	8.00	-2.34	73768.212	2.0	99092.980	1.0
394.7630	59.01	-.82	1613.150	0.0	26944.805	0.0
394.7639	25.00	-2.20	38120.180	4.5	63444.610	4.5
394.7678	25.00	-2.01	37789.930	2.5	63114.110	1.5
394.7690	30.02	-2.03	258277.700	3.0	283601.800	4.0
394.7690	30.02	-2.92	258277.700	3.0	283601.800	3.0
394.7700	6.01	-1.26	195785.740	3.5	221109.780	4.5
394.7726	24.00	-3.34	24940.610	2.0	50264.480	3.0
394.7770	22.00	-.84	170.132	3.0	25493.722	2.0
394.7840	62.01	-1.39	2661.698	0.0	27992.005	0.0
394.7881	28.01	-3.91	113172.960	4.5	138495.840	4.5
394.7896	28.01	-4.25	101357.200	4.5	126679.980	4.5
394.7896	26.01	-3.92	61093.440	2.5	86416.220	3.5
394.7960	9.02	-.55	441385.880	1.5	466708.250	1.5
394.7970	58.01	-.73	3306.958	0.0	28636.431	0.0
394.7979	22.00	-3.18	18911.399	2.0	44233.650	3.0
394.7980	74.00	-.15	19519.120	0.0	44848.529	0.0
394.7994	22.00	-4.70	18145.400	2.0	43467.550	2.0
394.8030	90.00	-1.68	0.000	0.0	25329.088	0.0
394.8089	26.00	-.13	26140.164	3.0	51461.707	4.0
394.8110	62.01	-1.21	806.575	0.0	26135.150	0.0
394.8211	28.01	-3.41	112422.190	5.5	137742.950	5.5
394.8272	26.00	-4.32	26140.164	3.0	51460.530	3.0
394.8331	27.00	-2.32	29948.760	2.5	55268.750	3.5
394.8331	6.01	-.39	195785.740	3.5	221105.730	3.5
394.8400	78.00	-1.30	13389.148	0.0	38715.863	0.0
394.8450	92.00	-.64	0.000	0.0	25326.394	0.0
394.8472	26.00	-3.93	25899.974	4.0	51219.059	3.0
394.8486	24.01	-2.51	42986.730	1.5	68305.730	1.5
394.8501	25.02	-2.57	193498.070	3.5	218816.970	2.5
394.8551	9.00	-2.99	105056.282	.5	130374.860	1.5
394.8582	7.00	-4.27	94830.860	2.5	120149.238	3.5
394.8604	24.00	-3.95	35501.260	3.0	60819.500	3.0
394.8671	22.00	-.43	0.000	2.0	25317.813	1.0
394.8683	28.00	-2.16	31786.210	3.0	57103.946	3.0
394.8687	26.00	-4.28	33507.102	3.0	58824.810	2.0
394.8688	13.01	-1.26	124792.000	2.0	150109.700	3.0
394.8760	22.00	-2.63	15877.180	2.0	41194.420	3.0
394.8778	26.00	-.38	26351.049	5.0	51668.175	4.0
394.8819	28.01	-.76	105499.050	3.5	130815.910	3.5
394.8819	26.01	-2.73	60807.280	4.5	86124.140	4.5
394.8836	24.00	-1.78	24303.940	3.0	49620.690	4.0
394.8900	20.00	-1.88	15157.901	0.0	40474.241	1.0
394.8922	22.01	-3.25	15265.600	3.5	40581.800	2.5
394.8947	25.01	-3.94	53597.130	2.0	78913.170	2.0
394.8953	19.02	-1.00	237512.000	2.5	262828.000	1.5
394.8959	9.02	-1.24	441406.460	3.5	466722.420	2.5
394.8975	18.00	-3.15	93143.800	2.0	118459.662	1.0
394.9100	57.01	.05	3226.301	0.0	28548.526	0.0
394.9109	28.01	-.18	104081.040	4.5	129396.040	5.5
394.9125	19.02	-1.35	238455.100	.5	263770.000	.5
394.9134	26.00	-2.22	27543.000	1.0	52857.840	1.0
394.9186	27.00	-2.85	28345.860	4.5	53660.370	5.5
394.9236	26.00	-3.35	20019.648	1.0	45333.834	2.0
394.9280	69.00	.42	8711.012	0.0	34032.083	0.0
394.9283	26.02	-3.70	204943.260	2.0	230257.150	2.0
394.9330	41.00	-.74	9356.272	0.0	34677.023	0.0
394.9364	6.01	-1.15	195785.740	3.5	221099.110	2.5
394.9372	24.00	-3.91	24897.550	4.0	50210.870	4.0
394.9390	58.01	-1.14	1855.123	0.0	27175.489	0.0
394.9417	28.01	-2.92	112422.190	5.5	137735.220	6.5
394.9420	44.00	-.94	11372.710	0.0	36692.884	0.0
394.9429	27.00	-1.34	28845.220	5.5	54158.170	4.5
394.9440	59.01	-.73	1613.150	0.0	26933.195	0.0
394.9495	24.00	-3.43	31049.330	6.0	56361.860	5.0
394.9592	24.00	-1.37	24277.060	0.0	49588.970	1.0
394.9600	63.00	-.11	12985.861	0.0	38304.881	0.0
394.9609	20.02	-1.97	325467.670	2.0	350779.470	3.0
394.9649	24.00	-2.62	24286.540	1.0	49598.080	2.0
394.9780	76.00	-.96	12905.203	0.0	38223.069	0.0
394.9850	62.00	-.81	2258.411	0.0	27575.828	0.0
394.9939	18.02	-4.62	225402.590	3.0	250712.270	2.0
394.9940	41.00	-1.77	1532.493	0.0	26849.333	0.0
394.9956	26.00	-1.42	17550.180	3.0	42859.756	2.0
394.9972	24.00	-.22	35813.730	3.0	61123.200	4.0
395.0040	44.00	.37	19922.407	0.0	45238.606	0.0
395.0046	25.00	-2.79	34343.900	4.5	59652.900	5.5
395.0210	44.00	-.70	6452.602	0.0	31767.712	0.0
395.0289	25.01	-1.84	81659.500	3.0	106966.940	2.0
395.0320	24.00	-1.80	35884.400	5.0	61191.640	6.0
395.0360	39.01	-.71	806.575	0.0	26120.724	0.0
395.0390	90.01	-.80	10485.478	0.0	35799.434	0.0
395.0395	25.01	-3.40	53805.800	4.0	79112.560	5.0
395.0410	44.00	-.87	9033.642	0.0	34347.470	0.0
395.0420	58.01	-.74	5081.424	0.0	30395.188	0.0
395.0422	16.01	-1.48	127976.210	1.5	153282.800	2.5
395.0514	30.02	-1.47	258239.600	4.0	283545.600	5.0
395.0608	30.02	-4.18	260418.100	2.0	285723.500	3.0
395.0634	26.02	-4.76	97041.380	3.0	122346.610	3.0
395.0640	75.00	-1.28	14518.354	0.0	39830.708	0.0
395.0667	27.00	-1.28	21920.090	4.5	47225.110	3.5
395.0670	26.02	-3.22	204943.260	2.0	230248.260	1.0
395.0804	27.00	-4.96	30102.960	2.5	55407.100	1.5
395.0806	24.00	-2.17	38537.680	5.0	63841.810	4.0
395.0904	24.02	-3.50	128782.200	3.0	154085.700	3.0
395.0984	25.00	-2.98	41031.480	4.5	66334.470	3.5
395.0990	42.00	-.70	16696.107	0.0	42006.219	0.0
395.1071	24.00	-.92	24286.540	1.0	49588.970	1.0
395.1095	28.01	-1.24	105499.050	3.5	130801.330	4.5
395.1160	60.01	-.58	1451.835	0.0	26760.858	0.0
395.1163	26.00	-1.17	26406.490	1.0	51708.330	2.0
395.1165	23.01	-3.11	32040.760	2.0	57342.590	2.0
395.1176	26.01	-3.47	73143.480	3.5	98445.240	4.5
395.1203	26.02	-4.57	179893.560	5.0	205195.150	5.0
395.1206	28.01	-.48	106369.300	1.5	131670.870	2.5
395.1210	44.00	-1.27	8711.012	0.0	34019.715	0.0
395.1267	21.01	-1.48	39344.900	2.0	64646.080	1.0
395.1284	9.02	-4.24	466191.030	2.5	491492.100	3.5
395.1302	26.01	-4.54	38164.240	2.5	63465.190	1.5
395.1330	40.00	-.80	11534.025	0.0	36841.959	0.0
395.1348	24.00	-3.18	27816.880	5.0	53117.540	4.0
395.1395	22.01	-3.34	43780.990	4.5	69081.350	4.5
395.1479	26.02	-3.31	114325.350	5.0	139625.170	4.0
395.1596	27.00	-1.87	27497.060	2.5	52796.130	2.5
395.1600	39.01	-1.88	3226.301	0.0	28532.506	0.0
395.1616	29.00	-2.30	45894.129	0.0	71200.232	0.0
395.1626	26.00	-1.88	23051.744	0.0	48350.620	1.0
395.1680	24.00	-.24	35862.820	4.0	61161.350	5.0
395.1699	23.00	-4.14	14548.830	2.5	39847.240	1.5
395.1716	27.00	-.18	29216.370	2.5	54514.670	3.5
395.1734	24.00	-.97	24299.890	2.0	49598.080	2.0
395.1830	72.00	-1.44	2339.068	0.0	27643.800	0.0
395.1841	26.02	-2.01	93388.750	4.0	118686.250	4.0
395.1930	28.01	-3.72	94705.930	3.5	120002.860	3.5
395.1930	8.00	-4.02	88630.599	1.0	113927.534	0.0
395.1950	77.00	-1.13	12098.628	0.0	37402.592	0.0
395.1960	23.01	-.80	11908.270	2.0	37205.010	3.0
395.1963	25.00	-.62	34845.260	.5	60141.980	.5
395.2000	64.01	-1.26	1129.205	0.0	26432.849	0.0
395.2030	29.01	-1.48	120919.410	1.0	146215.700	1.0
395.2057	6.01	-.21	195813.660	4.5	221109.780	4.5
395.2110	58.01	-1.09	4436.164	0.0	29739.103	0.0
395.2160	73.00	-.78	15324.929	0.0	40627.548	0.0
395.2200	60.01	-1.16	0.000	0.0	25302.363	0.0
395.2219	25.01	-3.28	55759.270	3.0	81054.350	2.0
395.2230	14.02	-1.63	214989.270	2.0	240284.280	2.0
395.2231	13.01	-4.82	106918.200	1.0	132213.200	1.0
395.2255	21.00	-.28	16210.800	3.5	41505.650	2.5
395.2318	27.00	-2.57	3482.820	4.5	28777.270	3.5
395.2363	24.01	-3.15	47354.630	2.5	72648.790	3.5
395.2366	24.00	-.52	24303.940	3.0	49598.080	2.0
395.2370	41.01	-.29	13631.121	0.0	38932.396	0.0
395.2372	17.02	-4.01	217913.100	1.5	243207.200	.5
395.2418	25.01	-1.67	62564.700	1.0	87858.510	2.0
395.2419	26.02	-3.53	93392.450	3.0	118686.250	4.0
395.2520	74.00	-.73	14840.984	0.0	40141.299	0.0
395.2540	58.01	.18	2581.041	0.0	27881.228	0.0
395.2604	26.00	-.96	21715.735	5.0	47008.351	5.0
395.2620	77.00	-.75	17663.997	0.0	42963.672	0.0
395.2643	26.01	-2.70	78690.980	2.5	103983.350	3.5
395.2646	25.01	-2.46	55759.270	3.0	81051.620	3.0
395.2647	26.00	-3.28	25899.974	4.0	51192.320	4.0
395.2651	25.00	-2.84	41230.300	3.5	66522.620	4.5
395.2680	44.00	.30	16050.847	0.0	41350.138	0.0
395.2689	6.01	-1.25	195813.660	4.5	221105.730	3.5
395.2697	26.00	-1.42	22946.810	1.0	48238.832	2.0
395.2713	28.00	-2.16	29481.020	4.0	54772.940	3.0
395.2725	18.01	-.81	161048.640	1.5	186340.480	1.5
395.2738	6.00	-4.20	64089.850	1.0	89381.610	0.0
395.2760	90.00	-1.36	3790.903	0.0	29089.682	0.0
395.2770	76.00	-1.08	13953.751	0.0	39252.466	0.0
395.2802	25.00	-1.96	37789.930	2.5	63081.280	2.5
395.2827	27.00	-3.01	23152.570	3.5	48443.760	2.5
395.2840	25.00	-.06	33825.490	2.5	59116.600	2.5
395.2885	24.00	-2.11	35870.530	4.0	61161.350	5.0
395.2889	8.00	-4.76	88630.599	1.0	113921.391	1.0
395.2898	25.01	-2.78	81659.500	3.0	106950.240	3.0
395.2900	74.00	-.20	19115.832	0.0	44413.715	0.0
395.2905	24.00	-2.58	24282.340	4.0	49573.030	4.0
395.2907	28.01	-1.06	105439.850	1.5	130730.530	2.5
395.2910	27.00	-1.35	7442.410	3.5	32733.070	3.5
395.2921	24.00	-2.17	28637.000	3.0	53927.590	4.0
395.2921	26.02	-3.55	179904.560	6.0	205195.150	5.0
395.2977	8.00	-3.18	88631.158	2.0	113921.391	1.0
395.3001	8.00	-4.78	88631.315	0.0	113921.391	1.0
395.3071	14.02	-1.19	214994.650	1.0	240284.280	2.0
395.3080	41.00	-.39	10969.423	0.0	36266.154	0.0
395.3113	24.00	-3.22	31987.060	4.0	57276.420	3.0
395.3155	26.00	-1.75	24338.766	3.0	49627.861	4.0
395.3157	24.00	-.88	24299.890	2.0	49588.970	1.0
395.3160	28.01	-4.55	109675.720	.5	134964.780	1.5
395.3160	74.00	.01	19680.435	0.0	44976.654	0.0
395.3198	22.00	-1.74	16267.510	5.0	41556.330	5.0
395.3370	64.00	-.26	483.945	0.0	25778.820	0.0
395.3382	25.00	-3.56	43428.580	4.5	68716.220	4.5
395.3493	26.00	-3.47	28604.610	2.0	53891.540	3.0
395.3518	27.00	-3.29	30102.960	2.5	55389.730	1.5
395.3520	59.01	-.39	4355.506	0.0	29649.421	0.0
395.3556	28.01	-3.71	106369.300	1.5	131655.830	.5
395.3580	92.01	-.99	4355.506	0.0	29649.037	0.0
395.3590	25.01	-2.39	62572.200	2.0	87858.510	2.0
395.3600	27.00	-2.57	21215.900	.5	46502.150	.5
395.3645	24.01	-3.23	38563.150	4.5	63849.110	5.5
395.3648	25.01	-4.23	43131.400	2.0	68417.340	2.0
395.3660	58.01	-.62	3952.218	0.0	29245.238	0.0
395.3680	57.00	-1.24	1048.548	0.0	26341.440	0.0
395.3761	26.02	-2.05	114339.950	4.0	139625.170	4.0
395.3787	9.00	-1.78	104731.050	1.5	130016.100	2.5
395.3834	26.02	-4.03	198773.950	5.0	224058.700	4.0
395.3859	26.00	-2.21	22838.320	2.0	48122.913	3.0
395.3930	42.00	-.07	20245.038	0.0	45536.330	0.0
395.3944	22.00	-4.06	13981.750	1.0	39265.800	2.0
395.3950	58.01	-.89	4436.164	0.0	29727.329	0.0
395.4003	26.02	.03	201164.210	2.0	226447.880	2.0
395.4108	27.02	-4.66	73540.200	3.5	98823.200	2.5
395.4158	23.01	-3.15	25191.080	2.0	50473.760	1.0
395.4200	28.00	-1.68	33590.159	4.0	58872.570	4.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
395.4200	62.01	-1.93	1451.835	0.0	26741.401	0.0
395.4249	17.01	.05	153257.000	2.0	178539.100	2.0
395.4299	26.02	-2.03	179661.480	3.0	204943.260	2.0
395.4300	14.01	-1.04	101023.310	1.5	126305.080	2.5
395.4303	22.01	-1.57	39602.900	1.5	64884.650	2.5
395.4311	26.02	.88	168329.670	3.0	193611.370	4.0
395.4338	26.02	-2.68	201166.350	3.0	226447.880	2.0
395.4364	8.01	-.36	188888.380	.5	214169.740	.5
395.4382	26.02	.29	168329.670	3.0	193610.920	3.0
395.4430	75.00	-.64	22261.476	0.0	47549.571	0.0
395.4474	25.00	-1.20	35114.980	2.5	60395.640	1.5
395.4504	14.01	-.88	101024.610	2.5	126305.080	3.5
395.4504	14.01	-2.18	101024.610	2.5	126305.080	2.5
395.4521	8.00	-3.77	88630.599	1.0	113910.957	2.0
395.4526	28.00	-.62	29481.020	4.0	54761.346	4.0
395.4565	25.00	-1.34	38008.700	5.5	63288.780	5.5
395.4609	8.00	-3.51	88631.158	2.0	113910.957	2.0
395.4646	24.01	-4.79	39877.280	3.5	65156.840	2.5
395.4705	26.00	-2.79	26351.049	5.0	51630.230	5.0
395.4918	24.00	-2.72	21847.880	2.0	47125.700	3.0
395.4959	24.00	-3.59	21810.840	1.0	47088.400	1.0
395.4962	24.00	-4.13	24093.160	2.0	49370.700	3.0
395.5054	24.00	-.82	35884.400	5.0	61161.350	5.0
395.5087	28.01	-1.13	104147.290	5.5	129424.030	5.5
395.5153	26.02	-.56	168329.670	3.0	193605.990	2.0
395.5170	90.00	-.27	9759.560	0.0	35042.923	0.0
395.5210	26.00	-2.83	24574.655	4.0	49850.610	3.0
395.5222	24.01	-3.55	64061.820	1.5	89337.700	1.5
395.5310	74.00	.07	19519.120	0.0	44801.588	0.0
395.5317	25.00	-2.19	38120.180	4.5	63395.450	3.5
395.5333	26.00	-.79	26479.366	1.0	51754.534	1.0
395.5370	23.00	-3.81	15103.770	4.5	40378.700	4.5
395.5370	76.00	-1.04	15082.956	0.0	40365.041	0.0
395.5418	26.00	-4.46	21038.987	2.0	46313.610	2.0
395.5446	26.00	-4.31	19552.474	1.0	44826.920	0.0
395.5490	42.00	.43	29923.940	0.0	55205.258	0.0
395.5591	28.01	-1.09	105668.780	2.5	130942.300	1.5
395.5591	20.02	-.45	325467.670	2.0	350741.190	3.0
395.5633	26.02	-3.55	114351.920	3.0	139625.170	4.0
395.5671	14.02	-2.81	214989.270	2.0	240262.280	1.0
395.5680	41.00	-1.44	2097.096	0.0	27377.200	0.0
395.5750	63.00	.20	15486.244	0.0	40765.900	0.0
395.5771	26.00	-3.84	20641.110	4.0	45913.480	3.0
395.5784	28.01	-1.06	104147.290	5.5	129419.580	4.5
395.5829	30.02	-3.99	257678.700	2.0	282950.700	2.0
395.5851	7.01	-.78	148940.170	1.0	174212.030	2.0
395.5907	25.01	-2.18	82830.750	4.0	108102.250	3.0
395.5920	58.01	-.89	4436.164	0.0	29714.734	0.0
395.5949	26.00	-1.35	24772.019	1.0	50043.250	1.0
395.5958	9.02	-.98	466190.470	4.5	491461.650	4.5
395.5984	25.01	-3.85	62587.500	3.0	87858.510	2.0
395.5985	28.01	-.91	105439.850	1.5	130710.850	.5
395.5992	25.02	-2.27	193235.430	2.5	218506.390	3.5
395.6018	23.00	-2.42	15264.830	5.5	40535.620	6.5
395.6029	28.01	-3.88	109846.000	3.5	135116.720	2.5
395.6035	9.02	.66	466190.970	3.5	491461.650	4.5
395.6054	24.00	-2.11	31009.000	3.0	56279.560	4.0
395.6060	58.01	-.57	5726.684	0.0	31004.359	0.0
395.6083	24.00	-.24	35807.900	2.0	61078.280	3.0
395.6162	26.02	-.45	201178.010	1.0	226447.880	2.0
395.6176	9.02	.75	466190.470	4.5	491460.250	5.5
395.6259	27.00	-4.10	0.000	4.5	25269.250	3.5
395.6264	28.00	-2.72	31441.665	2.0	56710.889	2.0
395.6280	58.01	-.04	4839.451	0.0	30115.721	0.0
395.6285	24.00	-1.76	24303.940	3.0	49573.030	4.0
395.6335	22.00	-.48	170.132	3.0	25438.898	2.0
395.6336	24.00	-2.83	21856.940	3.0	47125.700	3.0
395.6457	26.00	-.51	26105.908	6.0	51373.894	5.0
395.6458	9.02	-3.23	441276.720	2.5	466544.700	1.5
395.6490	23.00	-4.41	9824.580	2.5	35092.360	1.5
395.6513	14.02	-1.72	214994.650	1.0	240262.280	1.0
395.6528	7.00	-3.51	94881.790	3.5	120149.325	4.5
395.6568	6.00	-1.50	72610.720	2.0	97878.000	2.0
395.6570	73.00	-1.45	9920.875	0.0	35195.292	0.0
395.6590	90.01	-.55	10082.190	0.0	35356.479	0.0
395.6627	11.02	-3.83	443261.600	.5	468528.500	1.5
395.6637	26.01	-3.74	61332.820	1.5	86599.660	2.5
395.6640	14.02	-1.51	214995.460	0.0	240262.280	1.0
395.6669	16.01	-.66	133399.820	1.5	158666.450	1.5
395.6680	26.00	-.48	21715.735	5.0	46982.302	6.0
395.6710	26.02	-2.12	179676.890	2.0	204943.260	2.0
395.6735	28.01	-1.20	105499.050	3.5	130765.260	3.5
395.6743	27.00	-3.52	25937.590	4.5	51203.750	5.5
395.6861	28.01	-4.56	96052.480	2.5	121317.890	3.5
395.6923	9.01	-3.55	240092.550	2.0	265357.560	1.0
395.6959	26.02	-4.33	198773.950	5.0	224038.730	5.0
395.6995	24.00	-1.45	35813.730	3.0	61078.280	3.0
395.7009	26.00	-.32	26339.682	2.0	51604.146	3.0
395.7013	25.00	-3.20	43428.580	4.5	68693.020	5.5
395.7054	20.00	-1.40	15210.063	1.0	40474.241	1.0
395.7088	21.01	-1.59	32349.980	3.0	57613.940	2.0
395.7129	18.00	-4.60	93143.800	2.0	118407.494	1.0
395.7150	58.01	-1.47	2581.041	0.0	27851.754	0.0
395.7152	23.00	-2.29	17054.870	2.5	42318.420	1.5
395.7175	17.01	-2.17	161634.900	2.0	186898.300	3.0
395.7210	6.00	-3.49	64086.920	3.0	89350.100	2.0
395.7273	22.00	-2.34	16106.080	4.0	41368.860	4.0
395.7292	26.00	-3.70	20874.482	3.0	46137.140	3.0
395.7299	18.01	-2.99	183985.940	1.5	209248.550	2.5
395.7352	18.01	-2.71	179931.770	1.5	205194.040	1.5
395.7396	27.00	-4.43	25937.590	4.5	51199.580	3.5
395.7450	44.00	-1.41	9517.587	0.0	34786.384	0.0
395.7575	25.02	-4.22	109780.400	2.5	135041.250	1.5
395.7599	27.00	-1.17	29216.370	2.5	54477.070	3.5
395.7615	26.00	-2.03	26479.366	1.0	51739.964	2.0
395.7649	24.00	-2.37	35862.820	4.0	61123.200	4.0
395.7657	26.01	-6.10	18360.650	1.5	43620.980	1.5
395.7658	26.02	-2.50	179682.940	1.0	204943.260	2.0
395.7669	6.00	-4.77	64089.850	1.0	89350.100	2.0
395.7670	64.01	-.22	4758.794	0.0	30026.186	0.0
395.7771	27.02	-4.37	73286.000	4.5	98545.600	3.5
395.7771	24.00	-3.89	27703.840	4.0	52963.440	4.0
395.7782	27.00	-3.49	23184.230	2.5	48443.760	2.5
395.7815	26.01	-4.25	61156.900	3.5	86416.220	3.5
395.7841	6.00	-3.80	64090.950	2.0	89350.100	2.0
395.7931	27.00	-2.02	4690.180	2.5	29948.760	2.5
395.7950	28.01	-.11	105499.050	3.5	130757.510	4.5
395.7959	28.01	-4.16	74300.930	1.5	99559.330	2.5
395.7970	58.01	-.56	7178.519	0.0	32443.996	0.0
395.8000	60.01	-1.23	483.945	0.0	25749.230	0.0
395.8040	10.01	-2.96	254165.010	1.5	279424.890	.5
395.8081	24.00	-.31	35934.020	6.0	61191.640	6.0
395.8100	69.01	-1.49	0.000	0.0	25264.647	0.0
395.8206	22.00	-.09	386.874	4.0	25643.695	3.0
395.8220	40.01	-.43	4194.191	0.0	29458.072	0.0
395.8240	45.00	-.66	13873.093	0.0	39136.847	0.0
395.8254	18.01	-2.90	189654.780	2.5	214911.300	2.5
395.8270	58.01	-.57	5726.684	0.0	30990.246	0.0
395.8285	23.00	-4.13	15724.220	3.5	40980.540	4.5
395.8378	18.01	-1.80	158730.210	2.5	183985.940	1.5
395.8379	24.00	-1.07	24282.340	4.0	49538.060	5.0
395.8401	26.01	-6.85	21711.890	3.5	46967.470	2.5
395.8529	25.01	-2.16	82917.780	2.0	108172.540	1.0
395.8542	26.02	-3.91	205002.470	3.0	230257.150	2.0
395.8544	29.01	-1.26	123304.630	1.0	148559.300	2.0
395.8578	28.01	-3.13	109846.000	3.5	135100.450	3.5
395.8580	27.00	-2.34	29735.180	3.5	54989.620	3.5
395.8594	25.00	-4.44	38120.180	4.5	63374.530	4.5
395.8595	28.00	-2.91	30619.440	2.0	55873.780	2.0
395.8600	42.00	-.17	23955.283	0.0	49216.739	0.0
395.8640	46.00	-.58	11614.683	0.0	36875.884	0.0
395.8656	22.00	-3.83	18825.890	1.0	44079.840	2.0
395.8680	64.00	-1.07	0.000	0.0	25260.946	0.0
395.8720	62.01	-1.79	2661.698	0.0	27922.388	0.0
395.8857	25.01	-3.80	82917.780	2.0	108170.450	2.0
395.8857	24.00	-.98	35870.530	4.0	61123.200	4.0
395.8860	45.00	.19	7743.122	0.0	33002.919	0.0
395.8880	74.00	-1.09	13711.778	0.0	38971.447	0.0
395.8881	18.01	-4.00	189414.960	3.5	214667.480	2.5
395.9008	21.01	-3.74	39114.440	1.0	64366.150	2.0
395.9040	28.01	-1.90	105439.850	1.5	130691.350	1.5
395.9093	18.01	-3.30	161089.310	.5	186340.480	1.5
395.9095	28.01	-.77	106369.300	1.5	131620.450	1.5
395.9119	24.00	-1.33	29420.900	1.0	54671.900	1.0
395.9158	23.00	-5.31	2220.130	2.5	27470.880	3.5
395.9167	26.01	-4.09	38214.500	1.5	63465.190	1.5
395.9186	25.00	-2.47	37420.240	5.5	62670.810	4.5
395.9300	90.00	-.80	5484.711	0.0	30741.701	0.0
395.9338	26.02	-3.27	204943.260	2.0	230192.860	3.0
395.9348	25.01	-3.59	81713.020	0.0	106962.560	1.0
395.9360	41.00	-.31	12905.203	0.0	38161.810	0.0
395.9415	22.00	-5.90	6556.828	1.0	31805.940	2.0
395.9440	64.01	-.41	4758.794	0.0	30014.891	0.0
395.9449	26.00	-4.17	25899.974	4.0	51148.870	3.0
395.9472	28.01	-.46	104147.290	5.5	129396.040	5.5
395.9615	18.01	-3.78	183675.570	3.5	208923.410	2.5
395.9620	58.01	-.86	4113.534	0.0	29368.483	0.0
395.9655	22.00	-2.31	16267.510	5.0	41515.090	4.0
395.9778	19.01	-1.18	189772.000	0.0	215018.800	1.0
395.9800	58.01	-.87	4678.136	0.0	29931.937	0.0
395.9961	18.01	-1.35	186340.480	1.5	211586.110	2.5
396.0069	27.00	-1.28	29269.730	4.5	54514.670	3.5
396.0110	64.00	.02	6936.547	0.0	32188.371	0.0
396.0140	26.02	-2.68	179757.980	4.0	205002.470	3.0
396.0192	25.00	-3.00	37148.660	5.5	62392.820	4.5
396.0284	26.00	-1.09	29356.780	2.0	54600.350	3.0
396.0297	24.00	-2.75	24940.610	2.0	50184.100	2.0
396.0299	28.00	-2.06	31031.042	3.0	56274.516	2.0
396.0300	23.00	-2.11	14910.040	3.5	40153.510	2.5
396.0330	90.01	-.93	13147.176	0.0	38397.597	0.0
396.0364	23.01	-2.81	26839.820	3.0	52082.880	4.0
396.0377	26.02	-3.53	179759.490	2.0	205002.470	3.0
396.0380	58.01	-.91	5887.999	0.0	31138.101	0.0
396.0434	18.02	-1.91	213950.870	2.0	239193.480	1.0
396.0464	10.01	-3.30	281998.280	2.5	307240.700	3.5
396.0510	76.00	.30	24116.599	0.0	49365.872	0.0
396.0568	28.01	-4.60	113321.950	4.5	138563.710	3.5
396.0570	26.02	-2.45	179760.720	3.0	205002.470	3.0
396.0763	24.00	-3.38	21847.880	2.0	47088.400	1.0
396.0797	24.01	-4.61	39684.000	3.5	64924.300	3.5
396.0898	26.01	-1.60	58631.650	4.5	83871.310	4.5
396.0910	58.01	-.43	2581.041	0.0	27827.765	0.0
396.0929	24.00	-3.89	31352.420	1.0	56591.880	2.0
396.0980	41.00	-.61	12905.203	0.0	38151.480	0.0
396.0993	27.00	-3.97	21215.900	.5	46454.950	1.5
396.1020	76.00	-.44	14760.326	0.0	40006.348	0.0
396.1033	24.00	-.24	35884.400	5.0	61123.200	4.0
396.1040	75.00	-.78	13711.778	0.0	38957.673	0.0
396.1139	28.00	-4.73	29013.228	2.0	54251.353	3.0
396.1141	26.00	-2.02	23051.744	0.0	48289.852	1.0
396.1158	22.01	-4.30	40074.710	3.5	65312.710	2.5
396.1237	30.02	-3.03	258277.700	3.0	283515.200	3.0
396.1237	30.02	-3.77	258277.700	3.0	283515.200	2.0
396.1256	24.00	-4.58	24282.340	4.0	49519.720	3.0
396.1263	22.00	-4.24	14028.470	2.0	39265.800	2.0
396.1364	27.00	-3.83	25937.590	4.5	51174.280	5.5
396.1367	24.00	-3.60	31355.210	2.0	56591.880	2.0
396.1373	24.00	-3.33	21810.840	1.0	47047.470	2.0
396.1397	26.01	-2.52	60887.660	5.5	86124.140	4.5
396.1403	6.00	-2.14	61981.820	1.0	87218.260	2.0
396.1425	24.02	-2.63	128849.400	4.0	154085.700	3.0
396.1439	10.01	-.49	313457.570	3.5	338693.780	4.5
396.1450	10.01	-4.02	313457.540	2.5	338693.680	3.5
396.1455	10.01	-2.15	313457.570	3.5	338693.680	3.5
396.1472	27.00	-3.14	23207.760	1.5	48443.760	2.5
396.1511	28.01	-2.63	68154.310	1.5	93390.060	2.5
396.1520	13.00	-.45	112.061	1.5	25347.756	.5
396.1555	25.02	-4.63	89052.440	3.5	114287.910	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
396.1558	16.02	-.81	147550.320	1.0	172785.770	1.0
396.1566	8.02	.36	306584.800	2.0	331820.200	3.0
396.1631	25.02	-2.21	192880.160	3.5	218115.150	3.5
396.1639	25.01	-3.58	81732.000	1.0	106966.940	2.0
396.1717	25.01	-1.99	82936.010	3.0	108170.450	2.0
396.1723	27.01	-4.24	25147.200	4.0	50381.600	3.0
396.1797	24.00	-1.22	29584.620	2.0	54818.550	2.0
396.1858	25.01	-3.50	82939.000	1.0	108172.540	1.0
396.1974	16.00	-2.11	52622.690	2.0	77855.496	3.0
396.1984	22.01	-4.62	40074.710	3.5	65307.450	4.5
396.2004	25.02	-3.66	192948.290	1.5	218180.900	1.5
396.2014	27.00	-3.59	25937.590	4.5	51170.140	4.5
396.2090	58.01	-.49	7743.122	0.0	32982.327	0.0
396.2091	25.00	-3.32	38351.780	.5	63583.840	1.5
396.2119	28.00	-.79	31031.042	3.0	56262.920	3.0
396.2121	28.01	-3.92	105668.780	2.5	130900.650	2.5
396.2130	10.01	.76	313461.970	4.5	338693.780	4.5
396.2133	18.01	-2.04	186340.480	1.5	211572.270	1.5
396.2133	10.01	1.59	313461.990	5.5	338693.780	4.5
396.2142	28.00	-1.28	29500.690	1.0	54732.425	2.0
396.2146	10.01	-.12	313461.970	4.5	338693.680	3.5
396.2174	9.02	-.60	441406.460	3.5	466637.990	4.5
396.2182	28.01	-1.66	105499.050	3.5	130730.530	2.5
396.2187	25.01	-3.15	82939.000	1.0	108170.450	2.0
396.2234	25.02	-3.61	192576.420	2.5	217807.570	1.5
396.2240	62.01	-1.82	3468.273	0.0	28706.522	0.0
396.2322	25.00	-1.55	35165.050	1.5	60395.640	1.5
396.2326	25.01	-3.39	81732.000	1.0	106962.560	1.0
396.2330	74.00	-.64	16857.422	0.0	42095.098	0.0
396.2336	17.02	-3.18	217850.200	2.5	243080.700	1.5
396.2339	26.00	-4.53	26339.682	2.0	51570.160	3.0
396.2377	26.02	-2.27	179676.890	2.0	204907.130	1.0
396.2411	26.00	-3.95	26140.164	3.0	51370.184	2.0
396.2420	90.00	-1.33	3629.588	0.0	28866.691	0.0
396.2424	24.00	-4.07	35398.020	4.0	60627.960	4.0
396.2450	59.01	-1.00	1693.808	0.0	26930.720	0.0
396.2478	16.00	-2.28	52622.690	2.0	77852.284	2.0
396.2480	75.00	-.38	16212.162	0.0	41448.882	0.0
396.2534	27.00	-4.16	29216.370	2.5	54445.610	2.5
396.2587	9.02	-.64	441315.800	.5	466544.700	1.5
396.2651	26.00	-2.52	29371.860	3.0	54600.350	3.0
396.2771	25.00	-2.02	38120.180	4.5	63347.910	4.5
396.2780	77.00	-1.44	12098.628	0.0	37333.438	0.0
396.2790	92.01	-1.16	4678.136	0.0	29912.882	0.0
396.2799	24.00	-3.49	31364.330	3.0	56591.880	2.0
396.2834	24.00	-.22	35934.020	6.0	61161.350	5.0
396.2851	22.00	-1.03	0.000	2.0	25227.217	3.0
396.2858	26.00	-4.88	26339.682	2.0	51566.860	1.0
396.2870	16.00	-2.50	52622.690	2.0	77849.790	1.0
396.2882	28.01	-2.01	105588.890	4.5	130815.910	3.5
396.2886	28.01	-4.86	75917.630	3.5	101144.630	3.5
396.3027	17.01	-2.93	161634.900	2.0	186861.000	2.0
396.3092	26.00	-.54	26479.366	1.0	51705.052	2.0
396.3120	16.01	-.53	127976.210	1.5	153201.720	1.5
396.3120	60.01	-.47	3710.246	0.0	28942.891	0.0
396.3153	24.00	-1.67	29420.900	1.0	54646.200	0.0
396.3270	75.00	-1.11	16534.792	0.0	41766.482	0.0
396.3291	25.01	-4.15	81732.000	1.0	106956.420	0.0
396.3324	24.00	-4.47	31055.350	5.0	56279.560	4.0
396.3327	26.02	-2.15	179682.940	1.0	204907.130	1.0
396.3349	22.00	-3.71	8436.618	0.0	33660.671	1.0
396.3362	25.00	-1.90	41230.300	3.5	66454.270	3.5
396.3370	58.01	-1.04	4839.451	0.0	30070.504	0.0
396.3396	24.00	-2.70	24833.860	3.0	50057.610	2.0
396.3467	30.02	-1.66	238336.200	2.0	263559.500	1.0
396.3467	30.02	-.51	238336.200	2.0	263559.500	1.0
396.3476	22.00	-3.72	16961.420	3.0	42184.660	4.0
396.3530	42.00	-.05	26455.667	0.0	51685.702	0.0
396.3610	63.00	-.06	15808.874	0.0	41038.400	0.0
396.3630	76.00	-1.05	4113.534	0.0	29342.932	0.0
396.3688	24.00	.68	20519.600	6.0	45741.490	7.0
396.3726	9.02	-2.35	441315.800	.5	466537.450	.5
396.3740	23.00	-.97	15078.250	.5	40299.810	.5
396.3800	40.00	.07	16212.162	0.0	41440.478	0.0
396.3823	10.01	-.52	313457.540	2.5	338678.570	3.5
396.3828	10.01	.79	313457.570	3.5	338678.570	3.5
396.3852	25.00	-2.77	37630.620	4.5	62851.470	3.5
396.3888	28.01	.08	104147.290	5.5	129367.910	6.5
396.3899	25.02	-2.26	193756.790	4.5	218977.340	3.5
396.3962	27.00	-2.91	29294.520	3.5	54514.670	3.5
396.3974	24.00	-3.36	29584.620	2.0	54804.690	1.0
396.3990	42.00	-.05	26455.667	0.0	51682.774	0.0
396.4012	24.00	-1.73	24299.890	2.0	49519.720	3.0
396.4017	24.02	-3.65	71166.100	2.0	96385.900	2.0
396.4084	10.01	-.38	318828.550	2.5	344047.920	3.5
396.4084	10.01	.86	318828.550	3.5	344047.920	3.5
396.4160	29.00	-1.70	45894.129	0.0	71120.154	0.0
396.4169	28.00	-1.38	29481.020	4.0	54699.852	3.0
396.4169	22.00	-2.40	15975.590	3.0	41194.420	3.0
396.4220	92.00	.19	6210.629	0.0	31436.272	0.0
396.4260	59.01	-.93	1693.808	0.0	26919.197	0.0
396.4268	22.00	-1.04	170.132	3.0	25388.334	4.0
396.4328	24.00	-3.00	35398.020	4.0	60615.840	3.0
396.4347	26.02	-.73	201164.210	2.0	226381.910	3.0
396.4347	24.00	-3.13	24093.160	2.0	49310.860	3.0
396.4350	24.01	-4.75	21822.860	2.5	47040.540	2.5
396.4404	26.02	-4.44	198821.390	6.0	224038.730	5.0
396.4430	29.01	-.88	123304.630	1.0	148521.800	1.0
396.4470	24.00	-4.21	20517.400	2.0	45734.320	2.0
396.4473	25.03	-2.41	152858.200	3.0	178075.100	3.0
396.4477	28.01	-.86	104081.040	4.5	129297.910	3.5
396.4477	27.00	-2.42	29948.760	2.5	55165.630	2.5
396.4500	58.01	-.73	2581.041	0.0	27804.903	0.0
396.4517	26.00	-1.46	22946.810	1.0	48163.427	2.0
396.4520	10.01	1.46	313461.970	4.5	338678.570	3.5
396.4564	26.01	-4.62	22409.820	.5	47626.140	.5
396.4624	29.01	-3.09	116326.160	3.0	141542.100	2.0
396.4649	24.00	-2.34	24303.940	3.0	49519.720	3.0
396.4654	23.00	-8.55	14910.040	3.5	40125.790	3.5
396.4658	24.01	-5.63	21824.820	1.5	47040.540	2.5
396.4660	41.00	-1.05	9356.272	0.0	34579.116	0.0
396.4683	26.02	.24	201166.350	3.0	226381.910	3.0
396.4730	2.00	-1.30	166278.000	0.0	191500.398	0.0
396.4810	75.00	-.57	23793.968	0.0	49015.858	0.0
396.4825	24.00	-3.23	25038.610	5.0	50253.270	5.0
396.4830	59.01	-.64	403.288	0.0	25625.050	0.0
396.4855	25.01	-3.65	53698.700	2.0	78913.170	2.0
396.4858	28.01	-4.33	70358.940	4.5	95573.390	3.5
396.4900	44.00	-1.51	0.000	0.0	25221.317	0.0
396.4900	63.01	-1.41	10243.505	0.0	35464.822	0.0
396.4950	72.01	-.44	17744.654	0.0	42965.653	0.0
396.4960	76.00	-2.22	2661.698	0.0	27882.633	0.0
396.4989	22.00	-2.58	16267.510	5.0	41481.130	5.0
396.4990	74.00	-1.96	6129.972	0.0	31350.717	0.0
396.4995	10.01	-.86	313480.200	3.5	338693.780	4.5
396.4996	27.00	-4.83	8460.810	2.5	33674.380	2.5
396.5001	10.01	.05	313480.240	4.5	338693.780	4.5
396.5010	10.01	.69	313480.200	3.5	338693.680	3.5
396.5017	10.01	1.49	313480.240	4.5	338693.680	3.5
396.5023	24.00	-4.52	20520.920	3.0	45734.320	2.0
396.5040	64.00	-.34	7178.519	0.0	32398.946	0.0
396.5119	26.02	-.08	201293.750	2.0	226506.540	1.0
396.5140	74.00	.32	22342.133	0.0	47561.923	0.0
396.5174	28.01	-.57	105588.890	4.5	130801.330	4.5
396.5193	12.00	-2.41	35051.264	1.0	60263.583	2.0
396.5215	6.00	-3.04	64086.920	3.0	89299.100	3.0
396.5229	27.00	-6.25	7442.410	3.5	32654.500	2.5
396.5260	59.01	-.64	1613.150	0.0	26832.177	0.0
396.5275	13.01	-2.59	121365.200	0.0	146577.000	1.0
396.5287	27.00	-4.07	29735.180	3.5	54946.900	2.5
396.5391	23.00	-2.84	15103.770	4.5	40314.830	3.5
396.5415	24.00	-1.34	21810.840	1.0	47021.750	1.0
396.5504	26.00	-1.27	26140.164	3.0	51350.505	4.0
396.5515	27.00	-2.16	29216.370	2.5	54426.640	1.5
396.5586	23.00	-3.69	15770.720	4.5	40980.540	4.5
396.5618	22.01	-4.12	43740.770	3.5	68950.390	3.5
396.5652	17.01	-4.12	161634.900	2.0	186844.300	1.0
396.5681	23.00	-.94	14910.040	3.5	40119.260	2.5
396.5690	41.00	-.60	5887.999	0.0	31104.292	0.0
396.5760	42.00	-1.03	16534.792	0.0	41750.640	0.0
396.5824	24.00	-4.38	35572.940	2.0	60781.250	2.0
396.5831	26.00	-2.33	19552.474	1.0	44760.739	1.0
396.5849	6.00	-3.95	64090.950	2.0	89299.100	3.0
396.5863	24.01	-3.69	64061.820	1.5	89269.880	.5
396.5912	24.00	-.21	35870.530	4.0	61078.280	3.0
396.5967	28.01	-4.77	94705.930	3.5	119913.330	4.5
396.5968	26.01	-3.48	59663.450	1.5	84870.840	2.5
396.5976	27.00	-1.06	29269.730	4.5	54477.070	3.5
396.6000	22.00	-4.89	6598.749	2.0	31805.940	2.0
396.6002	25.02	-4.61	193498.070	3.5	218705.250	2.5
396.6040	62.01	-1.16	1935.780	0.0	27149.847	0.0
396.6064	26.00	-1.55	12968.552	2.0	38175.332	3.0
396.6090	41.00	.72	12017.970	0.0	37231.720	0.0
396.6090	77.00	-1.29	12824.546	0.0	38038.296	0.0
396.6123	26.01	-3.20	36126.410	1.5	61332.820	1.5
396.6143	9.00	-3.18	104731.050	1.5	129937.330	1.5
396.6156	17.01	-2.43	161654.800	1.0	186861.000	2.0
396.6176	10.01	.73	318841.850	3.5	344047.920	3.5
396.6183	10.01	.09	318841.890	4.5	344047.920	3.5
396.6184	24.00	-9.50	0.000	3.0	25206.020	3.0
396.6280	64.00	-.12	1693.808	0.0	26906.350	0.0
396.6340	62.01	-1.71	4355.506	0.0	29567.666	0.0
396.6343	28.01	-.50	104298.230	4.5	129503.240	4.5
396.6352	26.01	-3.15	58666.360	3.5	83871.310	4.5
396.6360	78.00	-1.27	10001.532	0.0	35213.565	0.0
396.6368	9.01	-3.78	240152.710	1.0	265357.560	1.0
396.6400	92.01	-1.34	2258.411	0.0	27470.190	0.0
396.6423	27.00	-3.34	16778.160	2.5	41982.660	1.5
396.6425	24.00	-2.88	24897.550	4.0	50102.040	3.0
396.6428	26.01	-6.87	13904.870	.5	39109.340	.5
396.6491	26.00	-.82	26550.466	0.0	51754.534	1.0
396.6540	26.00	-1.94	28604.610	2.0	53808.370	1.0
396.6570	59.01	-.78	2984.328	0.0	28195.026	0.0
396.6617	26.00	-4.19	22249.430	3.0	47452.702	4.0
396.6618	26.00	.05	25899.974	4.0	51103.237	5.0
396.6640	28.01	-4.89	109038.840	1.5	134241.960	.5
396.6648	26.02	-4.12	89907.850	4.0	115110.920	4.0
396.6648	26.02	-4.54	89907.850	5.0	115110.920	4.0
396.6660	40.00	-.98	1209.863	0.0	26419.989	0.0
396.6661	26.00	-2.95	33507.102	3.0	58710.090	3.0
396.6675	26.01	-3.26	73091.700	4.5	98294.600	5.5
396.6694	26.00	-4.78	29356.780	2.0	54559.560	3.0
396.6812	26.00	-2.12	26623.726	2.0	51825.758	3.0
396.6880	25.00	-3.45	37586.030	1.5	62787.630	1.5
396.6889	18.01	-2.20	173393.380	2.5	198594.920	3.5
396.7004	24.00	-3.28	31009.000	3.0	56209.810	3.0
396.7037	24.00	-3.52	21847.880	2.0	47048.480	3.0
396.7050	58.01	-.43	2581.041	0.0	27788.689	0.0
396.7118	26.00	-3.97	26339.682	2.0	51539.770	2.0
396.7135	24.00	-2.31	24277.060	0.0	49477.040	1.0
396.7180	58.01	-.79	5404.054	0.0	30610.876	0.0
396.7180	63.00	-.12	13953.751	0.0	39160.573	0.0
396.7196	24.00	-3.46	21847.880	2.0	47047.470	2.0
396.7294	26.02	-4.94	179893.560	5.0	205092.530	4.0
396.7305	18.01	-1.67	186470.280	1.5	211669.180	2.5
396.7311	9.02	-2.85	466196.700	3.5	491395.560	4.5
396.7388	28.00	-6.60	2216.519	2.0	27414.893	2.0
396.7389	10.01	-.09	313480.200	3.5	338678.570	3.5
396.7390	75.00	-.37	22019.503	0.0	47224.991	0.0
396.7395	10.01	-.64	313480.240	4.5	338678.570	3.5
396.7423	26.00	-.54	26627.612	4.0	51825.758	3.0
396.7451	24.00	-2.69	21856.940	3.0	47054.910	4.0
396.7517	24.01	-3.33	38509.070	3.5	63706.620	4.5
396.7530	58.01	-.40	9678.902	0.0	34883.500	0.0
396.7611	9.02	-4.78	466295.150	1.5	491492.100	2.5
396.7680	62.01	-.87	5242.739	0.0	30446.384	0.0
396.7791	28.01	-.76	104646.520	3.5	129842.330	2.5
396.7946	22.00	-4.32	15108.121	3.0	40302.950	3.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
396.7954	26.00	-3.99	26140.164	3.0	51334.940	4.0
396.8010	72.00	-2.15	0.000	0.0	25201.549	0.0
396.8046	25.01	-3.07	43850.420	2.0	69044.610	2.0
396.8083	25.02	-3.30	89307.220	5.5	114501.180	4.5
396.8084	28.01	-.92	105838.060	3.5	131032.010	2.5
396.8103	23.01	-1.32	11295.510	0.0	36489.340	1.0
396.8106	26.00	-3.92	28819.966	5.0	54013.780	5.0
396.8260	40.00	-.67	1209.863	0.0	26409.825	0.0
396.8260	64.01	-.97	1129.205	0.0	26329.167	0.0
396.8363	18.01	-1.39	132481.140	2.5	157673.320	2.5
396.8369	25.00	-3.37	43524.080	3.5	68716.220	4.5
396.8371	26.00	-4.15	20641.110	4.0	45833.240	4.0
396.8420	66.01	.06	0.000	0.0	25198.946	0.0
396.8439	2.01	-.97	411477.918	0.0	436676.743	0.0
396.8460	71.00	-1.87	0.000	0.0	25198.692	0.0
396.8468	20.01	-.15	0.000	.5	25191.510	.5
396.8469	24.01	-3.85	40228.440	5.5	65419.950	5.5
396.8561	26.00	-4.16	26140.164	3.0	51331.090	2.0
396.8580	27.00	-4.80	1406.840	2.5	26597.640	1.5
396.8590	23.00	-3.28	17054.870	2.5	42245.610	3.5
396.8590	74.00	-.18	19115.832	0.0	44313.698	0.0
396.8591	27.00	-2.24	16778.160	2.5	41968.890	2.5
396.8599	28.01	-4.89	104081.040	4.5	129271.720	3.5
396.8623	24.00	-4.82	21856.940	3.0	47047.470	2.0
396.8628	24.00	-2.47	24286.540	1.0	49477.040	1.0
396.8628	24.00	-2.97	24286.540	1.0	49477.040	2.0
396.8645	26.02	-2.79	205002.470	3.0	230192.860	3.0
396.8648	28.01	-2.51	103663.500	1.5	128853.870	2.5
396.8684	9.02	-4.19	466301.960	2.5	491492.100	3.5
396.8718	26.02	.59	168420.990	2.0	193610.920	3.0
396.8750	42.00	-.11	21454.900	0.0	46651.750	0.0
396.8785	17.01	-2.92	161654.800	1.0	186844.300	1.0
396.9000	64.00	-.20	161.315	0.0	25356.578	0.0
396.9000	90.01	-2.55	0.000	0.0	25195.263	0.0
396.9022	30.02	-2.34	237047.800	2.0	262235.800	3.0
396.9059	24.00	-.63	20519.600	6.0	45707.360	6.0
396.9093	23.00	-4.95	15264.830	5.5	40452.380	5.5
396.9110	27.00	-1.21	20500.710	1.5	45688.150	2.5
396.9137	24.00	-.76	33934.880	3.0	59122.150	3.0
396.9174	25.02	-3.13	192880.160	3.5	218067.190	2.5
396.9194	28.00	-1.71	29481.020	4.0	54667.928	4.0
396.9200	74.00	-.30	19680.435	0.0	44874.429	0.0
396.9211	19.02	-1.55	212725.400	1.5	237912.200	1.5
396.9258	24.00	-1.56	33935.650	2.0	59122.150	3.0
396.9260	26.00	-.36	11976.239	4.0	37162.729	3.0
396.9260	38.00	-.59	14437.696	0.0	39631.309	0.0
396.9290	64.01	-.87	4758.794	0.0	29952.217	0.0
396.9299	25.01	-3.48	81780.700	3.0	106966.940	2.0
396.9345	18.01	-2.55	186890.950	2.5	212076.900	2.5
396.9376	26.01	-4.69	13673.210	1.5	38858.960	2.5
396.9398	26.01	-3.97	13474.430	2.5	38660.040	3.5
396.9436	25.01	-3.74	43311.000	1.0	68496.370	1.0
396.9494	26.02	.38	168420.990	2.0	193605.990	2.0
396.9507	6.01	-1.05	196557.870	.5	221742.790	.5
396.9522	28.00	-1.41	28569.210	2.0	53754.036	2.0
396.9578	25.01	-4.42	82917.780	2.0	108102.250	3.0
396.9618	26.00	-1.68	26224.961	3.0	51409.180	4.0
396.9638	26.02	-2.10	114325.350	5.0	139509.440	5.0
396.9670	76.00	-.58	14760.326	0.0	39951.337	0.0
396.9688	26.02	-2.77	179759.490	2.0	204943.260	2.0
396.9743	24.00	.50	20523.940	5.0	45707.360	6.0
396.9790	44.00	-1.36	10566.135	0.0	35756.384	0.0
396.9881	27.00	-1.76	29294.520	3.5	54477.070	3.5
396.9882	26.02	-2.77	179760.720	3.0	204943.260	2.0
396.9947	25.00	-3.45	37586.030	1.5	62768.160	.5
397.0030	30.02	-4.25	257796.000	5.0	282977.600	4.0
397.0038	24.00	-1.24	27703.840	4.0	52885.390	5.0
397.0040	38.00	-.90	14437.696	0.0	39626.359	0.0
397.0040	58.01	-.01	11614.683	0.0	36803.346	0.0
397.0049	24.00	-2.10	31028.330	2.0	56209.810	3.0
397.0100	73.00	-2.18	0.000	0.0	25188.282	0.0
397.0149	18.01	-1.25	186890.950	2.5	212071.800	3.5
397.0162	22.00	-3.02	21469.494	3.0	46650.260	3.0
397.0212	16.01	-2.32	128233.070	2.5	153413.520	3.5
397.0221	28.01	-4.72	92792.080	3.5	117972.470	3.5
397.0246	24.00	-2.41	24286.540	1.0	49466.770	2.0
397.0251	26.01	-2.72	54063.530	.5	79243.730	1.5
397.0273	27.00	-3.41	30102.960	2.5	55283.020	2.5
397.0275	25.01	-2.70	44138.960	1.0	69319.010	0.0
397.0381	6.01	-1.05	196563.410	1.5	221742.790	.5
397.0385	24.00	-4.69	33113.270	4.0	58292.620	4.0
397.0387	26.00	-.99	24772.019	1.0	49951.360	0.0
397.0393	25.02	-2.65	192948.290	1.5	218127.590	.5
397.0420	58.01	-.71	9517.587	0.0	34703.839	0.0
397.0480	26.02	-.21	168420.990	2.0	193599.740	1.0
397.0481	28.00	-.07	29481.020	4.0	54659.759	5.0
397.0530	62.01	-1.33	0.000	0.0	25185.555	0.0
397.0545	9.01	-4.25	240179.220	0.0	265357.560	1.0
397.0640	58.01	-1.09	2581.041	0.0	27765.898	0.0
397.0650	41.00	-1.64	2097.096	0.0	27281.889	0.0
397.0672	22.00	-2.51	16875.190	2.0	42052.720	3.0
397.0681	20.00	-1.20	23652.304	1.0	48829.780	2.0
397.0685	16.01	-.92	127976.210	1.5	153153.660	.5
397.0695	18.01	-3.49	189654.780	2.5	214832.170	3.5
397.0698	16.01	-2.88	130641.000	1.5	155818.370	2.5
397.0732	24.00	-3.29	24299.890	2.0	49477.040	1.0
397.0732	24.00	-2.41	24299.890	2.0	49477.040	2.0
397.0743	25.00	-3.40	34423.270	3.5	59600.350	2.5
397.0836	23.00	-3.86	14949.300	4.5	40125.790	3.5
397.0855	28.01	-1.29	105588.890	4.5	130765.260	3.5
397.0907	28.01	-1.64	104298.230	4.5	129474.270	3.5
397.0915	28.00	-2.48	28578.046	3.0	53754.036	2.0
397.0956	28.01	-1.39	106620.530	3.5	131796.260	2.5
397.0980	26.00	-2.25	33095.922	4.0	58271.500	5.0
397.1021	28.01	-4.75	96052.480	2.5	121227.800	2.5
397.1060	64.01	-1.15	4758.794	0.0	29940.987	0.0
397.1131	26.02	.32	201207.290	4.0	226381.910	3.0
397.1160	59.01	-.78	3387.616	0.0	28569.175	0.0
397.1229	30.02	-3.05	260418.100	2.0	285592.100	2.0
397.1249	24.00	-.57	21847.880	2.0	47021.750	1.0
397.1290	26.02	-2.56	93512.640	4.0	118686.250	4.0
397.1325	26.00	-.98	21715.735	5.0	46889.126	4.0
397.1339	17.01	-2.76	161671.000	0.0	186844.300	1.0
397.1359	9.01	-1.62	229550.110	2.0	254723.280	1.0
397.1371	24.00	-1.48	24303.940	3.0	49477.040	2.0
397.1400	62.01	-.60	3468.273	0.0	28648.310	0.0
397.1434	30.02	.60	235623.900	3.0	260796.600	3.0
397.1434	30.02	-.56	235623.900	3.0	260796.600	3.0
397.1480	24.01	-2.98	64448.840	2.5	89621.250	3.5
397.1503	24.00	-3.81	25038.610	5.0	50210.870	4.0
397.1572	6.01	-1.05	196557.870	.5	221729.690	1.5
397.1608	24.00	-2.28	24282.340	4.0	49453.940	4.0
397.1620	22.00	-4.41	6742.757	4.0	31914.277	5.0
397.1625	9.01	-.44	229551.790	1.0	254723.280	1.0
397.1680	58.01	-.50	3952.218	0.0	29130.480	0.0
397.1731	28.01	-.70	105861.190	2.5	131032.010	2.5
397.1750	64.01	-.74	3952.218	0.0	29130.036	0.0
397.1770	22.00	-3.89	6842.964	5.0	32013.534	6.0
397.1770	26.00	-3.92	22249.430	3.0	47420.000	2.0
397.1850	41.00	.07	11937.313	0.0	37114.497	0.0
397.1880	58.01	-1.27	2581.041	0.0	27758.035	0.0
397.1890	27.00	-1.24	29735.180	3.5	54904.990	2.5
397.1933	25.01	-3.67	81780.700	3.0	106950.240	3.0
397.1941	26.02	-4.46	114339.950	4.0	139509.440	5.0
397.1955	30.02	-4.20	260584.100	1.0	285753.500	2.0
397.1960	63.01	-.08	1613.150	0.0	26789.637	0.0
397.2023	22.00	-5.15	6661.003	3.0	31829.972	4.0
397.2030	22.00	-4.78	6556.828	1.0	31725.750	1.0
397.2044	9.01	-.32	229554.450	0.0	254723.280	1.0
397.2070	58.01	-.43	6291.287	0.0	31467.077	0.0
397.2078	28.01	-1.44	105588.890	4.5	130757.510	4.5
397.2081	25.00	-4.47	38120.180	4.5	63288.780	3.5
397.2081	25.00	-2.31	38120.180	4.5	63288.780	5.5
397.2106	22.00	-3.92	18911.399	2.0	44079.840	2.0
397.2128	24.02	-3.49	70980.200	1.0	96148.500	1.0
397.2136	22.00	-3.98	8492.421	1.0	33660.671	1.0
397.2157	28.00	-3.22	3409.925	2.0	28578.046	3.0
397.2160	59.01	-1.05	403.288	0.0	25578.508	0.0
397.2171	24.00	-2.88	23163.270	0.0	48331.300	1.0
397.2201	24.00	-3.11	28637.000	3.0	53804.840	3.0
397.2239	17.02	-3.86	217913.100	1.5	243080.700	1.5
397.2283	26.01	-4.46	60956.820	3.5	86124.140	4.5
397.2300	40.00	-.31	15647.559	0.0	40821.891	0.0
397.2334	23.00	-1.32	15270.420	1.5	40437.420	1.5
397.2352	24.00	-2.67	24299.890	2.0	49466.770	2.0
397.2353	28.00	-2.98	29084.478	4.0	54251.353	3.0
397.2400	14.01	-2.11	97972.350	.5	123136.930	1.5
397.2401	9.01	-.44	229550.110	2.0	254716.680	2.0
397.2447	6.01	-.84	196563.410	1.5	221729.690	1.5
397.2453	25.01	-2.49	82936.010	3.0	108102.250	3.0
397.2496	27.00	.08	28345.860	4.5	53511.830	5.5
397.2520	41.00	.02	12259.943	0.0	37432.881	0.0
397.2525	27.00	.12	30102.960	2.5	55268.750	3.5
397.2569	20.00	-1.58	21849.634	2.0	47015.141	3.0
397.2570	10.01	-.69	318828.550	3.5	343994.050	4.5
397.2654	25.02	-3.05	193235.430	2.5	218400.400	3.5
397.2660	24.00	-3.23	24940.610	2.0	50105.540	1.0
397.2666	9.01	.03	229551.790	1.0	254716.680	2.0
397.2667	25.00	-1.13	41230.300	3.5	66395.190	2.5
397.2675	9.00	-2.32	105056.282	.5	130221.120	1.5
397.2710	64.00	-.52	0.000	0.0	25171.734	0.0
397.2712	27.00	-2.63	23152.570	3.5	48317.170	3.5
397.2897	22.00	-5.08	8492.421	1.0	33655.853	2.0
397.2912	26.00	-1.78	28819.966	5.0	53983.300	5.0
397.2992	24.00	-4.03	24303.940	3.0	49466.770	2.0
397.3006	24.00	-4.25	35618.510	1.0	60781.250	2.0
397.3036	24.00	-.95	33040.100	2.0	58202.650	3.0
397.3101	28.01	-.03	105588.890	4.5	130751.030	5.5
397.3112	24.00	-1.31	29824.750	3.0	54986.820	3.0
397.3137	27.00	-.99	15184.040	2.5	40345.950	2.5
397.3200	90.00	-.57	6291.287	0.0	31459.917	0.0
397.3213	24.00	-3.97	24940.610	2.0	50102.040	3.0
397.3219	27.00	-2.91	29735.180	3.5	54896.570	3.5
397.3263	8.01	.05	189068.370	1.5	214229.480	1.5
397.3300	60.01	-.41	5000.766	0.0	30168.762	0.0
397.3303	23.02	-3.34	61777.150	1.5	86938.010	2.5
397.3312	30.02	-3.41	257678.700	2.0	282839.500	3.0
397.3328	30.02	-3.81	257491.100	0.0	282651.800	1.0
397.3360	17.02	-1.44	216524.600	2.5	241685.100	2.5
397.3390	40.00	-.21	12663.231	0.0	37830.657	0.0
397.3420	22.00	-5.50	14105.680	3.0	39265.800	2.0
397.3443	28.01	-3.91	108368.050	2.5	133528.020	3.5
397.3458	10.01	-2.38	254165.010	1.5	279324.890	1.5
397.3480	72.00	-1.75	2339.068	0.0	27505.924	0.0
397.3500	40.00	-.93	564.603	0.0	25731.333	0.0
397.3504	22.00	-4.49	19421.576	3.0	44581.160	2.0
397.3516	23.00	-7.16	2311.370	3.5	27470.880	3.5
397.3532	27.00	-1.94	28777.270	3.5	53936.680	2.5
397.3552	28.00	-2.52	3409.925	2.0	28569.210	2.0
397.3620	41.00	.35	16696.107	0.0	41862.077	0.0
397.3625	9.02	-1.73	441385.880	1.5	466544.700	1.5
397.3636	23.01	-1.07	11514.760	1.0	36673.510	2.0
397.3639	28.01	-2.22	103663.500	1.5	128822.230	1.5
397.3649	26.00	-3.07	28604.610	2.0	53763.280	3.0
397.3690	60.01	-.89	2500.383	0.0	27665.909	0.0
397.3708	20.00	-1.18	15315.943	2.0	40474.241	1.0
397.3733	24.00	-3.14	25106.340	3.0	50264.480	3.0
397.3770	42.00	.80	29843.282	0.0	55008.302	0.0
397.3775	6.01	-.90	196571.820	2.5	221729.690	1.5
397.3837	22.00	-4.38	18818.230	0.0	43975.710	1.0
397.3870	25.01	-3.31	43339.100	2.0	68496.370	1.0
397.3930	42.00	-.53	16615.449	0.0	41779.455	0.0
397.3935	24.00	-.69	21810.840	1.0	46967.700	2.0
397.3980	64.01	-.52	4758.794	0.0	29924.484	0.0
397.4134	24.01	-3.54	40228.440	5.5	65384.040	4.5
397.4161	26.01	-4.13	21812.040	1.5	46967.470	2.5
397.4190	58.01	-1.18	4920.109	0.0	30062.469	0.0
397.4366	26.02	-.92	201293.750	2.0	226447.880	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
397.4371	29.01	-3.20	116388.000	2.0	141542.100	2.0
397.4371	26.00	-1.89	26140.164	3.0	51294.262	3.0
397.4380	25.01	-3.25	81812.900	2.0	106966.940	2.0
397.4477	18.01	-1.67	135085.920	1.5	160239.350	1.5
397.4500	44.00	-1.18	8469.040	0.0	33629.438	0.0
397.4540	28.01	-4.66	111783.790	3.5	136936.820	3.5
397.4599	28.00	-3.03	29084.478	4.0	54237.136	4.0
397.4629	28.00	-.15	31031.042	3.0	56183.510	4.0
397.4654	26.00	-1.30	24574.655	4.0	49726.964	4.0
397.4660	62.00	.25	2258.411	0.0	27417.796	0.0
397.4671	10.01	-.83	318841.850	3.5	343994.050	4.5
397.4678	10.01	-.74	318841.890	4.5	343994.050	4.5
397.4679	10.01	-.70	318841.890	4.5	343994.040	5.5
397.4725	27.00	-2.20	4142.660	3.5	29294.520	3.5
397.4757	18.01	-2.17	134241.650	2.5	159393.310	1.5
397.4760	26.00	-2.06	17927.378	1.0	43079.013	1.0
397.4771	9.02	-2.31	441385.880	1.5	466537.450	.5
397.4780	9.01	.30	229550.110	2.0	254701.620	3.0
397.4810	64.00	-.42	1693.808	0.0	26852.243	0.0
397.4846	27.00	-2.69	29294.520	3.5	54445.610	2.5
397.4997	27.00	-2.98	23184.230	2.5	48334.370	1.5
397.5019	24.00	-1.50	24303.940	3.0	49453.940	4.0
397.5030	26.01	-2.41	48039.230	2.5	73189.160	1.5
397.5036	24.00	-3.57	29824.750	3.0	54974.640	2.0
397.5047	22.00	-4.40	18825.890	1.0	43975.710	1.0
397.5070	58.01	-.27	7662.464	0.0	32819.254	0.0
397.5072	25.01	-3.54	81812.900	2.0	106962.560	1.0
397.5114	27.01	-4.00	24886.500	2.0	50035.900	3.0
397.5183	23.00	-3.53	15770.720	4.5	40919.680	5.5
397.5205	26.01	-3.84	75600.930	3.5	100749.750	2.5
397.5208	26.00	-2.95	19912.486	2.0	45061.287	3.0
397.5220	62.01	-1.71	2177.753	0.0	27333.593	0.0
397.5290	40.00	.04	12663.231	0.0	37818.628	0.0
397.5310	45.00	-.12	13389.148	0.0	38544.419	0.0
397.5313	27.00	-1.07	18389.570	1.5	43537.710	1.5
397.5392	26.02	-2.78	179759.490	2.0	204907.130	1.0
397.5440	76.00	-.95	12663.231	0.0	37817.679	0.0
397.5445	18.01	-2.10	179931.770	1.5	205079.070	2.5
397.5447	28.01	-4.94	114858.880	5.5	140006.170	4.5
397.5460	74.00	-1.24	12098.628	0.0	37252.950	0.0
397.5472	28.01	-.52	105668.780	2.5	130815.910	3.5
397.5472	23.00	-3.31	15078.250	.5	40225.380	1.5
397.5517	24.00	-1.38	35813.730	3.0	60960.580	4.0
397.5562	24.00	-4.03	27816.880	5.0	52963.440	4.0
397.5625	22.00	-3.89	15156.787	4.0	40302.950	3.0
397.5632	24.00	-3.52	31009.000	3.0	56155.120	2.0
397.5634	26.02	-4.77	126390.570	1.0	151536.680	1.0
397.5650	75.00	-1.39	16212.162	0.0	41365.282	0.0
397.5689	20.02	-1.29	339198.090	1.0	364343.850	1.0
397.5700	29.00	-1.73	40086.787	0.0	65239.590	0.0
397.5708	22.00	-1.46	16961.420	3.0	42107.060	4.0
397.5714	12.02	-.13	581567.500	0.0	606713.100	1.0
397.5743	25.01	-1.53	62572.200	2.0	87717.620	3.0
397.5770	24.00	-2.30	35862.820	4.0	61008.070	5.0
397.5819	22.00	-4.49	6661.003	3.0	31805.940	2.0
397.5887	25.00	-1.49	34845.260	.5	59989.770	1.5
397.5890	74.00	-.89	17018.737	0.0	42170.338	0.0
397.5915	26.02	-4.94	126390.570	1.0	151534.900	2.0
397.5919	6.01	-.90	196563.410	1.5	221707.710	2.5
397.5960	42.00	-.35	20164.380	0.0	45315.538	0.0
397.6018	24.00	-2.32	20519.600	6.0	45663.280	5.0
397.6051	24.01	-4.35	38563.150	4.5	63706.620	4.5
397.6068	9.02	-.46	441158.600	1.5	466301.960	2.5
397.6162	24.01	-1.95	50667.330	3.5	75810.100	4.5
397.6195	6.00	-3.39	64089.850	1.0	89232.410	1.0
397.6270	62.01	-1.11	806.575	0.0	25955.773	0.0
397.6298	24.00	-.44	33060.740	3.0	58202.650	3.0
397.6310	77.00	-.07	12985.861	0.0	38134.806	0.0
397.6337	28.00	-1.57	31031.042	3.0	56172.704	3.0
397.6367	24.01	-2.81	65709.530	5.5	90851.000	4.5
397.6369	6.00	-3.76	64090.950	2.0	89232.410	1.0
397.6391	22.00	-1.65	16817.190	1.0	41958.510	2.0
397.6420	90.01	-.91	9517.587	0.0	34665.836	0.0
397.6430	62.01	-.85	2661.698	0.0	27809.884	0.0
397.6543	10.01	-4.18	224699.270	.5	249839.630	.5
397.6546	26.00	-1.55	26224.961	3.0	51365.300	3.0
397.6560	27.00	-4.56	16778.160	2.5	41918.410	3.5
397.6611	26.00	-.74	27543.000	1.0	52682.930	2.0
397.6643	28.01	-4.77	103663.500	1.5	128803.230	2.5
397.6663	24.02	-4.34	128753.900	2.0	153893.500	2.0
397.6665	24.00	.28	20523.690	4.0	45663.280	5.0
397.6670	41.00	.23	15163.614	0.0	40310.282	0.0
397.6704	24.00	-.58	20523.940	5.0	45663.280	5.0
397.6772	10.01	-1.31	313461.970	4.5	338600.880	4.5
397.6775	10.01	-1.18	313461.990	5.5	338600.880	4.5
397.6775	10.01	-.83	313461.970	4.5	338600.860	5.5
397.6779	10.01	.63	313461.990	5.5	338600.860	5.5
397.6780	58.01	-.93	7017.204	0.0	32163.176	0.0
397.6850	60.01	-1.20	0.000	0.0	25145.530	0.0
397.6854	26.00	-1.09	26623.726	2.0	51762.120	2.0
397.6900	23.02	-3.10	61578.740	.5	86716.840	1.5
397.6915	26.02	-2.69	114325.350	5.0	139463.360	5.0
397.6981	25.02	-3.16	192948.290	1.5	218085.880	.5
397.6984	25.02	-4.00	193235.430	2.5	218373.000	1.5
397.6989	24.00	-1.88	35870.530	4.0	61008.070	5.0
397.6995	28.01	-3.41	73903.250	.5	99040.750	1.5
397.7021	25.01	-3.83	81812.900	2.0	106950.240	3.0
397.7078	25.00	-1.59	34463.370	1.5	59600.350	2.5
397.7146	9.02	-.86	441158.600	1.5	466295.150	1.5
397.7177	27.00	-1.09	18775.010	.5	43911.360	1.5
397.7198	28.01	-2.27	103663.500	1.5	128799.720	.5
397.7230	76.00	-1.07	5081.424	0.0	30224.551	0.0
397.7250	6.01	-.50	196571.820	2.5	221707.710	2.5
397.7310	7.01	-3.21	149076.520	2.0	174212.030	2.0
397.7340	40.00	-1.36	5162.081	0.0	30304.513	0.0
397.7359	17.01	-1.65	147605.700	3.0	172740.900	4.0
397.7440	28.00	-2.33	28569.210	2.0	53703.899	1.0
397.7445	26.01	-3.31	60989.480	4.5	86124.140	4.5
397.7480	40.00	-.65	7985.094	0.0	33126.641	0.0
397.7530	58.01	-1.02	8711.012	0.0	33852.243	0.0
397.7605	27.00	-3.97	30443.630	1.5	55577.280	1.5
397.7717	27.00	-3.18	23184.230	2.5	48317.170	3.5
397.7733	23.01	-1.66	11908.270	2.0	37041.110	2.0
397.7744	26.00	-.96	17726.985	2.0	42859.756	2.0
397.7770	58.01	-.73	5887.999	0.0	31027.713	0.0
397.7791	28.01	-3.44	109846.000	3.5	134978.470	2.5
397.7940	41.00	-.12	12905.203	0.0	38043.843	0.0
397.7950	25.01	-4.08	53781.700	3.0	78913.170	2.0
397.7963	6.00	-3.63	61981.820	1.0	87113.210	2.0
397.8030	23.00	-4.22	0.000	1.5	25130.960	2.5
397.8072	10.01	-3.19	254292.190	.5	279422.890	.5
397.8151	28.01	-.64	106620.530	3.5	131750.730	3.5
397.8163	25.01	-2.40	62587.500	3.0	87717.620	3.0
397.8236	10.01	-3.27	280268.960	2.5	305398.620	1.5
397.8262	15.02	-.59	178653.200	3.5	203782.700	3.5
397.8262	15.02	.95	178653.200	3.5	203782.700	4.5
397.8262	15.02	.84	178653.200	2.5	203782.700	3.5
397.8329	22.00	-4.68	6556.828	1.0	31685.900	0.0
397.8343	28.00	-1.51	33500.854	3.0	58629.840	2.0
397.8355	23.00	-2.02	14910.040	3.5	40038.950	4.5
397.8389	28.00	-2.02	33500.854	3.0	58629.550	3.0
397.8390	23.00	-1.96	17116.920	3.5	42245.610	3.5
397.8399	26.02	.16	168477.360	1.0	193605.990	2.0
397.8402	24.00	-3.23	35501.260	3.0	60629.870	2.0
397.8420	63.00	-.07	13389.148	0.0	38524.755	0.0
397.8440	44.00	-.41	7985.094	0.0	33120.574	0.0
397.8459	26.00	-2.45	22838.320	2.0	47966.571	3.0
397.8539	9.02	-.12	441167.400	.5	466295.150	1.5
397.8552	18.01	-4.29	183675.570	3.5	208803.240	4.5
397.8646	27.00	-2.14	4142.660	3.5	29269.730	4.5
397.8650	58.01	-.23	4274.849	0.0	29409.003	0.0
397.8657	22.00	-4.46	6598.749	2.0	31725.750	1.0
397.8691	24.00	-3.30	31028.330	2.0	56155.120	2.0
397.8705	24.00	-4.79	35501.260	3.0	60627.960	4.0
397.8712	6.01	-.99	196571.820	2.5	221698.480	3.5
397.8719	27.00	-3.30	23207.760	1.5	48334.370	1.5
397.8740	40.00	-.31	12259.943	0.0	37393.528	0.0
397.8750	41.00	-1.52	1532.493	0.0	26666.015	0.0
397.8760	26.01	-2.78	73966.940	6.5	99093.290	5.5
397.8778	25.00	-2.22	34343.900	4.5	59470.140	3.5
397.8800	25.00	-2.32	41230.300	3.5	66356.400	4.5
397.8808	18.01	-2.96	183797.360	2.5	208923.410	2.5
397.8847	28.01	-.07	104298.230	4.5	129424.030	5.5
397.8855	27.00	.20	29735.180	3.5	54860.930	4.5
397.8856	6.01	-.99	196581.960	3.5	221707.710	2.5
397.8889	14.01	-2.54	97972.350	.5	123097.890	.5
397.9061	18.01	-3.09	179931.770	1.5	205056.220	1.5
397.9157	18.01	-3.65	183797.360	2.5	208921.200	1.5
397.9185	24.00	-.43	35884.400	5.0	61008.070	5.0
397.9197	24.00	-3.98	36552.130	3.0	61675.720	2.0
397.9199	26.01	-3.24	73969.710	5.5	99093.290	5.5
397.9200	62.01	-.68	4355.506	0.0	29486.186	0.0
397.9220	42.00	.06	27181.584	0.0	52312.137	0.0
397.9226	26.02	-3.46	114339.950	4.0	139463.360	5.0
397.9280	73.00	-1.37	10566.135	0.0	35696.309	0.0
397.9290	74.00	-.91	13227.833	0.0	38357.944	0.0
397.9315	24.00	-2.36	27597.220	3.0	52720.070	4.0
397.9330	64.00	-.21	161.315	0.0	25291.174	0.0
397.9332	24.00	-1.21	33040.100	2.0	58162.840	2.0
397.9345	24.00	-2.37	28682.180	2.0	53804.840	3.0
397.9351	18.01	-.26	161048.640	1.5	186171.260	.5
397.9354	27.01	-8.75	22414.500	3.0	47537.100	2.0
397.9360	76.00	.36	30085.255	0.0	55214.924	0.0
397.9370	41.00	-.35	12582.573	0.0	37712.179	0.0
397.9389	26.02	.27	168477.360	1.0	193599.740	1.0
397.9400	72.01	.55	27907.502	0.0	53036.918	0.0
397.9420	44.00	-1.25	1129.205	0.0	26258.495	0.0
397.9470	66.01	-1.06	4678.136	0.0	29807.110	0.0
397.9490	60.01	-1.00	1613.150	0.0	26741.998	0.0
397.9514	27.00	-2.51	816.000	3.5	25937.590	4.5
397.9528	24.01	-.82	45730.740	2.5	70852.240	3.5
397.9552	28.01	-1.12	104298.230	4.5	129419.580	4.5
397.9576	13.01	-1.19	124792.000	2.0	149913.200	3.0
397.9632	26.00	-3.72	26339.682	2.0	51460.530	3.0
397.9658	10.01	-.87	313480.200	3.5	338600.880	4.5
397.9664	10.01	.54	313480.240	4.5	338600.880	4.5
397.9667	10.01	-1.07	313480.240	4.5	338600.860	5.5
397.9712	18.00	-3.33	93750.639	1.0	118870.981	0.0
397.9744	24.00	-3.92	35398.020	4.0	60518.160	3.0
397.9744	24.00	-4.40	35398.020	4.0	60518.160	3.0
397.9795	24.00	-.93	21847.880	2.0	46967.700	2.0
397.9856	16.01	-.30	131028.760	1.5	156148.190	.5
397.9940	29.01	-3.84	95565.650	4.0	120684.550	3.0
397.9940	25.02	-3.28	192948.290	1.5	218067.190	2.5
397.9954	29.00	-2.15	45894.129	0.0	71020.048	0.0
398.0092	26.02	-.08	168477.360	1.0	193595.300	0.0
398.0097	13.02	-1.66	188877.570	2.5	213995.480	2.5
398.0097	13.02	-.35	188877.570	2.5	213995.480	3.5
398.0143	25.00	-.31	41031.480	4.5	66149.100	3.5
398.0200	13.02	-.51	188878.220	1.5	213995.480	2.5
398.0200	42.00	.32	26616.982	0.0	51741.348	0.0
398.0214	24.00	-2.92	36558.550	2.0	61675.720	2.0
398.0241	24.00	-3.86	24940.610	2.0	50057.610	2.0
398.0317	6.01	-.21	196581.960	3.5	221698.480	3.5
398.0427	18.01	-1.89	186470.280	1.5	211586.110	2.5
398.0480	41.00	-2.02	967.890	0.0	26090.488	0.0
398.0497	27.00	-4.17	25937.590	4.5	51052.980	3.5
398.0625	24.00	-3.50	35501.260	3.0	60615.840	3.0
398.0633	26.00	-3.32	19562.435	4.0	44676.963	4.0
398.0640	74.00	-.11	19680.435	0.0	44802.023	0.0
398.0641	23.00	-2.11	14949.300	4.5	40069.780	5.5
398.0677	25.00	-2.81	37737.220	3.5	62851.470	3.5
398.0737	23.00	-3.04	15264.830	5.5	40378.700	4.5
398.0800	92.00	-.34	5726.684	0.0	30847.263	0.0
398.0844	22.00	-1.12	16875.190	2.0	41988.390	3.0
398.0880	58.01	-.20	5646.026	0.0	30766.100	0.0
398.0942	25.01	-3.24	81051.620	3.0	106164.200	4.0
398.1010	73.01	-.85	11775.998	0.0	36895.252	0.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
398.1099	26.00	-1.67	19552.474	1.0	44664.061	2.0
398.1145	24.02	-3.69	128782.200	3.0	153893.500	2.0
398.1178	14.02	-2.37	176487.190	1.0	201598.280	2.0
398.1230	24.00	-.71	21856.940	3.0	46967.700	2.0
398.1234	27.00	-4.96	26450.020	2.5	51560.760	2.5
398.1265	14.02	-2.84	176487.190	1.0	201597.730	1.0
398.1288	20.00	-1.28	23652.304	1.0	48762.700	2.0
398.1316	14.02	-1.61	225526.330	3.0	250636.550	2.0
398.1349	22.01	-3.99	40074.710	3.5	65184.720	3.5
398.1454	22.00	-1.27	17075.310	4.0	42184.660	4.0
398.1543	26.01	-4.00	38164.240	2.5	63273.030	2.5
398.1600	40.00	-.18	10969.423	0.0	36084.954	0.0
398.1603	26.01	-6.61	13904.870	.5	39013.280	1.5
398.1613	26.00	-1.99	24118.815	4.0	49227.160	3.0
398.1761	22.00	-.17	0.000	2.0	25107.417	2.0
398.1774	26.00	-.93	21999.132	4.0	47106.463	4.0
398.1803	24.00	-.34	33060.740	3.0	58167.890	4.0
398.1854	9.02	-4.35	466301.960	2.5	491408.790	3.5
398.1900	58.01	-1.29	5887.999	0.0	31001.638	0.0
398.1931	25.01	-4.49	43311.000	1.0	68417.340	2.0
398.1942	24.00	-2.18	31048.850	1.0	56155.120	2.0
398.1950	73.00	-.63	15808.874	0.0	40922.198	0.0
398.1996	27.01	-3.85	61240.800	3.0	86346.730	3.0
398.1998	24.00	-4.13	35398.020	4.0	60503.940	4.0
398.2011	22.01	-2.50	4628.610	2.5	29734.450	3.5
398.2020	25.01	-4.25	81051.620	3.0	106157.400	3.0
398.2050	42.00	.08	23390.681	0.0	48503.374	0.0
398.2060	41.00	-.60	13066.518	0.0	38179.148	0.0
398.2060	59.01	-.15	3387.616	0.0	28500.246	0.0
398.2092	28.01	-4.50	29070.930	1.5	54176.260	.5
398.2112	25.01	-4.86	81780.700	3.0	106885.900	4.0
398.2115	24.00	-3.27	35572.940	2.0	60678.120	1.0
398.2152	9.02	-4.26	466302.800	3.5	491407.750	4.5
398.2157	25.00	-.51	34463.370	1.5	59568.290	.5
398.2160	40.00	-.49	10808.108	0.0	35920.108	0.0
398.2165	26.00	-4.47	29056.312	3.0	54161.182	3.0
398.2198	9.02	-4.68	466290.900	4.5	491395.560	4.5
398.2198	9.02	-2.97	466290.900	4.5	491395.560	5.5
398.2218	24.00	-4.48	25106.340	3.0	50210.870	4.0
398.2263	26.01	-3.49	48039.230	2.5	73143.480	3.5
398.2276	25.00	-.99	41230.300	3.5	66334.470	3.5
398.2299	28.00	-3.65	29668.918	3.0	54772.940	3.0
398.2360	60.01	-1.20	2984.328	0.0	28095.066	0.0
398.2453	25.01	-2.81	81054.350	2.0	106157.400	3.0
398.2480	22.00	-5.52	0.000	2.0	25102.880	2.0
398.2583	25.00	-.94	25281.040	2.5	50383.270	1.5
398.2600	39.01	-.79	967.890	0.0	26077.115	0.0
398.2600	42.00	-1.02	16615.449	0.0	41724.674	0.0
398.2604	24.00	-1.17	33060.740	3.0	58162.840	2.0
398.2622	18.01	-2.35	186470.280	1.5	211572.270	1.5
398.2688	25.01	-3.20	83070.970	2.0	108172.540	1.0
398.2720	8.01	-.64	189068.370	1.5	214169.740	.5
398.2723	22.00	-2.85	16267.510	5.0	41368.860	4.0
398.2748	24.00	-2.18	31987.060	4.0	57088.250	5.0
398.2870	74.00	-.87	17986.627	0.0	43094.150	0.0
398.2885	26.02	-2.40	205092.530	4.0	230192.860	3.0
398.2890	58.01	-.08	6533.259	0.0	31640.656	0.0
398.2893	25.00	-4.97	41403.930	2.5	66504.210	1.5
398.2894	10.01	-4.71	277325.600	1.5	302425.870	1.5
398.2937	12.02	-.41	581734.700	1.0	606834.700	2.0
398.2940	26.01	-3.50	49506.990	1.5	74606.970	2.5
398.2960	74.00	-.33	19115.832	0.0	44222.788	0.0
398.2972	24.01	-4.06	39824.520	4.5	64924.300	3.5
398.3010	64.01	-.99	5807.341	0.0	30913.981	0.0
398.3020	25.01	-2.99	83070.970	2.0	108170.450	2.0
398.3031	22.00	-2.77	15220.390	5.0	40319.800	6.0
398.3064	27.01	-2.22	27585.300	1.0	52684.500	1.0
398.3140	62.01	-.96	2984.328	0.0	28090.149	0.0
398.3230	26.00	-4.75	21038.987	2.0	46137.140	3.0
398.3245	24.00	-1.21	27816.880	5.0	52914.940	6.0
398.3285	28.01	-2.47	104298.230	4.5	129396.040	5.5
398.3290	58.01	-.65	4113.534	0.0	29218.410	0.0
398.3290	74.00	.19	19680.435	0.0	44785.311	0.0
398.3293	24.00	-1.02	35862.820	4.0	60960.580	4.0
398.3302	27.00	-2.24	29269.730	4.5	54367.430	5.5
398.3315	22.00	-2.33	16458.710	6.0	41556.330	5.0
398.3343	28.01	-4.07	67694.640	2.5	92792.080	3.5
398.3359	26.00	-2.96	24335.764	2.0	49433.108	2.0
398.3450	28.01	-4.11	111783.790	3.5	136880.560	4.5
398.3461	13.01	-2.75	121480.300	3.0	146577.000	2.0
398.3496	28.01	-1.13	105668.780	2.5	130765.260	3.5
398.3556	13.01	-3.11	121480.900	2.0	146577.000	1.0
398.3556	13.01	-3.50	121480.900	2.0	146577.000	2.0
398.3578	22.00	-5.28	13981.750	1.0	39077.713	1.0
398.3604	13.01	-3.59	121481.200	1.0	146577.000	1.0
398.3604	13.01	-3.38	121481.200	1.0	146577.000	0.0
398.3604	13.01	-4.68	121481.200	1.0	146577.000	2.0
398.3645	6.00	-4.22	61981.820	1.0	87077.360	0.0
398.3667	24.00	-4.58	35398.020	4.0	60493.420	3.0
398.3670	66.01	-.34	4274.849	0.0	29377.330	0.0
398.3683	25.00	-1.45	38669.600	3.5	63764.900	2.5
398.3709	25.02	-3.69	192880.160	3.5	217975.300	2.5
398.3765	16.02	-.72	147690.990	2.0	172785.770	1.0
398.3820	73.00	-2.04	9598.245	0.0	34699.781	0.0
398.3835	26.00	-2.93	24338.766	3.0	49433.108	2.0
398.3880	10.01	-3.65	282680.650	.5	307774.710	1.5
398.3896	24.00	.17	20520.920	3.0	45614.880	4.0
398.3959	26.00	-1.02	21999.132	4.0	47092.693	3.0
398.4082	9.00	-2.78	105056.282	.5	130149.070	.5
398.4086	9.02	-2.77	466302.800	3.5	491395.560	4.5
398.4116	16.01	-2.12	131028.760	1.5	156121.330	2.5
398.4139	28.00	-.37	29668.918	3.0	54761.346	4.0
398.4177	25.00	-1.65	25281.040	2.5	50373.230	2.5
398.4186	24.01	-4.11	38509.070	3.5	63601.200	3.5
398.4212	12.00	-3.08	35051.264	1.0	60143.230	0.0
398.4236	26.02	-2.20	188955.560	3.0	214047.380	4.0
398.4318	22.00	-1.00	16961.420	3.0	42052.720	3.0
398.4336	24.00	-.58	20523.690	4.0	45614.880	4.0
398.4344	23.00	-.65	14910.040	3.5	40001.180	3.5
398.4375	24.00	-2.06	20523.940	5.0	45614.880	4.0
398.4400	45.00	-.72	10243.505	0.0	35341.387	0.0
398.4451	26.00	-4.19	20874.482	3.0	45964.944	2.0
398.4517	24.00	-3.00	35870.530	4.0	60960.560	4.0
398.4549	23.00	-1.73	14910.040	3.5	39999.890	2.5
398.4580	23.00	-.50	14949.300	4.5	40038.950	4.5
398.4623	24.00	-1.44	33113.270	4.0	58202.650	3.0
398.4668	25.03	-3.26	152986.000	2.0	178075.100	3.0
398.4680	58.01	.18	7662.464	0.0	32758.582	0.0
398.4750	40.00	-1.12	4113.534	0.0	29209.211	0.0
398.4785	24.00	-4.87	24282.340	4.0	49370.700	3.0
398.4788	22.00	-3.06	16106.080	4.0	41194.420	3.0
398.4810	41.00	-.38	15324.929	0.0	40420.228	0.0
398.4817	26.02	-.50	201293.750	2.0	226381.910	3.0
398.4860	44.00	-.25	7985.094	0.0	33080.079	0.0
398.4923	26.00	-3.92	26479.366	1.0	51566.860	1.0
398.4938	25.01	-2.92	81862.840	4.0	106950.240	3.0
398.4951	28.00	-1.20	33500.854	3.0	58586.168	3.0
398.4957	24.00	-1.79	29584.620	2.0	54671.900	1.0
398.4967	22.00	-7.19	6742.757	4.0	31829.972	4.0
398.4980	73.00	-2.09	9598.245	0.0	34692.474	0.0
398.4987	24.00	-2.33	25177.390	4.0	50264.480	3.0
398.5046	27.00	-2.73	29269.730	4.5	54356.450	4.5
398.5060	27.01	-3.74	61260.100	2.0	86346.730	3.0
398.5166	29.01	-1.18	123556.640	2.0	148642.600	2.0
398.5180	41.00	-.60	11130.738	0.0	36223.707	0.0
398.5208	30.02	-4.56	257566.100	1.0	282651.800	1.0
398.5224	30.02	-4.01	260418.100	2.0	285503.700	1.0
398.5241	25.00	-.83	25287.740	3.5	50373.230	2.5
398.5261	9.00	-2.32	105056.282	.5	130141.650	1.5
398.5320	26.00	-2.56	20641.110	4.0	45726.104	5.0
398.5382	26.00	-4.84	26623.726	2.0	51708.330	2.0
398.5446	17.01	-1.95	159574.200	2.0	184658.400	2.0
398.5451	22.00	-.80	16817.190	1.0	41901.360	1.0
398.5500	3.00	-1.92	14904.000	0.0	39994.955	0.0
398.5586	22.00	-1.18	16875.190	2.0	41958.510	2.0
398.5616	23.00	-2.02	17054.870	2.5	42138.000	2.5
398.5691	24.01	-5.06	21822.860	2.5	46905.520	1.5
398.5705	27.00	-3.90	29269.730	4.5	54352.300	3.5
398.5723	10.01	-2.53	283894.410	.5	308976.870	.5
398.5769	23.01	-2.88	30267.460	2.0	55349.630	3.0
398.5800	92.01	-.32	5162.081	0.0	30251.147	0.0
398.5912	24.01	-5.34	21824.250	.5	46905.520	1.5
398.5918	26.01	-4.19	74606.970	2.5	99688.200	3.5
398.5928	28.01	-3.89	105861.190	2.5	130942.360	1.5
398.5937	28.01	-1.59	105861.190	2.5	130942.300	1.5
398.5955	17.01	-1.31	159574.200	2.0	184655.200	3.0
398.5963	16.02	-1.45	147550.320	1.0	172631.270	0.0
398.6000	62.01	-1.85	1451.835	0.0	26539.642	0.0
398.6002	28.01	-3.01	92792.080	3.5	117872.780	2.5
398.6002	24.01	-4.60	21824.820	1.5	46905.520	1.5
398.6063	9.01	-1.98	270508.290	2.0	295588.610	1.0
398.6163	26.00	-.51	26224.961	3.0	51304.650	4.0
398.6169	26.00	-2.64	25899.974	4.0	50979.627	4.0
398.6200	42.00	.51	25407.119	0.0	50493.668	0.0
398.6289	26.00	-2.61	26140.164	3.0	51219.059	3.0
398.6393	25.00	-2.92	25281.040	2.5	50359.280	3.5
398.6393	25.01	-3.48	43339.100	2.0	68417.340	2.0
398.6400	58.01	-1.17	5887.999	0.0	30973.289	0.0
398.6401	24.00	-3.06	24940.610	2.0	50018.800	1.0
398.6465	22.00	-3.19	8602.340	2.0	33680.130	3.0
398.6470	24.00	-2.69	25106.340	3.0	50184.100	2.0
398.6600	63.00	-.13	13389.148	0.0	38473.180	0.0
398.6627	25.01	-2.84	44138.960	1.0	69215.730	1.0
398.6680	62.01	-1.15	1451.835	0.0	26535.363	0.0
398.6721	24.00	-2.26	35884.400	5.0	60960.580	4.0
398.6753	12.00	-2.10	35051.264	1.0	60127.239	2.0
398.6757	7.00	-3.72	86137.320	.5	111213.271	1.5
398.6768	24.00	-3.44	25177.390	4.0	50253.270	5.0
398.6800	40.00	-1.94	564.603	0.0	25647.376	0.0
398.6819	25.00	-.60	25265.740	5.5	50341.300	4.5
398.6978	29.01	-.48	123556.640	2.0	148631.200	3.0
398.7035	13.01	-1.31	124792.000	2.0	149866.200	3.0
398.7059	24.00	-.80	35934.020	6.0	61008.070	5.0
398.7075	28.00	-1.51	29500.690	1.0	54574.640	1.0
398.7091	25.00	-.71	25285.430	4.5	50359.280	3.5
398.7113	27.00	-2.85	4142.660	3.5	29216.370	2.5
398.7210	64.01	-.76	3952.218	0.0	29032.412	0.0
398.7220	90.00	-.70	7420.492	0.0	32500.623	0.0
398.7298	25.02	-3.06	193235.430	2.5	218307.980	2.5
398.7429	28.00	-2.81	31786.210	3.0	56857.933	4.0
398.7430	62.01	-1.36	2177.753	0.0	27256.563	0.0
398.7459	25.00	-1.52	25287.740	3.5	50359.280	3.5
398.7460	10.01	-2.92	281998.280	2.5	307069.810	1.5
398.7495	22.00	-7.40	6842.964	5.0	31914.277	5.0
398.7500	39.00	-.91	11292.053	0.0	36370.423	0.0
398.7575	24.00	-2.11	24299.890	2.0	49370.700	3.0
398.7627	22.01	-2.65	4897.600	3.5	29968.080	4.5
398.7731	24.00	-3.62	35398.020	4.0	60467.850	5.0
398.7800	44.00	-.76	16050.847	0.0	41127.330	0.0
398.7840	64.00	-.44	0.000	0.0	25076.232	0.0
398.7937	28.01	-4.46	103663.500	1.5	126732.030	1.5
398.7941	24.00	-4.37	27816.880	5.0	52885.390	5.0
398.7980	70.00	-.42	0.000	0.0	25075.351	0.0
398.8010	90.01	-.99	9114.300	0.0	34189.463	0.0
398.8065	28.01	-4.54	94729.250	2.5	119796.980	2.5
398.8157	18.01	-1.45	158730.210	2.5	183797.360	2.5
398.8160	41.00	.35	16696.107	0.0	41770.327	0.0
398.8180	76.00	-.81	14276.381	0.0	39350.475	0.0
398.8219	24.00	-2.65	24303.940	3.0	49370.700	3.0
398.8244	17.01	-2.38	145468.500	1.0	170535.100	2.0
398.8283	27.00	-1.57	29216.370	2.5	54282.730	2.5
398.8335	28.01	-.08	106620.530	3.5	131686.560	4.5
398.8356	25.02	-3.58	192741.670	.5	217807.570	1.5
398.8454	25.02	-3.85	115711.600	4.5	140776.880	5.5
398.8496	24.00	-4.54	35618.510	1.0	60683.530	1.0
398.8520	57.01	-.28	3226.301	0.0	28298.258	0.0
398.8539	27.00	-3.46	23152.570	3.5	48217.320	3.5
398.8575	25.00	-3.96	34463.370	1.5	59527.890	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
398.8620	76.00	-.60	19277.147	0.0	44348.475	0.0
398.8660	25.00	-1.73	34463.370	1.5	59527.360	.5
398.8680	40.00	-1.21	5000.766	0.0	30071.717	0.0
398.8700	73.00	-1.24	10888.765	0.0	35959.590	0.0
398.8717	23.00	-1.56	17181.980	4.5	42245.610	3.5
398.8737	28.00	-1.84	29668.918	3.0	54732.425	2.0
398.8770	11.02	-4.42	442710.500	1.5	467773.800	2.5
398.8827	23.00	-.61	15000.840	5.5	40063.780	5.5
398.8850	90.01	-1.74	6613.917	0.0	31683.799	0.0
398.8859	28.00	-1.39	34163.294	2.0	59226.030	1.0
398.8870	27.00	-.50	30102.960	2.5	55165.630	2.5
398.8883	28.01	-3.71	105838.060	3.5	130900.650	2.5
398.8890	92.01	-1.46	2258.411	0.0	27328.042	0.0
398.8897	30.02	-3.23	257566.100	1.0	282628.600	2.0
398.8988	27.00	-2.71	29294.520	3.5	54356.450	4.5
398.9014	22.00	-3.04	21588.496	4.0	46650.260	3.0
398.9016	28.01	-.74	105668.780	2.5	130730.530	2.5
398.9050	25.00	-4.14	37789.930	2.5	62851.470	3.5
398.9052	7.00	-3.30	86137.320	.5	111198.848	.5
398.9080	21.01	-2.56	2540.970	2.0	27602.320	3.0
398.9143	22.00	-4.46	21469.494	3.0	46530.450	4.0
398.9194	27.00	-3.37	16467.900	4.5	41528.530	5.5
398.9230	26.00	-3.70	26479.366	1.0	51539.770	2.0
398.9231	26.01	-4.26	60402.380	2.5	85462.780	3.5
398.9250	25.00	-.94	35041.370	3.5	60101.650	2.5
398.9290	40.00	-1.87	564.603	0.0	25631.720	0.0
398.9357	24.00	-4.07	35618.510	1.0	60678.120	1.0
398.9440	58.01	-.20	7178.519	0.0	32244.694	0.0
398.9500	40.00	.21	15002.299	0.0	40068.097	0.0
398.9529	26.01	-4.16	38214.500	1.5	63273.030	2.5
398.9560	22.00	-3.04	8602.340	2.0	33660.671	1.0
398.9592	26.00	-1.77	26351.049	5.0	51409.180	4.0
398.9648	27.00	-2.73	29294.520	3.5	54352.300	3.5
398.9688	25.00	-2.92	34423.270	3.5	59480.800	2.5
398.9720	59.01	-.72	403.288	0.0	25467.704	0.0
398.9759	22.00	-.07	170.132	3.0	25227.217	3.0
398.9761	29.01	-4.52	123304.630	1.0	148361.700	1.0
398.9784	24.00	-3.78	35572.940	2.0	60629.870	2.0
398.9788	24.00	-3.11	35813.730	3.0	60870.630	4.0
398.9792	23.01	-1.91	14556.090	4.0	39612.970	5.0
398.9849	26.00	-.39	28604.610	2.0	53661.130	3.0
398.9948	15.01	-4.39	104054.700	1.0	129110.600	1.0
398.9952	25.00	-1.62	25285.430	4.5	50341.300	4.5
398.9979	24.00	.50	31393.400	5.0	56449.100	6.0
399.0000	62.01	-1.04	0.000	0.0	25062.657	0.0
399.0035	23.00	-2.96	15270.420	1.5	40325.770	2.5
399.0088	9.02	-4.71	466537.450	.5	491592.470	1.5
399.0100	60.01	-.46	3710.246	0.0	28772.275	0.0
399.0110	58.01	-1.04	2823.013	0.0	27884.979	0.0
399.0142	22.00	-1.19	16817.190	1.0	41871.870	2.0
399.0151	24.00	-.14	33113.270	4.0	58167.890	4.0
399.0191	22.00	-.85	16817.190	1.0	41871.560	0.0
399.0203	17.01	-.02	149798.300	2.0	174852.600	3.0
399.0223	26.02	-3.94	93388.750	4.0	118442.920	3.0
399.0293	27.00	-1.11	15774.040	1.5	40827.770	1.5
399.0306	10.01	-2.62	254165.010	1.5	279218.660	2.5
399.0320	25.00	-2.99	25287.740	3.5	50341.300	4.5
399.0328	22.00	-3.10	8602.340	2.0	33655.853	2.0
399.0377	26.00	-1.34	24574.655	4.0	49627.861	4.0
399.0420	92.01	-1.25	887.233	0.0	25947.252	0.0
399.0449	28.01	-3.46	93390.060	2.5	118442.810	1.5
399.0490	90.00	-1.02	3790.903	0.0	28850.482	0.0
399.0544	26.00	-2.90	26140.164	3.0	51192.320	4.0
399.0548	23.00	.02	14910.040	3.5	39962.170	2.5
399.0588	23.00	.18	14949.300	4.5	40001.180	3.5
399.0658	23.00	-3.31	8476.200	1.5	33527.640	2.5
399.0670	41.00	-.79	12017.970	0.0	37076.419	0.0
399.0679	29.01	-2.47	110084.290	1.0	135135.600	1.0
399.0690	58.01	-1.11	5565.369	0.0	30623.692	0.0
399.0739	25.00	-2.67	30354.210	3.5	55405.140	2.5
399.0769	22.01	-1.92	39926.830	2.5	64977.570	3.5
399.0787	29.01	-2.38	121524.670	3.0	146575.300	2.0
399.0812	26.02	-2.91	93392.450	3.0	118442.920	3.0
399.0833	28.01	-3.53	106620.530	3.5	131670.670	2.5
399.0890	70.00	.45	19599.777	0.0	44656.844	0.0
399.0930	16.01	-.19	128233.070	2.5	153282.800	2.5
399.0981	24.01	-4.03	50667.330	3.5	75716.740	3.5
399.1008	22.00	-7.32	14028.470	2.0	39077.713	1.0
399.1030	75.00	-1.60	14518.354	0.0	39574.543	0.0
399.1107	24.00	.28	20517.400	2.0	45566.020	3.0
399.1130	40.01	-.30	6049.314	0.0	31104.875	0.0
399.1192	24.00	-2.41	21856.940	3.0	46905.030	4.0
399.1220	74.00	-.10	21293.585	0.0	46348.581	0.0
399.1222	17.02	-4.95	179076.100	1.5	204124.000	1.5
399.1238	17.02	-4.45	216524.600	2.5	241572.400	1.5
399.1242	9.02	-4.46	466544.700	1.5	491592.470	2.5
399.1362	24.01	-4.80	39877.280	3.5	64924.300	3.5
399.1386	25.00	-3.00	34423.270	3.5	59470.140	3.5
399.1390	42.00	-.06	25407.119	0.0	50461.048	0.0
399.1402	24.00	-4.64	23163.270	0.0	48210.040	1.0
399.1439	24.00	-2.42	31987.060	4.0	57033.600	4.0
399.1475	23.01	-2.87	11908.270	2.0	36954.580	1.0
399.1490	76.00	-2.64	2661.698	0.0	27714.999	0.0
399.1493	17.01	-2.51	145468.500	1.0	170514.700	1.0
399.1523	27.00	-2.63	18389.570	1.5	43435.580	.5
399.1525	17.02	-.70	179495.200	2.5	204541.200	2.5
399.1526	23.00	-6.20	2424.890	4.5	27470.880	3.5
399.1534	27.00	.29	29269.730	4.5	54315.670	5.5
399.1553	18.01	-2.11	179931.770	1.5	204977.590	2.5
399.1606	10.01	-2.87	282375.330	1.5	307420.820	2.5
399.1611	25.00	-1.76	30411.740	.5	55457.200	.5
399.1628	24.01	-4.20	65680.150	4.5	90725.500	3.5
399.1668	24.00	-.55	20520.920	3.0	45566.020	3.0
399.1684	27.00	-2.45	4690.180	2.5	29735.180	3.5
399.1692	26.02	-4.47	88694.670	5.0	113739.620	6.0
399.1730	90.00	-.41	8711.012	0.0	33762.807	0.0
399.1740	60.01	-1.08	0.000	0.0	25051.732	0.0
399.1748	17.01	-.68	147605.700	3.0	172650.300	3.0
399.1780	19.01	-1.22	187531.100	1.0	212575.500	2.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
399.1824	27.00	-2.48	21215.900	.5	46260.020	1.5
399.1850	42.00	-.51	20809.640	0.0	45860.681	0.0
399.1966	23.01	-4.49	30306.400	3.0	55349.630	3.0
399.1974	27.00	-4.62	1406.840	2.5	26450.020	2.5
399.2019	24.00	-3.72	35572.940	2.0	60615.840	3.0
399.2028	24.00	-4.55	35640.690	0.0	60683.530	1.0
399.2055	18.01	-1.71	132630.650	1.5	157673.320	2.5
399.2083	30.02	-3.72	257908.200	1.0	282950.700	2.0
399.2102	27.00	-1.20	29216.370	2.5	54258.750	2.5
399.2110	24.00	-1.94	20523.690	4.0	45566.020	3.0
399.2120	77.00	-.58	9759.560	0.0	34808.907	0.0
399.2130	58.01	-1.28	4274.849	0.0	29324.133	0.0
399.2197	9.00	-2.28	104731.050	1.5	129772.830	2.5
399.2280	90.01	-1.53	9194.957	0.0	34243.300	0.0
399.2335	24.01	-3.99	44307.440	.5	69348.360	1.5
399.2344	27.00	-4.12	29948.760	2.5	54989.620	3.5
399.2390	58.01	-.36	3548.931	0.0	28596.584	0.0
399.2391	26.00	-3.61	26627.612	4.0	51668.175	4.0
399.2451	25.00	-2.19	37630.620	4.5	62670.810	4.5
399.2567	28.01	-2.38	105861.190	2.5	130900.650	2.5
399.2578	28.00	-4.56	33590.159	4.0	58629.550	3.0
399.2690	64.00	-.54	483.945	0.0	25529.716	0.0
399.2783	23.00	.31	15000.840	5.5	40038.950	4.5
399.2891	24.00	-4.34	35640.690	0.0	60678.120	1.0
399.2910	58.01	-.36	5887.999	0.0	30932.390	0.0
399.3024	15.01	-2.23	107361.100	3.0	132397.700	2.0
399.3097	27.00	-2.83	18389.570	1.5	43425.710	2.5
399.3138	27.00	-4.28	26232.050	3.5	51267.930	4.5
399.3177	27.00	-4.85	17233.680	3.5	42269.320	4.5
399.3192	26.02	-2.84	189011.840	4.0	214047.380	4.0
399.3210	64.01	-1.49	564.603	0.0	25607.113	0.0
399.3224	28.00	-4.58	31786.210	3.0	56821.553	3.0
399.3231	26.02	-4.85	98661.880	1.0	123697.180	2.0
399.3258	29.01	-.51	121524.670	3.0	146559.800	4.0
399.3287	28.01	-2.81	93528.440	3.5	118563.390	3.5
399.3310	62.01	-1.30	322.630	0.0	25364.513	0.0
399.3347	23.00	-5.89	2153.200	1.5	27187.770	2.5
399.3360	24.00	-3.73	33113.270	4.0	58147.760	3.0
399.3400	56.00	.08	9596.000	0.0	34637.318	0.0
399.3520	16.01	-3.48	115285.310	3.5	140318.600	3.5
399.3521	24.00	-3.23	25177.390	4.0	50210.870	4.0
399.3530	44.00	-1.34	8952.985	0.0	33993.488	0.0
399.3583	27.00	-3.51	23184.230	2.5	48217.320	3.5
399.3646	10.01	-3.53	254292.190	.5	279324.890	1.5
399.3689	9.02	.09	441158.600	1.5	466191.030	2.5
399.3692	29.00	-2.46	45813.471	0.0	70852.958	0.0
399.3768	29.01	-2.14	121524.670	3.0	146556.600	3.0
399.3789	20.02	-1.53	339198.090	1.0	364229.890	0.0
399.3797	22.00	-.77	17075.310	4.0	42107.060	4.0
399.3820	58.01	.21	7259.177	0.0	32297.862	0.0
399.3839	25.00	-1.73	30425.710	1.5	55457.200	.5
399.3872	25.01	-2.71	83070.970	2.0	108102.250	3.0
399.3900	74.00	-.19	22906.736	0.0	47944.919	0.0
399.3917	23.01	-3.52	30318.630	4.0	55349.630	3.0
399.3927	28.00	-.54	29668.918	3.0	54699.852	3.0
399.3930	42.00	-.23	23390.681	0.0	48428.676	0.0
399.3960	24.00	-.80	21847.880	2.0	46878.610	3.0
399.3996	26.00	-2.94	26339.682	2.0	51370.184	2.0
399.4078	26.02	-4.28	93412.930	2.0	118442.920	3.0
399.4113	27.01	-8.66	22009.230	4.0	47039.000	3.0
399.4117	26.00	-.61	24574.655	4.0	49604.402	5.0
399.4119	25.01	-1.35	65567.070	2.0	90596.800	2.0
399.4157	28.00	-1.09	33500.854	3.0	58530.350	3.0
399.4160	64.01	-.57	4194.191	0.0	29230.744	0.0
399.4174	23.00	-1.45	15270.420	1.5	40299.810	.5
399.4218	24.01	-2.07	50687.630	2.5	75716.740	3.5
399.4249	28.01	-4.06	109038.840	1.5	134067.760	1.5
399.4312	24.00	-4.31	24282.340	4.0	49310.860	3.0
399.4430	41.00	-.90	11130.738	0.0	36165.599	0.0
399.4534	27.00	-2.67	5075.830	1.5	30102.960	2.5
399.4560	22.00	-.78	16961.420	3.0	41988.390	3.0
399.4570	58.01	-.91	5646.026	0.0	30680.010	0.0
399.4676	24.01	-3.32	64448.840	2.5	89475.080	2.5
399.4688	22.00	-.57	16875.190	2.0	41901.360	1.0
399.4702	9.02	-4.85	441276.720	2.5	466302.800	3.5
399.4761	18.01	-1.78	161048.640	1.5	186074.350	2.5
399.4793	18.01	-.10	167307.920	.5	192333.430	.5
399.4797	28.00	-.66	34163.294	2.0	59188.780	3.0
399.4825	22.01	-6.93	9518.050	2.5	34543.360	3.5
399.4830	59.01	-.65	403.288	0.0	25435.642	0.0
399.4836	9.02	-.79	441276.720	2.5	466301.960	2.5
399.4900	23.02	-2.06	63303.120	4.5	88327.960	3.5
399.4930	76.00	-.30	21212.928	0.0	46244.656	0.0
399.4935	20.00	-1.34	23652.304	1.0	48676.920	2.0
399.4997	7.01	.24	149187.800	1.0	174212.030	2.0
399.5016	25.00	-2.77	37737.220	3.5	62761.330	2.5
399.5018	19.01	-.95	162507.000	2.0	187531.100	1.0
399.5082	24.00	-4.89	33040.100	2.0	58063.800	2.0
399.5153	26.00	-3.24	33801.555	2.0	58824.810	2.0
399.5184	25.01	-2.88	81862.840	4.0	106885.900	4.0
399.5218	26.00	-2.46	26351.049	5.0	51373.894	5.0
399.5218	26.02	-4.47	189024.530	5.0	214047.380	4.0
399.5262	28.01	-1.84	105668.780	2.5	130691.350	1.5
399.5286	22.00	-2.55	16458.710	6.0	41481.130	5.0
399.5302	27.00	-.79	7442.410	3.5	32464.730	4.5
399.5305	17.01	-.81	149798.300	2.0	174820.600	2.0
399.5406	24.00	-.30	21856.940	3.0	46878.610	3.0
399.5420	58.01	-1.65	3629.588	0.0	28658.246	0.0
399.5473	21.01	-3.22	39344.900	2.0	64366.150	2.0
399.5486	21.01	-4.05	4802.750	2.0	29823.920	2.0
399.5500	23.00	-1.61	17116.920	3.5	42138.000	2.5
399.5590	69.01	-2.01	161.315	0.0	25188.908	0.0
399.5610	45.00	-.72	10243.505	0.0	35270.973	0.0
399.5660	56.00	-.83	9596.000	0.0	34623.154	0.0
399.5740	22.01	-4.51	40074.710	3.5	65094.290	4.5
399.5750	57.01	-.59	1371.178	0.0	26397.769	0.0
399.5845	28.00	-.93	33610.916	2.0	58629.840	2.0
399.5848	13.01	-.88	121480.300	3.0	146499.200	4.0
399.5891	28.00	-1.56	33610.916	2.0	58629.550	3.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
399.5923	9.02	-2.39	441276.720	2.5	466295.150	1.5
399.5980	44.00	-.62	9033.642	0.0	34058.792	0.0
399.5986	26.00	-1.26	21999.132	4.0	47017.170	3.0
399.6072	13.01	-2.31	121480.300	3.0	146497.800	3.0
399.6083	25.00	-.77	34463.370	1.5	59480.800	2.5
399.6111	28.00	-.92	33500.854	3.0	58518.110	4.0
399.6112	26.01	-4.73	37227.320	.5	62244.570	1.5
399.6150	45.00	-.32	11856.655	0.0	36880.741	0.0
399.6168	24.00	-4.35	35501.260	3.0	60518.160	3.0
399.6168	13.01	-1.41	121480.900	2.0	146497.800	3.0
399.6170	73.00	-1.45	5968.656	0.0	30992.616	0.0
399.6221	28.01	-2.17	106620.530	3.5	131637.100	3.5
399.6248	13.01	-3.49	121480.300	3.0	146496.700	2.0
399.6249	26.00	-3.87	26550.466	0.0	51566.860	1.0
399.6275	24.00	-1.19	27703.840	4.0	52720.070	4.0
399.6280	23.03	-.88	263111.400	4.0	288127.600	4.0
399.6282	26.00	-2.91	24118.815	4.0	49135.003	3.0
399.6344	13.01	-1.95	121480.900	2.0	146496.700	2.0
399.6353	26.01	-3.23	48039.230	2.5	73054.970	2.5
399.6392	13.01	-1.21	121481.200	1.0	146496.700	2.0
399.6399	23.00	-3.11	15571.900	2.5	40587.350	3.5
399.6510	44.00	-1.64	8952.985	0.0	33974.817	0.0
399.6570	78.00	-1.32	15405.586	0.0	40427.042	0.0
399.6598	28.01	-4.20	109038.840	1.5	134053.050	2.5
399.6607	21.00	-.73	0.000	1.5	25014.150	2.5
399.6642	28.01	-4.85	109269.830	1.5	134283.760	.5
399.6700	66.01	-.30	4678.136	0.0	29698.778	0.0
399.6727	30.02	-1.13	237506.800	1.0	262520.200	2.0
399.6778	26.00	-2.28	33507.102	3.0	58520.180	4.0
399.6800	76.00	-2.98	0.000	0.0	25020.016	0.0
399.6805	23.02	-3.83	63315.050	3.5	88327.960	3.5
399.6839	18.01	-2.25	189654.780	2.5	214667.480	2.5
399.6852	24.00	-2.36	33762.740	6.0	58775.360	6.0
399.6973	26.00	-.95	29798.960	4.0	54810.820	4.0
399.6975	27.00	-4.21	28777.270	3.5	53789.120	3.5
399.7015	24.00	-1.86	35807.900	2.0	60819.500	3.0
399.7029	27.00	-1.39	28777.270	3.5	53788.780	4.5
399.7050	59.01	-.79	2984.328	0.0	28002.779	0.0
399.7053	24.00	-4.37	35618.510	1.0	60629.870	2.0
399.7079	17.01	-2.79	128621.900	1.0	153633.100	1.0
399.7090	92.00	-.19	6936.547	0.0	31954.748	0.0
399.7115	24.00	-3.12	24299.890	2.0	49310.860	3.0
399.7117	23.01	-1.15	11908.270	2.0	36919.230	3.0
399.7130	74.00	-.67	18873.860	0.0	43891.810	0.0
399.7226	22.00	-7.95	14105.680	3.0	39115.958	4.0
399.7395	26.00	-.34	21999.132	4.0	47008.351	5.0
399.7470	90.01	-1.30	11050.080	0.0	36065.903	0.0
399.7474	26.00	-3.00	26140.164	3.0	51148.892	2.0
399.7477	26.00	-3.31	26140.164	3.0	51148.870	3.0
399.7539	25.02	-1.77	193498.070	3.5	218506.390	3.5
399.7574	30.02	-3.70	257962.500	2.0	282970.600	3.0
399.7590	30.02	-4.11	260584.100	1.0	285592.100	2.0
399.7590	15.01	-4.00	104102.600	2.0	129110.600	1.0
399.7620	24.00	-2.60	35862.820	4.0	60870.630	4.0
399.7720	58.01	-.43	8711.012	0.0	33725.270	0.0
399.7760	64.01	-.35	8469.040	0.0	33483.048	0.0
399.7763	25.00	-.71	34250.520	5.5	59257.440	4.5
399.7803	6.00	-4.14	60393.140	2.0	85399.810	2.0
399.7855	27.00	-4.16	30443.630	1.5	55449.970	2.5
399.7870	90.01	-1.03	9678.902	0.0	34692.222	0.0
399.7900	27.00	-1.17	8460.810	2.5	33466.870	3.5
399.7923	28.01	-4.80	115000.250	3.5	140006.170	4.5
399.7942	14.01	.67	131677.400	2.5	156683.200	3.5
399.7947	24.00	-1.70	35813.730	3.0	60819.500	3.0
399.7954	8.00	-2.70	102662.026	2.0	127667.754	1.0
399.8018	29.00	-2.13	46136.101	0.0	71148.495	0.0
399.8055	26.00	-.73	21715.735	5.0	46720.824	4.0
399.8160	74.00	-.36	21293.585	0.0	46305.090	0.0
399.8167	13.02	-2.47	170637.350	.5	195641.740	1.5
399.8178	25.02	-3.82	89704.690	4.5	114209.010	3.5
399.8271	24.00	-4.42	28637.000	3.0	53640.740	3.0
399.8290	42.00	-.36	22100.161	0.0	47110.853	0.0
399.8370	9.00	-2.32	105056.282	.5	130059.400	.5
399.8375	23.00	-1.81	25111.500	4.5	50114.590	5.5
399.8441	24.00	-4.99	35501.260	3.0	60503.940	4.0
399.8444	29.01	-.93	123556.640	2.0	148559.300	2.0
399.8451	26.00	-3.92	26627.612	4.0	51630.230	5.0
399.8546	27.00	-2.83	8460.810	2.5	33462.830	2.5
399.8607	10.00	-3.58	148257.790	1.0	173259.430	1.0
399.8636	22.00	.05	386.874	4.0	25388.334	4.0
399.8676	27.00	-3.17	29948.760	2.5	54949.970	1.5
399.8735	23.00	.43	15062.940	6.5	40063.780	5.5
399.8760	74.00	-.47	18873.860	0.0	43881.612	0.0
399.8786	16.01	-0.00	131028.760	1.5	156029.280	1.5
399.8853	24.00	-.37	35870.530	4.0	60870.630	4.0
399.8920	28.01	-.98	104298.230	4.5	129297.910	3.5
399.8930	76.00	-.39	19761.092	0.0	44767.781	0.0
399.8938	25.01	-3.27	81886.330	5.0	106885.900	4.0
399.8967	24.01	-4.69	21824.250	.5	46823.640	.5
399.8970	40.01	-.50	4436.164	0.0	29442.603	0.0
399.9028	28.00	-1.18	29668.918	3.0	54667.928	4.0
399.9047	24.00	-3.24	21847.880	2.0	46846.770	3.0
399.9058	24.01	-4.99	21824.820	1.5	46823.640	.5
399.9092	24.00	-2.59	31987.060	4.0	56985.670	3.0
399.9112	26.02	-2.22	189011.840	4.0	214010.320	5.0
399.9167	27.00	-3.21	29948.760	2.5	54946.900	2.5
399.9180	41.00	.03	13066.518	0.0	38071.644	0.0
399.9180	92.00	-.58	3710.246	0.0	28715.372	0.0
399.9188	28.00	-2.36	33590.159	4.0	58588.168	3.0
399.9199	23.01	-3.20	30306.400	3.0	55304.340	4.0
399.9237	25.00	-2.87	37789.930	2.5	62787.630	1.5
399.9240	58.01	.09	2339.068	0.0	27343.819	0.0
399.9248	18.01	-4.78	179931.770	1.5	204929.400	.5
399.9274	10.00	-3.87	148257.790	1.0	173255.260	0.0
399.9280	73.00	-1.75	5968.656	0.0	30973.157	0.0
399.9325	26.02	-.72	198333.560	2.0	223330.710	3.0
399.9335	22.00	-1.22	16961.420	3.0	41958.510	2.0
399.9400	22.00	-.76	16875.190	2.0	41871.870	2.0
399.9467	10.01	-3.47	224699.270	.5	249695.530	1.5
399.9474	28.01	-4.64	97273.830	2.5	122270.050	3.5
399.9557	24.00	-3.70	25106.340	3.0	50102.040	3.0
399.9565	25.00	-2.74	34343.900	4.5	59339.550	3.5
399.9723	28.00	-1.56	32973.414	4.0	57968.080	3.0
399.9780	26.02	.06	198333.560	2.0	223327.670	2.0
399.9861	24.00	-2.13	29824.750	3.0	54818.550	2.0
399.9885	26.02	.16	198337.060	3.0	223330.710	3.0
399.9896	23.00	-2.94	137.380	2.5	25130.960	2.5
399.9975	9.02	-4.91	466468.560	5.5	491461.650	4.5
400.0019	26.00	-3.64	22838.320	2.0	47831.132	2.0
400.0023	7.00	-2.96	86220.480	1.5	111213.271	1.5
400.0033	25.01	-1.37	62587.500	3.0	87580.230	4.0
400.0042	23.00	-1.45	9544.540	.5	34537.210	1.5
400.0044	9.02	-3.36	466468.990	4.5	491461.650	4.5
400.0124	24.00	-4.44	35501.260	3.0	60493.420	3.0
400.0135	26.02	-.68	198338.620	4.0	223330.710	3.0
400.0175	24.00	-2.32	33762.740	6.0	58754.580	5.0
400.0180	64.00	-.48	6694.574	0.0	31693.449	0.0
400.0190	59.01	-.91	1613.150	0.0	26611.963	0.0
400.0244	26.00	-3.62	26339.682	2.0	51331.090	2.0
400.0327	24.00	-2.11	32097.360	6.0	57088.250	5.0
400.0340	26.02	-.78	198337.060	3.0	223327.870	2.0
400.0390	42.00	-.28	20809.640	0.0	45807.203	0.0
400.0441	26.02	-.76	198336.580	5.0	223326.760	4.0
400.0449	23.01	-3.72	30673.140	2.0	55663.270	1.0
400.0460	26.00	-2.19	24118.815	4.0	49108.876	4.0
400.0480	66.01	-.08	806.575	0.0	25803.575	0.0
400.0497	24.00	-3.13	21856.940	3.0	46846.770	3.0
400.0500	42.00	.50	26294.352	0.0	51291.227	0.0
400.0500	60.01	-1.28	1613.150	0.0	26610.025	0.0
400.0518	26.02	-.56	198337.060	3.0	223326.760	4.0
400.0600	41.01	-.42	14679.669	0.0	39675.920	0.0
400.0622	28.01	-3.57	93390.060	2.5	118379.110	2.5
400.0673	24.00	-3.71	24833.860	3.0	49822.590	2.0
400.0756	27.00	-1.19	29294.520	3.5	54282.730	2.5
400.0758	30.02	-2.86	257962.500	2.0	282950.700	2.0
400.0767	26.02	.24	198338.620	4.0	223326.760	4.0
400.0800	58.01	-1.76	5404.054	0.0	30399.055	0.0
400.0886	17.01	-2.05	149798.300	2.0	174785.700	1.0
400.0949	22.00	-7.84	6842.964	5.0	31829.972	4.0
400.1003	25.00	-1.20	35114.980	2.5	60101.650	2.5
400.1060	58.01	-.90	5646.026	0.0	30639.403	0.0
400.1073	24.00	-1.15	35884.400	5.0	60870.630	4.0
400.1076	23.01	-3.20	44657.990	2.0	69644.200	3.0
400.1090	40.00	-2.09	1209.863	0.0	26203.052	0.0
400.1120	23.01	-6.43	12545.150	4.0	37531.090	4.0
400.1130	41.00	-.35	12259.943	0.0	37252.882	0.0
400.1137	18.01	-3.91	147227.970	.5	172213.800	1.5
400.1144	26.02	-2.82	189024.530	5.0	214010.320	5.0
400.1156	23.01	-4.32	30318.630	4.0	55304.340	4.0
400.1185	25.00	-1.51	30419.610	2.5	55405.140	2.5
400.1222	19.01	-.53	165149.500	0.0	190134.800	1.0
400.1260	64.01	-.71	4194.191	0.0	29186.318	0.0
400.1318	12.02	.04	581734.700	1.0	606719.400	2.0
400.1370	74.00	-1.25	12098.628	0.0	37090.068	0.0
400.1371	13.02	-2.78	170637.350	.5	195621.720	.5
400.1446	24.00	.30	31377.960	4.0	56361.860	5.0
400.1490	6.00	-4.26	61981.820	1.0	86965.450	2.0
400.1560	58.01	-.69	4920.109	0.0	29910.363	0.0
400.1661	23.00	-1.07	9636.960	1.5	34619.520	2.5
400.1663	26.00	-1.33	17550.180	3.0	42532.729	3.0
400.1687	24.02	-4.33	71166.100	2.0	96148.500	1.0
400.1696	26.02	-4.84	88694.670	5.0	113677.010	5.0
400.1727	10.01	-4.66	277325.600	1.5	302307.750	2.5
400.1730	58.01	-1.05	3629.588	0.0	28618.780	0.0
400.1730	90.01	-2.16	4032.876	0.0	29022.068	0.0
400.2021	28.00	-3.69	31786.210	3.0	56766.523	4.0
400.2071	26.01	-4.50	22409.820	.5	47389.820	1.5
400.2162	25.00	-1.21	30425.710	1.5	55405.140	2.5
400.2175	9.02	-.23	441315.800	.5	466295.150	1.5
400.2276	7.01	-1.56	186511.580	2.0	211490.300	2.0
400.2295	24.00	-2.96	24833.860	3.0	49812.460	3.0
400.2305	26.02	-4.39	109570.840	2.0	134549.380	1.0
400.2327	12.02	-.18	581734.700	1.0	606713.100	1.0
400.2332	7.00	-3.55	86220.480	1.5	111198.848	.5
400.2366	26.02	-3.71	109570.840	2.0	134549.000	3.0
400.2416	28.01	-1.06	105838.060	3.5	130815.910	3.5
400.2462	24.01	-1.89	42898.120	2.5	67875.680	3.5
400.2486	22.00	-.64	17075.310	4.0	42052.720	3.0
400.2507	9.02	-1.35	466190.970	3.5	491168.250	2.5
400.2511	28.00	-1.05	33610.916	2.0	58588.168	3.0
400.2536	26.01	-2.03	48039.230	2.5	73016.330	3.5
400.2550	40.00	-1.35	4839.451	0.0	29823.524	0.0
400.2563	25.00	-1.27	35165.050	1.5	60141.980	.5
400.2585	14.01	-.61	83802.210	.5	108779.000	1.5
400.2630	28.01	-.64	104503.220	2.5	129479.730	1.5
400.2653	26.00	-2.66	26224.961	3.0	51201.330	2.0
400.2728	24.02	-4.00	128753.900	2.0	153729.800	1.0
400.2774	26.02	-1.07	198333.760	6.0	223309.370	5.0
400.2799	23.01	-7.25	12545.150	4.0	37520.610	3.0
400.2810	58.01	-.50	7259.177	0.0	32241.627	0.0
400.2872	7.01	-2.43	186511.580	2.0	211486.580	1.0
400.2920	17.02	-2.84	216710.400	3.5	241685.100	2.5
400.2940	23.01	-1.46	11514.760	1.0	36469.340	1.0
400.2970	58.01	-1.19	3306.958	0.0	28288.409	0.0
400.2978	6.00	-3.06	61981.820	1.0	86956.160	1.0
400.3028	29.00	-1.44	45894.129	0.0	70875.218	0.0
400.3100	40.00	-.33	10969.423	0.0	35950.063	0.0
400.3102	22.00	-3.03	18825.890	1.0	43799.455	2.0
400.3110	90.01	-1.07	10485.478	0.0	35466.056	0.0
400.3170	58.01	-.99	4920.109	0.0	29900.312	0.0
400.3177	30.02	-3.70	257678.700	2.0	282651.800	1.0
400.3227	26.02	.42	198336.580	5.0	223309.370	5.0
400.3257	17.02	-2.78	217850.200	2.5	242822.800	2.5
400.3260	25.00	-.55	37420.240	5.5	62392.820	4.5
400.3292	24.01	-4.11	42898.120	2.5	67870.500	1.5
400.3308	24.01	-.84	52298.120	3.5	77270.400	4.5
400.3310	90.01	-.91	9114.300	0.0	34093.630	0.0
400.3429	29.01	-.73	121524.670	3.0	146496.200	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
400.3438	26.02	-4.42	88663.870	4.0	113635.340	4.0
400.3449	25.00	-3.01	37789.930	2.5	62761.330	2.5
400.3460	62.01	-1.52	1935.780	0.0	26914.174	0.0
400.3480	76.00	-.53	15324.929	0.0	40303.198	0.0
400.3505	28.01	-.95	104503.220	2.5	129474.270	3.5
400.3554	26.02	-.31	198338.620	4.0	223309.370	5.0
400.3578	17.01	-2.23	128662.500	2.0	153633.100	1.0
400.3592	27.00	-1.59	21215.900	.5	46186.410	1.5
400.3642	7.02	.60	317781.800	2.5	342752.000	3.5
400.3674	17.01	-1.91	121499.000	2.0	146469.000	3.0
400.3685	24.01	-3.53	42898.120	2.5	67868.050	2.5
400.3700	73.00	-2.00	5565.369	0.0	30542.265	0.0
400.3760	26.00	-1.08	27543.000	1.0	52512.460	1.0
400.3770	58.01	.23	7420.492	0.0	32396.952	0.0
400.3799	22.00	-.44	17215.440	5.0	42184.660	4.0
400.3850	64.01	-.69	11472.710	0.0	36348.671	0.0
400.3868	24.00	-4.01	36558.550	2.0	61527.340	1.0
400.3890	16.01	-.75	128233.070	2.5	153201.720	1.5
400.3921	24.00	-.64	31393.400	5.0	56361.860	5.0
400.4020	76.00	-1.18	11292.053	0.0	36266.953	0.0
400.4052	23.00	-6.61	2220.130	2.5	27187.770	2.5
400.4060	92.01	-1.27	1693.808	0.0	26668.459	0.0
400.4070	27.00	-4.21	26232.050	3.5	51199.580	3.5
400.4099	28.01	-4.77	98467.250	3.5	123434.600	4.5
400.4116	26.01	-4.00	61156.900	3.5	86124.140	4.5
400.4150	26.01	-3.35	36126.410	1.5	61093.440	2.5
400.4171	17.01	-1.69	147605.700	3.0	172572.600	2.0
400.4260	62.01	-2.31	1451.835	0.0	26425.238	0.0
400.4306	23.00	-3.31	17054.870	2.5	42020.930	3.5
400.4400	40.00	-.41	12421.258	0.0	37393.788	0.0
400.4450	29.01	-1.89	123556.640	2.0	148521.800	1.0
400.4580	58.01	-.78	7178.519	0.0	32149.927	0.0
400.4599	27.00	-3.65	29294.520	3.5	54258.750	2.5
400.4721	27.00	-4.31	30443.630	1.5	55407.100	1.5
400.4753	28.01	-.36	105838.060	3.5	130801.330	4.5
400.4819	26.00	-1.38	26105.908	6.0	51068.770	5.0
400.4870	40.00	.13	16857.422	0.0	41827.022	0.0
400.4930	75.00	-.52	19599.777	0.0	44569.002	0.0
400.4974	26.00	-1.52	24335.764	2.0	49297.660	1.0
400.4977	26.00	-3.16	25899.974	4.0	50861.850	3.0
400.5039	26.02	-2.58	93388.750	4.0	118350.240	4.0
400.5090	90.00	-1.35	3629.588	0.0	28597.816	0.0
400.5127	26.00	-1.99	30912.838	1.0	55873.780	2.0
400.5160	76.00	-.10	18793.202	0.0	43760.994	0.0
400.5210	92.00	.04	4355.506	0.0	29322.986	0.0
400.5244	26.00	-.54	12560.933	3.0	37521.144	2.0
400.5276	23.00	-3.87	15103.770	4.5	40063.780	5.5
400.5345	22.00	-4.70	19421.576	3.0	44381.160	4.0
400.5362	18.01	-3.60	190106.230	1.5	215065.710	.5
400.5381	28.01	-4.99	94705.930	3.5	119665.290	2.5
400.5387	26.00	-3.01	19552.474	1.0	44511.795	2.0
400.5400	74.00	-2.59	1613.150	0.0	26579.446	0.0
400.5477	26.00	-2.55	20874.482	3.0	45833.240	4.0
400.5498	27.01	-4.85	61388.100	4.0	86346.730	3.0
400.5530	90.01	-1.09	9517.587	0.0	34483.072	0.0
400.5573	26.02	-4.31	117950.320	4.0	142908.480	5.0
400.5628	22.01	-1.25	39926.830	2.5	64884.650	2.5
400.5633	26.02	-3.78	93392.450	3.0	118350.240	4.0
400.5640	44.00	-.96	8711.012	0.0	33675.812	0.0
400.5640	58.01	-.97	967.890	0.0	25932.690	0.0
400.5685	28.00	-2.47	30619.440	2.0	55576.905	3.0
400.5705	23.01	-.47	14655.630	5.0	39612.970	5.0
400.5765	22.00	-2.32	22081.198	2.0	47038.160	3.0
400.5772	25.00	-1.58	30411.740	.5	55368.660	1.5
400.5811	24.00	-2.08	35862.820	4.0	60819.500	3.0
400.5857	25.01	-3.59	81993.850	4.0	106950.240	3.0
400.5883	27.00	-1.52	29948.760	2.5	54904.990	2.5
400.5979	22.00	-2.91	16961.420	3.0	41917.050	4.0
400.5997	23.00	-1.69	25253.530	5.5	50209.050	6.5
400.6050	42.00	.29	26133.037	0.0	51095.282	0.0
400.6071	23.00	-2.72	17054.870	2.5	42009.930	2.5
400.6087	23.00	-2.11	15270.420	1.5	40225.380	1.5
400.6113	29.01	-1.36	121981.680	2.0	146936.480	2.0
400.6118	28.00	-.75	34163.294	2.0	59118.060	2.0
400.6125	28.01	-1.50	105861.190	2.5	130815.910	3.5
400.6148	26.00	-2.20	26339.682	2.0	51294.262	3.0
400.6305	26.00	-1.42	26351.049	5.0	51304.650	4.0
400.6308	24.00	-1.62	33906.650	1.0	58860.230	2.0
400.6437	25.00	-2.51	34463.370	1.5	59416.150	1.5
400.6458	27.00	-1.75	21920.090	4.5	46872.740	3.5
400.6600	44.00	-1.13	9033.642	0.0	33992.460	0.0
400.6600	62.01	-1.83	806.575	0.0	25765.393	0.0
400.6621	26.00	-1.15	25091.620	0.0	50043.250	1.0
400.6679	24.00	-4.63	25106.340	3.0	50057.610	2.0
400.6713	26.00	-2.36	29320.050	1.0	54271.110	1.0
400.6820	62.01	-1.99	2177.753	0.0	27135.201	0.0
400.6832	28.01	-4.25	94705.930	3.5	119656.250	3.5
400.6840	73.00	-1.99	1935.780	0.0	26893.103	0.0
400.6899	30.02	-2.77	257678.700	2.0	282628.600	2.0
400.6901	26.02	-2.07	189024.530	5.0	213974.420	6.0
400.6960	64.00	-1.06	161.315	0.0	25117.891	0.0
400.7012	10.01	-4.89	313744.580	4.5	338693.780	4.5
400.7020	90.01	-.65	11050.080	0.0	36006.282	0.0
400.7025	23.00	-3.14	8578.520	2.5	33527.640	2.5
400.7028	24.01	-2.61	52321.300	4.5	77270.400	4.5
400.7028	17.01	-4.61	128621.900	1.0	153571.000	1.0
400.7036	25.00	-2.25	30419.610	2.5	55368.660	1.5
400.7049	24.00	-3.47	35870.530	4.0	60819.500	3.0
400.7204	22.00	-.66	16875.190	2.0	41823.190	3.0
400.7230	73.00	-1.05	15808.874	0.0	40763.768	0.0
400.7235	27.00	-2.89	29948.760	2.5	54896.570	3.5
400.7248	27.00	-2.39	29735.180	3.5	54682.910	4.5
400.7269	30.02	-3.04	260805.900	2.0	285753.500	2.0
400.7274	26.00	-1.48	22249.430	3.0	47197.000	2.0
400.7301	9.02	-4.23	466544.700	1.5	491492.100	2.5
400.7304	25.02	-4.83	86654.070	4.5	111601.450	5.5
400.7418	24.00	-3.08	23512.000	1.0	48458.670	2.0
400.7450	58.01	-1.18	5081.424	0.0	30034.948	0.0
400.7473	25.00	-.89	34343.900	4.5	59290.230	3.5
400.7480	62.01	-1.11	3468.273	0.0	28421.610	0.0
400.7510	27.00	-4.75	30443.630	1.5	55389.730	1.5
400.7540	44.00	-.64	14760.326	0.0	39713.290	0.0
400.7590	58.01	-.74	4758.794	0.0	29711.446	0.0
400.7600	40.00	.30	14921.641	0.0	39874.231	0.0
400.7606	17.02	-4.46	179076.100	1.5	204021.600	.5
400.7611	25.02	-2.49	193235.430	2.5	218180.900	1.5
400.7629	18.01	-2.01	158730.210	2.5	183675.570	3.5
400.7641	25.01	-4.92	43339.100	2.0	68264.380	3.0
400.7714	26.01	-3.52	47674.780	1.5	72619.610	2.5
400.7772	16.01	-2.05	115285.310	3.5	140229.780	2.5
400.7810	23.00	-1.86	17054.870	2.5	41999.100	1.5
400.7918	27.00	-.81	28845.220	5.5	53786.780	4.5
400.8016	25.00	-1.55	30425.710	1.5	55368.660	1.5
400.8050	42.00	-.22	24358.571	0.0	49308.360	0.0
400.8056	22.00	-2.68	17075.310	4.0	42018.010	5.0
400.8100	62.01	-1.71	2661.698	0.0	27611.175	0.0
400.8162	23.01	-1.92	14461.730	3.0	39403.770	4.0
400.8176	22.00	-2.66	21588.496	4.0	46530.450	4.0
400.8183	9.02	-1.77	466190.470	4.5	491132.380	3.5
400.8263	9.02	-.20	466190.970	3.5	491132.380	3.5
400.8270	44.00	-.58	13550.463	0.0	38498.882	0.0
400.8280	41.00	-.37	10162.848	0.0	35111.205	0.0
400.8330	64.00	-.49	967.890	0.0	25915.936	0.0
400.8345	9.02	-.12	466190.470	4.5	491131.370	4.5
400.8382	26.02	-3.87	88694.670	5.0	113635.340	4.0
400.8410	21.01	-3.25	4883.420	3.0	29823.920	2.0
400.8459	28.00	-2.49	33590.159	4.0	58530.350	3.0
400.8469	28.00	-1.97	29832.810	3.0	54772.940	3.0
400.8536	28.01	-3.95	101740.270	3.5	126679.980	4.5
400.8540	23.02	-3.83	61777.150	1.5	86716.840	1.5
400.8572	23.00	-1.94	24992.880	3.5	49932.370	4.5
400.8591	21.01	-3.44	4802.750	2.0	29742.120	1.0
400.8660	58.01	-1.14	7178.519	0.0	32124.511	0.0
400.8710	59.01	-.01	5000.766	0.0	29946.447	0.0
400.8736	28.01	-3.06	109269.830	1.5	134208.300	2.5
400.8750	74.00	-.36	2903.671	0.0	27849.103	0.0
400.8763	26.02	.54	198333.760	6.0	223272.060	6.0
400.8797	27.00	-4.54	26232.050	3.5	51170.140	4.5
400.8900	25.00	-1.03	34423.270	3.5	59360.720	2.5
400.8926	22.00	-.97	170.132	3.0	25107.417	2.0
400.9036	25.00	-1.91	35165.050	1.5	60101.650	2.5
400.9050	90.00	-.28	7420.492	0.0	32364.057	0.0
400.9060	58.01	-1.03	7097.862	0.0	32041.365	0.0
400.9098	10.01	-1.55	319111.700	3.5	344047.920	3.5
400.9100	10.01	-3.73	319111.710	4.5	344047.920	3.5
400.9160	68.00	-1.53	0.000	0.0	24942.881	0.0
400.9170	92.01	-1.18	6210.629	0.0	31153.448	0.0
400.9217	26.02	-.76	198336.580	5.0	223272.060	6.0
400.9252	18.01	-3.27	183985.940	1.5	208921.200	1.5
400.9265	23.00	-3.08	15103.770	4.5	40038.950	4.5
400.9270	2.00	-1.47	171135.000	0.0	196077.196	0.0
400.9305	10.01	-3.58	280473.580	1.5	305408.510	.5
400.9370	42.00	.35	24358.571	0.0	49300.145	0.0
400.9379	16.01	-.85	131186.860	2.5	156121.330	2.5
400.9387	24.00	-2.89	24093.160	2.0	49027.580	2.0
400.9434	10.01	-3.35	282375.330	1.5	307309.460	.5
400.9457	10.01	-4.89	313744.580	4.5	338678.570	3.5
400.9461	28.01	-4.69	111120.540	1.5	136054.500	1.5
400.9520	25.00	-3.55	37737.220	3.5	62670.810	4.5
400.9533	26.00	-2.78	25899.974	4.0	50833.485	5.0
400.9615	16.01	-3.57	115817.000	2.5	140750.000	1.5
400.9638	23.00	-1.43	9544.540	.5	34477.400	.5
400.9656	22.00	-3.78	170.132	3.0	25102.880	2.0
400.9710	41.00	-.07	12582.573	0.0	37522.032	0.0
400.9715	26.00	-.96	17927.378	1.0	42859.756	2.0
400.9720	90.00	-.81	8065.752	0.0	33005.149	0.0
400.9727	13.01	-1.94	121365.200	0.0	146297.500	1.0
400.9882	6.01	-.53	184690.980	1.5	209622.320	2.5
400.9930	6.00	-2.78	61981.820	1.0	86912.860	1.0
400.9975	28.00	-1.05	33590.159	4.0	58520.923	5.0
400.9996	9.02	-3.97	466608.570	5.5	491539.200	6.5
401.0006	28.00	-2.22	29320.782	3.0	54251.353	3.0
401.0053	26.02	-4.21	93512.640	4.0	118442.920	3.0
401.0099	28.01	-4.32	111120.540	1.5	136050.530	2.5
401.0140	58.01	-.70	6533.259	0.0	31470.044	0.0
401.0178	26.00	-3.46	29371.860	3.0	54301.360	4.0
401.0333	28.00	-1.66	29832.810	3.0	54761.346	4.0
401.0380	74.00	-.19	22906.736	0.0	47842.029	0.0
401.0427	28.00	-2.04	33590.159	4.0	58518.110	4.0
401.0452	28.00	-3.68	22102.349	4.0	47030.148	3.0
401.0548	28.01	-.56	105838.060	3.5	130765.260	3.5
401.0563	25.00	-3.11	27201.540	2.5	52128.650	2.5
401.0601	27.00	-2.66	28777.270	3.5	53704.140	2.5
401.0748	26.00	-3.75	21038.987	2.0	45964.944	2.0
401.0836	29.00	-1.93	46136.101	0.0	71068.559	0.0
401.0844	29.01	-3.60	123556.640	2.0	148482.000	3.0
401.0846	24.00	-1.16	33934.880	3.0	58860.230	2.0
401.0896	10.01	-3.70	280473.580	1.5	305396.620	1.5
401.0925	27.00	-1.97	28777.270	3.5	53702.130	3.5
401.0954	28.00	-2.93	31786.210	3.0	56710.889	2.0
401.0959	24.00	-3.45	25177.390	4.0	50102.040	3.0
401.0966	13.01	-1.43	110087.500	2.0	135012.100	1.0
401.0970	24.00	-.91	33935.650	2.0	58860.230	2.0
401.0989	23.00	-4.89	8715.720	3.5	33640.180	4.5
401.1074	27.00	-4.26	816.000	3.5	25739.930	2.5
401.1130	7.00	-2.91	86137.320	.5	111060.905	.5
401.1208	18.01	-1.35	158167.710	1.5	183090.810	1.5
401.1308	23.00	-.81	9824.580	2.5	34747.060	3.5
401.1409	26.00	-2.36	20641.110	4.0	45562.959	3.0
401.1528	22.00	-3.99	0.000	2.0	24921.110	1.0
401.1533	25.00	-.54	34463.370	1.5	59384.450	1.5
401.1560	58.01	-.97	5646.026	0.0	30573.984	0.0
401.1590	90.00	-1.02	6291.287	0.0	31219.059	0.0
401.1630	24.00	-4.67	35572.940	2.0	60493.420	3.0
401.1690	63.01	.39	24035.941	0.0	48963.091	0.0
401.1710	9.02	.10	441276.720	2.5	466196.700	3.5
401.1716	26.00	-2.86	19757.020	3.0	44676.963	4.0
401.1730	62.01	-2.27	0.000	0.0	24926.902	0.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
401.1771	30.02	-3.31	260584.100	1.0	285503.700	1.0
401.1776	28.01	-4.39	106022.790	.5	130942.360	1.5
401.1786	28.01	-2.96	106022.790	.5	130942.300	1.5
401.1796	28.01	-1.83	105838.060	3.5	130757.510	4.5
401.1798	28.00	-2.85	33610.916	2.0	58530.350	3.0
401.1817	7.01	-2.48	186570.980	3.0	211490.300	2.0
401.1884	26.00	-3.00	23783.617	5.0	48702.518	4.0
401.1900	25.00	-.98	41230.300	3.5	66149.100	3.5
401.1936	20.00	-1.38	23652.304	1.0	48570.880	2.0
401.1970	42.00	.19	25729.749	0.0	50655.160	0.0
401.2060	41.00	-1.78	1129.205	0.0	26054.057	0.0
401.2093	30.02	-4.25	260805.900	2.0	285723.500	3.0
401.2126	19.01	-.42	163237.000	1.0	188154.400	2.0
401.2142	27.00	-.87	28777.270	3.5	53694.570	3.5
401.2145	26.00	-1.95	26105.908	6.0	51023.190	6.0
401.2250	40.00	.39	15647.559	0.0	40571.230	0.0
401.2250	60.01	.10	5000.766	0.0	29924.437	0.0
401.2260	75.00	-.07	26536.324	0.0	51459.933	0.0
401.2294	28.00	-2.90	29320.782	3.0	54237.136	4.0
401.2306	25.00	-4.82	34423.270	3.5	59339.550	3.5
401.2338	9.02	.20	441385.880	1.5	466301.960	2.5
401.2349	28.01	-4.61	109038.840	1.5	133954.850	.5
401.2384	19.02	-2.44	237912.200	1.5	262828.000	1.5
401.2390	22.01	-1.73	4628.610	2.5	29544.370	2.5
401.2390	58.01	.32	4436.164	0.0	29358.966	0.0
401.2453	26.01	-3.56	36126.410	1.5	61041.780	2.5
401.2475	24.00	.20	31364.330	3.0	56279.560	4.0
401.2486	23.00	-3.32	0.000	1.5	24915.160	1.5
401.2496	24.01	-1.02	45669.540	1.5	70584.640	2.5
401.2500	90.00	-.75	2823.013	0.0	27745.131	0.0
401.2511	9.02	-4.21	466253.240	1.5	491168.250	2.5
401.2527	24.00	-2.45	24897.550	4.0	49812.460	3.0
401.2578	28.00	-2.03	33610.916	2.0	58525.507	1.0
401.2620	26.00	-2.35	29356.780	2.0	54271.110	1.0
401.2624	9.02	-1.48	441276.720	2.5	466191.030	2.5
401.2747	25.00	-1.25	34343.900	4.5	59257.440	4.5
401.2821	22.00	-.32	17075.310	4.0	41988.390	3.0
401.3174	28.01	-4.17	111120.540	1.5	136031.430	2.5
401.3190	73.00	-1.20	12179.286	0.0	37097.119	0.0
401.3245	22.00	-.41	16961.420	3.0	41871.870	2.0
401.3252	26.00	-3.83	29056.312	3.0	53966.720	2.0
401.3256	25.00	-1.50	38934.940	2.5	63845.320	1.5
401.3270	41.00	.61	16776.764	0.0	41694.101	0.0
401.3291	18.01	-1.32	185624.730	3.5	210534.900	4.5
401.3366	17.02	-2.84	217913.100	1.5	242822.800	2.5
401.3395	23.01	-3.99	12621.570	5.0	37531.090	4.0
401.3430	64.00	-.04	7339.834	0.0	32256.177	0.0
401.3435	9.02	-.75	441385.880	1.5	466295.150	1.5
401.3485	26.01	-4.94	36126.410	1.5	61035.370	.5
401.3500	44.00	-1.33	7420.492	0.0	32336.401	0.0
401.3554	26.00	-2.54	33801.555	2.0	58710.090	3.0
401.3587	22.00	-2.42	17215.440	5.0	42123.770	6.0
401.3627	26.00	-2.90	25899.974	4.0	50808.053	4.0
401.3654	23.00	-1.76	14514.750	1.5	39422.660	2.5
401.3784	26.00	-4.06	24335.764	2.0	49242.872	3.0
401.3814	26.00	-1.16	24335.764	2.0	49242.680	2.0
401.3848	26.00	-4.47	29469.010	2.0	54375.719	2.0
401.3857	18.01	-.88	132327.280	3.5	157233.930	3.5
401.3882	24.00	-4.48	31009.000	3.0	55915.500	4.0
401.3930	30.02	-1.07	238205.500	1.0	263111.700	0.0
401.3943	27.00	-1.28	16195.680	.5	41101.800	.5
401.3950	64.01	-1.60	3064.986	0.0	27978.102	0.0
401.4019	25.01	-3.85	44138.960	1.0	69044.610	2.0
401.4080	26.02	-4.93	117950.320	4.0	142855.590	4.0
401.4183	29.01	-2.12	121981.680	2.0	146886.310	1.0
401.4267	26.00	-2.25	24338.766	3.0	49242.872	3.0
401.4273	28.01	-1.05	105861.190	2.5	130765.260	3.5
401.4283	23.00	-2.21	17116.920	3.5	42020.930	3.5
401.4294	26.01	-4.77	36252.960	2.5	61156.900	3.5
401.4352	7.01	-1.66	186511.580	2.0	211415.160	2.0
401.4357	26.01	-3.25	61512.670	4.5	86416.220	3.5
401.4366	10.01	-4.51	277344.290	2.5	302247.780	3.5
401.4415	24.00	-3.22	27816.880	5.0	52720.070	4.0
401.4457	23.00	-3.23	8578.520	2.5	33481.450	3.5
401.4468	22.01	-.99	40074.710	3.5	64977.570	3.5
401.4489	9.02	-4.18	466229.650	4.5	491132.380	3.5
401.4497	21.01	-1.67	2540.970	2.0	27443.650	2.0
401.4510	90.01	-2.48	1451.835	0.0	26361.475	0.0
401.4530	26.00	-2.40	28819.966	5.0	53722.440	5.0
401.4547	18.01	-3.66	185624.730	3.5	210527.100	2.5
401.4554	25.02	-3.50	193498.070	3.5	218400.400	3.5
401.4623	30.02	-3.53	258075.700	3.0	282977.600	4.0
401.4671	24.00	-.48	31377.960	4.0	56279.560	4.0
401.4715	25.00	-3.55	37586.030	1.5	62487.360	2.5
401.4734	9.02	-3.89	466637.990	4.5	491539.200	5.5
401.4760	10.01	-2.29	281998.280	2.5	306899.330	2.5
401.4889	23.00	-1.31	9636.960	1.5	34537.210	1.5
401.4900	58.01	-.18	4194.191	0.0	29101.412	0.0
401.4930	41.00	-.79	12179.286	0.0	37086.320	0.0
401.4944	26.02	-4.84	97041.380	3.0	121941.290	4.0
401.4991	28.00	-3.57	29832.810	3.0	54732.425	2.0
401.5040	76.00	-1.12	13308.491	0.0	38214.843	0.0
401.5095	26.02	-2.84	199139.760	5.0	224038.730	5.0
401.5108	7.01	-2.36	186511.580	2.0	211410.470	3.0
401.5134	29.01	-1.80	121524.670	3.0	146423.400	4.0
401.5134	23.00	-5.23	0.000	1.5	24898.730	2.5
401.5163	23.00	-3.08	15688.800	2.5	40587.350	3.5
401.5197	26.01	-4.28	37227.320	.5	62125.660	1.5
401.5220	64.00	-.06	7178.519	0.0	32083.755	0.0
401.5220	74.00	.48	19519.120	0.0	44424.356	0.0
401.5320	28.01	-4.79	75721.680	5.5	100619.260	4.5
401.5347	23.00	-2.32	15103.770	4.5	40001.180	3.5
401.5357	25.00	-1.74	34463.370	1.5	59360.720	2.5
401.5387	22.00	.01	16817.190	1.0	41714.350	2.0
401.5390	59.01	-.84	1693.808	0.0	26597.989	0.0
401.5390	57.00	-.61	1048.548	0.0	25952.729	0.0
401.5474	28.01	-2.46	32523.540	3.5	57420.160	2.5
401.5520	9.02	-2.00	441406.460	3.5	466302.800	3.5
401.5549	10.01	-2.52	322348.010	3.5	347244.170	4.5
401.5549	10.01	.81	322348.010	4.5	347244.170	4.5
401.5555	10.01	-.36	322348.010	4.5	347244.130	5.5
401.5580	64.00	-.60	1693.808	0.0	26596.811	0.0
401.5615	24.00	-2.25	31049.330	6.0	55945.080	5.0
401.5636	28.01	-4.24	95017.710	4.5	119913.330	4.5
401.5655	9.02	-1.53	441406.460	3.5	466301.960	2.5
401.5658	23.00	-1.70	17054.870	2.5	41950.350	2.5
401.5752	30.02	-4.71	258075.700	3.0	282970.600	3.0
401.5770	62.01	-2.02	3468.273	0.0	28370.098	0.0
401.5800	29.00	-2.49	30569.200	0.0	55470.839	0.0
401.5880	58.01	-.23	8307.725	0.0	33208.867	0.0
401.6057	23.00	-2.21	17116.920	3.5	42009.930	2.5
401.6099	9.02	-3.36	466275.500	2.5	491168.250	2.5
401.6144	28.01	-1.33	105838.060	3.5	130730.530	2.5
401.6281	22.00	-.15	17215.440	5.0	42107.060	4.0
401.6299	16.01	-2.43	115817.000	2.5	140708.510	2.5
401.6317	26.00	-1.91	24335.764	2.0	49227.160	3.0
401.6363	26.01	-2.09	75600.930	3.5	100492.040	3.5
401.6376	29.01	-1.20	121524.670	3.0	146415.700	2.0
401.6410	26.00	-2.78	26479.366	1.0	51370.184	2.0
401.6412	25.01	-3.85	59537.400	4.0	84428.210	5.0
401.6471	23.00	-2.09	24898.730	2.5	49789.170	3.5
401.6543	26.00	-3.63	21999.132	4.0	46889.126	4.0
401.6586	24.00	-.38	31055.350	5.0	55945.080	5.0
401.6673	25.01	-4.04	81279.710	4.0	106168.900	5.0
401.6675	25.00	-1.70	34938.700	4.5	59827.880	5.5
401.6726	24.01	-3.96	64448.840	2.5	89337.700	1.5
401.6739	29.01	-4.88	111876.600	3.0	136765.380	4.0
401.6752	27.01	-3.06	25147.200	4.0	50035.900	3.0
401.6753	18.01	-4.39	155043.070	2.5	179931.770	1.5
401.6768	30.02	-1.64	237047.800	2.0	261936.400	1.0
401.6794	27.00	-.31	29269.730	4.5	54158.170	4.5
401.6802	26.00	-2.75	24338.766	3.0	49227.160	3.0
401.6827	23.01	-3.59	30318.630	4.0	55206.870	5.0
401.6833	8.01	-2.50	251220.900	3.5	276109.100	4.5
401.6849	24.00	-3.80	27703.840	4.0	52591.940	5.0
401.6856	22.00	-2.40	18911.399	2.0	43799.455	2.0
401.6953	22.00	-.93	17423.853	2.0	42311.310	3.0
401.6980	40.00	-.14	12259.943	0.0	37154.267	0.0
401.7041	22.01	-4.33	40425.800	1.5	65312.710	2.5
401.7082	27.00	-2.81	30102.960	2.5	54989.620	3.5
401.7087	26.00	-2.26	22249.430	3.0	47136.058	2.0
401.7152	26.00	-2.80	24574.655	4.0	49460.876	5.0
401.7162	24.00	-2.19	31393.400	5.0	56279.560	4.0
401.7202	22.00	-4.95	6742.757	4.0	31628.668	5.0
401.7250	64.00	.28	7501.149	0.0	32393.799	0.0
401.7272	6.01	-.71	184690.980	1.5	209576.460	1.5
401.7283	23.01	-1.05	30613.970	4.0	55499.380	5.0
401.7380	42.00	-.09	24358.571	0.0	49250.416	0.0
401.7439	9.02	-.15	441406.460	3.5	466290.900	4.5
401.7441	28.00	-.62	29888.505	2.0	54772.940	3.0
401.7446	30.02	-2.13	257796.000	5.0	282680.400	4.0
401.7459	26.00	-2.67	22946.810	1.0	47831.132	2.0
401.7475	23.00	-3.11	9544.540	.5	34428.760	1.5
401.7511	19.01	-.52	190134.800	1.0	215018.800	1.0
401.7548	24.01	-3.33	42986.730	1.5	67870.500	1.5
401.7560	41.00	-.10	12905.203	0.0	37795.933	0.0
401.7580	63.01	-1.30	10566.135	0.0	35456.741	0.0
401.7600	58.01	-.80	5726.684	0.0	30617.166	0.0
401.7650	27.00	-2.48	28845.220	5.5	53728.360	6.5
401.7658	23.00	-.80	15270.420	1.5	40153.510	2.5
401.7672	29.01	-4.45	114000.000	3.0	138883.000	4.0
401.7710	64.00	.36	6936.547	0.0	31826.347	0.0
401.7719	22.00	-5.17	11531.760	2.0	36414.470	3.0
401.7764	21.00	-1.08	15672.550	1.5	40554.980	2.5
401.7777	10.01	-3.11	319111.700	3.5	343994.050	4.5
401.7780	10.01	-2.98	319111.710	4.5	343994.040	5.5
401.7789	22.00	.10	16875.190	2.0	41757.470	3.0
401.7837	24.00	-4.96	24940.610	2.0	49824.590	2.0
401.7944	24.01	-2.17	42986.730	1.5	67868.050	2.5
401.7987	9.00	-1.94	105056.282	.5	129937.330	1.5
401.8100	25.00	-.30	17052.290	4.5	41934.640	3.5
401.8160	27.00	-4.18	28845.220	5.5	53725.200	4.5
401.8202	25.02	-3.79	193235.430	2.5	218115.150	3.5
401.8221	16.01	-3.94	115870.400	1.5	140750.000	1.5
401.8226	9.02	-.03	441158.600	1.5	466038.170	2.5
401.8255	25.02	-.79	192392.200	3.5	217271.590	4.5
401.8257	26.00	-2.24	26339.682	2.0	51219.059	3.0
401.8260	76.00	-.75	13308.491	0.0	38194.885	0.0
401.8286	17.01	-2.49	146330.000	1.0	171209.200	2.0
401.8336	25.00	-3.43	38669.600	3.5	63548.490	4.5
401.8380	40.01	-.92	7662.464	0.0	32548.114	0.0
401.8400	75.00	-.27	27100.927	0.0	51986.454	0.0
401.8447	17.02	-4.97	179663.000	1.5	204541.200	2.5
401.8486	26.01	-5.27	18360.650	1.5	43238.610	2.5
401.8490	29.01	-3.36	116326.160	3.0	141204.100	3.0
401.8498	26.00	-4.33	33946.920	2.0	58824.810	2.0
401.8554	25.02	-4.40	193498.070	3.5	218375.610	4.5
401.8561	30.02	-3.72	237642.700	3.0	262520.200	2.0
401.8570	25.00	-1.68	41031.480	4.5	65908.920	4.5
401.8641	30.02	-3.97	257962.500	2.0	282839.500	3.0
401.8666	22.01	-4.05	40581.800	2.5	65458.650	3.5
401.8690	25.00	-4.31	38669.600	3.5	63546.300	3.5
401.8738	23.00	-8.33	2311.370	3.5	27187.770	2.5
401.8800	9.00	-2.01	104731.050	1.5	129607.070	.5
401.8810	60.01	-1.46	483.945	0.0	25366.933	0.0
401.8900	17.01	-2.72	146333.800	2.0	171209.200	2.0
401.8965	30.02	-4.56	258075.700	3.0	282950.700	2.0
401.8990	92.01	-1.53	241.973	0.0	25123.846	0.0
401.8998	25.00	-1.97	35114.980	2.5	59989.770	1.5
401.9013	30.02	-3.82	260878.800	3.0	285753.500	2.0
401.9018	25.00	-.60	37630.620	4.5	62505.290	3.5
401.9040	58.01	-.37	8065.752	0.0	32947.316	0.0
401.9046	26.00	-2.69	21038.987	2.0	45913.480	3.0
401.9058	28.00	-3.06	15609.861	2.0	40484.282	2.0
401.9126	27.00	-1.59	18389.570	1.5	43263.570	1.5
401.9130	90.01	-.80	0.000	0.0	24881.007	0.0
401.9154	23.00	-1.07	14548.830	2.5	39422.660	2.5
401.9158	30.02	-3.39	237047.800	2.0	261921.600	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
401.9178	24.00	-4.51	35501.260	3.0	60374.940	2.0
401.9196	26.01	-3.95	61726.090	3.5	86599.660	2.5
401.9230	74.00	-1.92	3306.958	0.0	28187.346	0.0
401.9289	27.00	-3.38	4690.180	2.5	29563.170	1.5
401.9299	27.00	-3.73	5075.830	1.5	29948.760	2.5
401.9474	24.00	-3.77	24940.610	2.0	49812.460	3.0
401.9486	23.00	-4.96	20828.480	2.5	45700.250	2.5
401.9525	15.01	-1.73	76764.960	2.0	101636.490	1.0
401.9556	25.00	-3.26	23296.670	3.5	48168.010	4.5
401.9640	82.00	-.22	21293.585	0.0	46171.435	0.0
401.9645	6.00	-4.31	64089.850	1.0	88960.640	0.0
401.9730	64.00	-.58	483.945	0.0	25361.238	0.0
401.9737	24.00	-1.28	35807.900	2.0	60678.120	1.0
401.9813	28.01	-3.84	103025.580	2.5	127895.330	3.5
401.9840	62.01	-1.87	2177.753	0.0	27054.365	0.0
401.9845	18.01	-3.71	190196.160	.5	215065.710	.5
401.9879	28.01	-1.12	105861.190	2.5	130730.530	2.5
401.9900	58.01	-.51	8065.752	0.0	32941.993	0.0
401.9958	22.01	-1.94	42068.850	1.5	66937.700	2.5
401.9980	62.01	-1.59	1451.835	0.0	26327.581	0.0
402.0002	26.02	-4.22	158562.700	4.0	183431.280	5.0
402.0030	77.00	.88	26133.037	0.0	51008.473	0.0
402.0038	26.00	-4.55	26339.682	2.0	51208.040	1.0
402.0064	17.01	-.34	149952.400	1.0	174820.600	2.0
402.0068	25.00	-1.43	30411.740	.5	55279.910	1.5
402.0251	28.00	-1.88	29832.810	3.0	54699.852	3.0
402.0264	25.00	-1.50	34423.270	3.5	59290.230	3.5
402.0384	24.00	-3.22	21810.840	1.0	46677.060	2.0
402.0390	21.00	.18	0.000	1.5	24866.180	1.5
402.0484	26.00	-1.74	29371.860	3.0	54237.460	4.0
402.0497	23.00	-2.11	15571.900	2.5	40437.420	1.5
402.0717	28.01	-4.82	109038.840	1.5	133903.000	1.5
402.0799	27.00	-2.26	29294.520	3.5	54158.170	4.5
402.0801	56.01	-3.51	48258.590	0.0	73129.256	0.0
402.0807	24.00	-2.16	21856.940	3.0	46720.540	4.0
402.0828	27.00	-1.07	29563.170	1.5	54426.640	1.5
402.0870	60.01	-.77	2500.383	0.0	27370.623	0.0
402.0883	23.00	-1.76	15724.220	3.5	40587.350	3.5
402.0898	27.00	-2.30	3482.820	4.5	28345.860	4.5
402.0956	28.01	-3.34	111120.540	1.5	135983.220	1.5
402.1000	44.00	-.61	14921.641	0.0	39791.076	0.0
402.1020	42.00	.72	29681.967	0.0	54551.279	0.0
402.1103	22.00	-1.24	16961.420	3.0	41823.190	3.0
402.1166	24.01	-4.73	64061.820	1.5	88923.200	2.5
402.1166	6.01	-1.01	184690.980	1.5	209552.360	.5
402.1218	23.00	-2.70	25253.530	5.5	50114.590	5.5
402.1296	26.02	-4.74	182412.650	4.0	207273.230	5.0
402.1340	60.01	-.77	2500.383	0.0	27367.716	0.0
402.1341	25.00	-1.53	30419.610	2.5	55279.910	1.5
402.1365	24.00	-2.01	31055.350	5.0	55915.500	4.0
402.1370	24.00	-3.77	31048.000	7.0	55908.120	6.0
402.1506	25.02	-3.55	192948.290	1.5	217807.570	1.5
402.1540	24.00	-4.61	28682.180	2.0	53541.250	2.0
402.1585	24.00	-4.12	31049.330	6.0	55908.120	6.0
402.1606	26.00	-3.33	19552.474	1.0	44411.137	1.0
402.1629	26.00	-3.15	26140.164	3.0	50998.686	2.0
402.1715	25.02	-4.29	109780.400	2.5	134638.390	1.5
402.1750	26.02	-3.18	93388.750	4.0	118246.520	3.0
402.1815	22.01	-3.96	40027.280	1.5	64884.650	2.5
402.1830	22.00	.22	16961.420	3.0	41818.700	4.0
402.1870	26.00	-.58	22249.430	3.0	47106.463	4.0
402.1894	9.02	-2.72	466275.500	2.5	491132.380	3.5
402.1904	28.00	-2.39	27414.893	2.0	52271.716	2.0
402.1904	23.00	-1.26	15078.250	.5	39935.070	1.5
402.1920	28.01	-.38	104646.520	3.5	129503.240	4.5
402.1940	29.01	-4.21	116388.000	2.0	141244.600	1.0
402.2038	28.00	-1.30	32973.414	4.0	57829.405	5.0
402.2040	28.01	-4.84	76402.030	2.5	101258.010	1.5
402.2083	28.00	-1.73	33112.368	3.0	57968.080	3.0
402.2114	6.00	-2.77	60333.430	0.0	85188.950	1.0
402.2118	23.00	-4.79	137.380	2.5	24992.880	3.5
402.2120	74.00	-.17	19438.462	0.0	44300.972	0.0
402.2160	44.00	.04	8469.040	0.0	33331.303	0.0
402.2204	26.00	-2.97	22838.320	2.0	47693.289	3.0
402.2219	10.01	-3.51	283322.350	1.5	308177.220	1.5
402.2263	24.00	.02	31355.210	2.0	56209.810	3.0
402.2270	58.01	-.18	8952.985	0.0	33814.568	0.0
402.2275	26.02	-4.98	182418.700	4.0	207273.230	5.0
402.2305	23.00	-3.16	26171.960	4.5	51026.300	5.5
402.2325	25.00	-2.81	38669.600	3.5	63523.820	2.5
402.2328	25.00	-1.63	30425.710	1.5	55279.910	1.5
402.2349	26.02	-2.27	93392.450	3.0	118246.520	3.0
402.2377	24.01	-2.16	45730.740	2.5	70584.640	2.5
402.2390	22.00	-5.57	14105.680	3.0	38959.499	4.0
402.2390	41.00	-.70	12905.203	0.0	37766.044	0.0
402.2427	10.01	-1.62	294086.490	1.5	318940.080	1.5
402.2441	26.00	-3.86	19390.165	6.0	44243.668	5.0
402.2461	27.00	-1.89	18389.570	1.5	43242.950	2.5
402.2490	30.02	-2.91	237642.700	3.0	262495.900	4.0
402.2516	18.01	-2.32	185624.730	3.5	210477.770	3.5
402.2559	24.00	-1.74	31055.350	5.0	55908.120	6.0
402.2629	29.00	-.73	30569.200	0.0	55428.564	0.0
402.2729	26.00	-3.68	26479.366	1.0	51331.090	2.0
402.2730	62.01	-2.23	322.630	0.0	25181.370	0.0
402.2776	25.02	-4.25	115711.600	4.5	140563.030	3.5
402.2844	6.00	-2.65	60352.630	1.0	85203.640	2.0
402.2899	28.01	-2.70	93528.440	3.5	118379.110	2.5
402.2940	25.01	-1.73	82099.820	4.0	106950.240	3.0
402.2960	75.00	-.48	18793.202	0.0	43650.521	0.0
402.3034	26.01	-4.27	47674.780	1.5	72524.620	1.5
402.3034	23.00	-2.52	9636.960	1.5	34486.800	2.5
402.3063	28.01	-4.62	112686.300	2.5	137535.960	3.5
402.3140	41.00	.02	12905.203	0.0	37761.410	0.0
402.3140	45.00	-.54	14276.381	0.0	39132.588	0.0
402.3140	64.00	.11	1693.808	0.0	26550.015	0.0
402.3196	23.00	-2.53	15270.420	1.5	40119.260	2.5
402.3225	21.00	-.31	15672.550	1.5	40521.210	1.5
402.3230	62.01	-1.23	322.630	0.0	25178.281	0.0
402.3231	25.01	-4.31	56883.380	1.0	81732.000	1.0
402.3310	75.00	-1.21	14115.066	0.0	38970.223	0.0
402.3350	64.00	-.16	483.945	0.0	25338.854	0.0
402.3383	23.01	-.62	14556.090	4.0	39403.770	4.0
402.3400	27.00	-2.01	15774.040	1.5	40621.620	1.5
402.3406	18.01	-2.66	186815.960	3.5	211663.500	3.5
402.3411	21.00	-1.02	15756.510	2.5	40604.020	3.5
402.3529	18.02	-4.06	214346.700	1.0	239193.480	1.0
402.3568	23.01	-4.22	44098.460	3.0	68945.000	3.0
402.3590	57.01	-.62	14276.381	0.0	39129.808	0.0
402.3659	26.02	-2.96	199212.720	4.0	224058.700	4.0
402.3678	25.02	-2.80	115711.600	4.5	140557.460	4.5
402.3686	21.00	.36	168.340	2.5	25014.150	2.5
402.3719	25.00	-.82	34938.700	4.5	59784.310	3.5
402.3740	24.00	-.52	31364.330	3.0	56209.810	3.0
402.3753	8.01	-.87	251220.900	3.5	276066.300	2.5
402.3762	28.01	-2.16	76402.030	2.5	101247.370	2.5
402.3830	44.00	-1.27	1129.205	0.0	25981.150	0.0
402.3840	25.00	-1.38	41031.480	4.5	65876.340	3.5
402.3866	30.02	-3.06	260878.800	3.0	285723.500	3.0
402.3947	30.02	-3.83	257796.000	5.0	282640.200	5.0
402.3951	7.01	-2.12	186570.980	3.0	211415.160	2.0
402.3970	2.00	-2.58	171135.000	0.0	195986.080	0.0
402.3980	40.00	-.56	5484.711	0.0	30335.729	0.0
402.3989	27.00	-4.65	30102.960	2.5	54946.900	2.5
402.3992	28.00	-.90	29888.505	2.0	54732.425	2.0
402.4023	24.00	-3.45	27816.880	5.0	52660.610	6.0
402.4041	10.01	-2.74	283894.410	.5	308736.030	1.5
402.4090	42.00	-.39	16534.792	0.0	41385.131	0.0
402.4091	56.01	-2.29	48258.590	0.0	73108.923	0.0
402.4099	26.00	-2.55	22249.430	3.0	47092.693	3.0
402.4184	28.00	-2.50	31031.042	3.0	55873.780	2.0
402.4271	8.01	-1.02	251224.100	2.5	276066.300	1.5
402.4271	8.01	-2.22	251224.100	2.5	276066.300	2.5
402.4346	22.00	-3.04	17075.310	4.0	41917.050	4.0
402.4350	26.01	-4.33	73603.530	5.5	98445.240	4.5
402.4350	58.01	-.96	4436.164	0.0	29284.897	0.0
402.4425	28.01	-4.23	108368.050	2.5	133209.300	2.5
402.4440	40.01	-.88	7985.094	0.0	32833.272	0.0
402.4490	58.01	-.28	3710.246	0.0	28558.115	0.0
402.4550	26.01	-2.19	36252.960	2.5	61093.440	2.5
402.4556	23.00	-2.09	9636.960	1.5	34477.400	.5
402.4558	28.01	-4.51	112686.300	2.5	137526.730	2.5
402.4559	7.00	-2.59	86220.480	1.5	111060.905	.5
402.4569	24.00	-3.14	21847.880	2.0	46688.240	3.0
402.4572	22.00	-.96	386.874	4.0	25227.217	3.0
402.4631	18.01	-2.79	185624.730	3.5	210464.710	2.5
402.4644	25.02	-1.42	193756.790	4.5	218596.690	5.5
402.4650	24.00	-4.43	27163.200	0.0	52003.060	1.0
402.4660	10.01	-4.77	302935.310	4.5	327775.110	3.5
402.4711	7.01	-2.56	186570.980	3.0	211410.470	3.0
402.4714	26.00	-1.94	26140.164	3.0	50979.627	4.0
402.4726	27.00	-3.31	30443.630	1.5	55283.020	2.5
402.4727	9.01	.19	182864.400	1.0	207703.790	2.0
402.4764	22.00	-.58	16875.190	2.0	41714.350	2.0
402.4766	10.01	-4.63	302935.330	5.5	327774.480	4.5
402.4780	60.01	-1.51	483.945	0.0	25330.024	0.0
402.4798	23.00	-2.78	17181.980	4.5	42020.930	3.5
402.4804	26.02	-1.81	199212.720	4.0	224051.630	3.0
402.4871	19.01	-.57	188154.400	2.0	212992.900	1.0
402.4920	40.00	-.31	5162.081	0.0	30007.295	0.0
402.4933	16.01	-2.99	115870.400	1.5	140708.510	2.5
402.4952	25.01	-4.93	77842.090	6.0	102680.090	5.0
402.4999	24.00	-.03	20520.920	3.0	45358.630	4.0
402.5009	9.01	-.51	182864.400	1.0	207702.040	0.0
402.5016	26.02	-3.08	93512.640	4.0	118350.240	4.0
402.5067	22.00	-1.26	17369.590	1.0	42206.880	2.0
402.5101	28.00	-1.55	32973.414	4.0	57810.494	4.0
402.5113	12.02	-1.50	564289.800	1.0	589126.800	1.0
402.5138	22.01	-2.09	4897.600	3.5	29734.450	3.5
402.5150	58.01	-.86	3468.273	0.0	28312.068	0.0
402.5223	6.00	-2.87	60352.630	1.0	85188.950	1.0
402.5240	24.00	-4.08	27176.220	1.0	52012.440	2.0
402.5339	23.01	-3.20	30306.400	3.0	55142.010	3.0
402.5419	28.00	-1.23	29832.810	3.0	54667.928	4.0
402.5447	24.00	-.80	20523.690	4.0	45358.630	4.0
402.5470	17.01	-.81	121499.000	2.0	146333.800	2.0
402.5488	24.00	-2.28	20523.940	5.0	45358.630	4.0
402.5491	9.01	-.03	182864.400	1.0	207699.070	1.0
402.5498	27.00	-4.04	30742.650	.5	55577.280	1.5
402.5506	24.00	-2.54	20519.600	6.0	45354.180	5.0
402.5512	26.01	-2.28	75915.210	2.5	100749.750	2.5
402.5529	23.01	-3.02	22273.540	1.0	47107.980	1.0
402.5533	28.01	-3.17	105981.500	4.5	130815.910	3.5
402.5572	25.00	-2.85	34423.270	3.5	59257.440	4.5
402.5600	17.01	-.89	121635.000	3.0	146469.000	3.0
402.5608	2.01	-.85	411477.918	0.0	436318.886	0.0
402.5660	90.01	-.91	9678.902	0.0	34519.549	0.0
402.5666	26.02	-3.66	93412.930	2.0	118246.520	3.0
402.5681	13.01	-1.20	124792.000	2.0	149625.500	3.0
402.5692	23.00	-2.19	17116.920	3.5	41950.350	2.5
402.5713	17.01	-.85	149952.400	1.0	174785.700	1.0
402.5786	28.00	-1.35	31441.665	2.0	56274.516	2.0
402.5792	22.00	-4.93	19421.576	3.0	44254.390	3.0
402.5880	57.01	-1.62	2581.041	0.0	27420.331	0.0
402.5931	25.00	-1.49	30354.210	3.5	55186.170	2.5
402.5948	24.00	-1.88	31377.960	4.0	56209.810	3.0
402.5963	25.02	-3.38	193235.430	2.5	218067.190	2.5
402.6020	92.01	-1.85	2258.411	0.0	27096.837	0.0
402.6038	24.00	-3.62	21856.940	3.0	46686.240	3.0
402.6078	7.01	.28	186570.980	3.0	211402.030	4.0
402.6086	17.01	-.81	121499.000	2.0	146330.000	1.0
402.6160	90.01	-1.17	8307.725	0.0	33145.287	0.0
402.6169	24.00	.05	20523.690	4.0	45354.180	5.0
402.6172	24.00	-4.01	21847.880	2.0	46678.350	1.0
402.6200	2.00	-.37	169087.000	0.0	193924.316	0.0
402.6209	24.00	-.78	20523.940	5.0	45354.180	5.0
402.6219	23.00	-4.06	0.000	1.5	24830.180	1.5
402.6222	28.01	-.69	105861.190	2.5	130691.350	1.5
402.6262	12.00	-2.27	35051.264	1.0	59881.181	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
402.6281	13.01	-1.74	110087.500	2.0	134917.300	1.0
402.6289	8.01	-1.91	231296.050	1.5	256125.800	2.5
402.6307	25.01	-3.70	56883.380	1.0	81713.020	0.0
402.6374	28.00	-1.46	34163.294	2.0	58992.520	2.0
402.6381	24.00	-3.25	21847.880	2.0	46677.060	2.0
402.6389	24.00	-1.21	20519.600	6.0	45348.730	6.0
402.6433	25.00	-.51	25265.740	5.5	50094.600	6.5
402.6500	22.00	-7.89	6661.003	3.0	31489.451	4.0
402.6518	23.01	-4.21	22273.540	1.0	47101.880	2.0
402.6545	22.00	.35	17075.310	4.0	41903.480	5.0
402.6550	18.01	-4.57	184093.060	.5	208921.200	1.5
402.6613	28.01	-.46	104646.520	3.5	129474.270	3.5
402.6767	12.02	-.83	564300.000	0.0	589126.800	1.0
402.6793	6.00	-3.38	64086.920	3.0	88913.560	2.0
402.6895	26.02	-2.57	199212.720	4.0	224038.730	5.0
402.6906	26.00	-3.60	19552.474	1.0	44378.420	1.0
402.6930	8.02	-3.33	367952.200	1.0	392778.000	1.0
402.6940	73.00	-1.50	5968.656	0.0	30801.407	0.0
402.6954	24.00	-2.14	31049.330	6.0	55874.980	5.0
402.7025	27.00	-2.75	1406.840	2.5	26232.050	3.5
402.7026	29.00	-1.42	46136.101	0.0	70968.322	0.0
402.7050	58.01	-.97	6855.889	0.0	31687.962	0.0
402.7091	26.00	-2.88	33695.378	5.0	58520.180	4.0
402.7093	24.00	-.16	20523.940	5.0	45348.730	6.0
402.7105	25.00	-1.03	35165.050	1.5	59989.770	1.5
402.7200	40.00	-.23	5000.766	0.0	29831.914	0.0
402.7269	6.00	-4.74	64089.850	1.0	88913.560	2.0
402.7303	26.02	-4.84	182444.700	3.0	207268.200	4.0
402.7310	41.00	-.42	12179.286	0.0	37009.756	0.0
402.7319	24.00	-4.50	27176.220	1.0	51999.620	0.0
402.7322	23.01	-2.57	30318.630	4.0	55142.010	3.0
402.7324	28.01	-4.38	109038.840	1.5	133862.210	1.5
402.7340	15.01	-3.25	76813.220	1.0	101636.490	1.0
402.7447	6.00	-3.75	64090.950	2.0	88913.560	2.0
402.7501	18.01	-1.89	185624.730	3.5	210447.010	3.5
402.7523	28.01	-3.90	108368.050	2.5	133190.190	1.5
402.7551	24.00	-1.69	35807.900	2.0	60629.870	2.0
402.7610	64.00	-.68	967.890	0.0	25796.510	0.0
402.7667	28.00	-.46	31441.665	2.0	56262.920	3.0
402.7729	23.00	-2.52	25111.500	4.5	49932.370	4.5
402.7851	24.00	-3.16	21856.940	3.0	46677.060	2.0
402.7898	28.01	-1.71	105981.500	4.5	130801.330	4.5
402.7911	22.01	-2.33	41996.740	.5	66816.490	1.5
402.7931	24.00	-1.80	31055.350	5.0	55874.980	5.0
402.7980	41.00	-.33	12905.203	0.0	37731.543	0.0
402.7984	24.00	-2.94	23512.000	1.0	48331.300	1.0
402.8049	24.00	-2.04	24833.860	3.0	49652.760	2.0
402.8051	28.01	-4.07	109038.840	1.5	133857.730	.5
402.8093	24.00	-4.34	33906.650	1.0	58725.280	1.0
402.8101	27.00	-3.75	23207.760	1.5	48026.340	.5
402.8150	64.00	.76	6936.547	0.0	31761.839	0.0
402.8283	28.00	-1.08	34408.574	1.0	59226.030	1.0
402.8291	26.01	-3.90	73751.340	4.5	98568.750	3.5
402.8328	22.01	-.92	15257.530	4.5	40074.710	3.5
402.8361	6.00	-2.87	60352.630	1.0	85169.610	0.0
402.8410	58.01	-.43	2500.383	0.0	27324.073	0.0
402.8418	23.00	-2.53	15770.720	4.5	40587.350	3.5
402.8423	13.01	-3.77	121480.900	2.0	146297.500	1.0
402.8431	26.02	-4.09	88923.070	6.0	113739.620	6.0
402.8459	14.01	-.36	84004.520	1.5	108820.900	2.5
402.8461	24.00	-2.56	24833.860	3.0	49650.220	3.0
402.8472	13.01	-4.25	121481.200	1.0	146297.500	1.0
402.8488	28.00	-1.02	32973.414	4.0	57789.611	4.0
402.8497	24.00	-.74	35813.730	3.0	60629.870	2.0
402.8504	29.01	-4.13	116388.000	2.0	141204.100	3.0
402.8530	75.00	-.35	22987.393	0.0	47810.343	0.0
402.8590	25.00	-1.90	25265.740	5.5	50081.310	5.5
402.8635	28.01	-3.92	95017.710	4.5	119833.000	5.5
402.8650	42.00	-.27	21051.613	0.0	45873.824	0.0
402.8658	27.00	-2.95	28845.220	5.5	53660.370	5.5
402.8756	10.01	-2.56	283322.350	1.5	308136.890	1.5
402.8777	16.01	.05	128599.110	3.5	153413.520	3.5
402.8790	74.00	-1.24	9436.930	0.0	34258.278	0.0
402.8881	18.01	-1.45	185624.730	3.5	210438.500	4.5
402.8932	25.00	-3.20	27201.540	2.5	52015.000	3.5
402.8950	40.00	-.95	4113.534	0.0	28933.897	0.0
402.9072	28.01	-3.19	109846.000	3.5	134658.600	4.5
402.9089	15.01	-4.86	76824.000	0.0	101636.490	1.0
402.9138	25.00	-4.02	24779.320	1.5	49591.510	1.5
402.9182	23.00	-3.73	8715.720	3.5	33527.640	2.5
402.9262	28.01	-4.75	112719.750	3.5	137531.180	4.5
402.9275	28.00	-1.63	29888.505	2.0	54699.852	3.0
402.9320	76.00	.48	30407.885	0.0	55225.968	0.0
402.9413	6.00	-2.19	60393.140	2.0	85203.640	2.0
402.9460	27.00	-4.50	26232.050	3.5	51042.260	2.5
402.9481	27.00	-4.34	18389.570	1.5	43199.650	2.5
402.9504	22.01	-2.45	40074.710	3.5	64884.650	2.5
402.9509	25.02	-2.06	193498.070	3.5	218307.980	2.5
402.9622	26.00	-3.26	26339.682	2.0	51148.892	2.0
402.9626	26.00	-3.21	26339.682	2.0	51148.870	3.0
402.9630	75.00	-1.22	13711.778	0.0	38527.952	0.0
402.9639	22.01	-3.13	15265.600	3.5	40074.710	3.5
402.9671	22.00	-4.41	11531.760	2.0	36340.670	2.0
402.9680	40.01	-.65	5726.684	0.0	30542.550	0.0
402.9710	24.00	-4.44	27223.050	2.0	52031.720	3.0
402.9829	24.00	-3.00	35807.900	2.0	60615.840	3.0
402.9863	26.00	-3.03	34017.084	1.0	58824.810	2.0
402.9894	23.00	-2.29	323.420	3.5	25130.960	2.5
402.9900	12.02	-2.37	535179.600	2.0	559987.100	1.0
402.9942	23.01	-7.38	12545.150	4.0	37352.390	5.0
402.9950	22.00	-4.00	19573.968	4.0	44381.160	4.0
403.0006	25.00	-3.84	25265.740	5.5	50072.590	4.5
403.0040	40.00	-.56	4839.451	0.0	29653.100	0.0
403.0079	30.02	-2.20	258171.200	5.0	282977.600	4.0
403.0115	23.00	-1.94	15078.250	.5	39884.430	1.5
403.0160	58.01	-.68	10001.532	0.0	34814.443	0.0
403.0185	26.00	-1.66	17726.985	2.0	42532.729	3.0
403.0282	9.02	-.94	441385.880	1.5	466191.030	2.5
403.0295	18.01	-2.50	190106.230	1.5	214911.300	2.5
403.0297	29.01	-1.48	123556.640	2.0	148361.700	1.0
403.0303	25.00	-.71	37586.030	1.5	62391.050	.5
403.0340	58.01	-.97	2339.068	0.0	27150.870	0.0
403.0380	38.00	-.24	14760.326	0.0	39571.882	0.0
403.0391	24.01	-3.15	25033.950	3.5	49838.430	4.5
403.0441	25.00	-1.98	37586.030	1.5	62390.200	1.5
403.0453	24.00	-1.12	37233.500	5.0	62037.600	5.0
403.0470	60.01	-1.31	1451.835	0.0	26262.837	0.0
403.0479	26.00	-1.85	25899.974	4.0	50703.912	5.0
403.0505	22.00	.47	17215.440	5.0	42019.220	6.0
403.0508	28.01	-4.57	112719.750	3.5	137523.510	3.5
403.0557	25.00	-3.66	24788.050	2.5	49591.510	1.5
403.0566	30.02	-2.36	237642.700	3.0	262446.100	3.0
403.0599	15.01	-2.23	107361.100	3.0	132164.300	2.0
403.0680	24.00	-.14	31352.420	1.0	56155.120	2.0
403.0701	22.00	-2.52	17215.440	5.0	42018.010	5.0
403.0753	25.00	-.55	0.000	2.5	24802.250	3.5
403.0776	24.00	-1.47	35813.730	3.0	60615.840	3.0
403.0789	27.00	-1.50	30102.960	2.5	54904.990	2.5
403.0794	24.00	-4.91	35572.940	2.0	60374.940	2.0
403.0815	28.01	-1.79	108368.050	2.5	133169.920	3.5
403.0830	22.01	-2.91	12628.770	1.5	37430.550	.5
403.0840	90.00	-.81	2823.013	0.0	27631.738	0.0
403.0843	13.01	-1.39	123415.900	2.0	148217.600	3.0
403.0880	64.00	.66	6936.547	0.0	31745.026	0.0
403.0893	26.00	-1.18	29798.960	4.0	54600.350	3.0
403.0900	22.01	-1.97	43780.990	4.5	68582.340	5.5
403.1000	44.00	-1.46	6452.602	0.0	31260.342	0.0
403.1134	24.00	-.66	31355.210	2.0	56155.120	2.0
403.1184	13.01	-2.45	123418.000	3.0	148217.600	3.0
403.1184	13.01	-1.48	123418.000	3.0	148217.600	4.0
403.1184	13.01	-1.70	123418.000	3.0	148217.600	4.0
403.1203	28.01	-4.80	112719.750	3.5	137519.230	2.5
403.1233	30.02	-2.69	258178.300	4.0	282977.600	4.0
403.1243	26.00	-1.33	24335.764	2.0	49135.003	3.0
403.1290	23.00	-3.94	15264.830	5.5	40063.780	5.5
403.1340	58.01	-.43	2500.383	0.0	27306.031	0.0
403.1353	14.03	-.95	305641.100	.5	330439.660	.5
403.1368	21.00	-.19	15756.510	2.5	40554.980	2.5
403.1379	18.01	-2.26	159393.310	1.5	184191.710	.5
403.1441	26.01	-3.13	38164.240	2.5	62962.260	1.5
403.1639	13.01	-4.25	123420.800	4.0	148217.600	3.0
403.1639	13.01	-2.69	123420.800	4.0	148217.600	4.0
403.1639	13.01	-2.83	123420.800	4.0	148217.600	4.0
403.1639	13.01	-1.16	123420.800	4.0	148217.600	5.0
403.1690	57.01	-.57	2581.041	0.0	27364.535	0.0
403.1701	26.02	-3.39	157684.300	2.0	182480.720	2.0
403.1703	28.01	-1.79	105439.850	1.5	130236.260	2.5
403.1722	23.00	-2.49	24992.880	3.5	49789.170	3.5
403.1727	26.02	-3.11	199262.440	3.0	224058.700	4.0
403.1731	26.00	-3.46	24338.766	3.0	49135.003	3.0
403.1737	13.01	-2.19	121480.300	3.0	146276.500	3.0
403.1755	28.01	-3.20	109846.000	3.5	134642.090	3.5
403.1760	59.01	-.86	1613.150	0.0	26416.214	0.0
403.1761	22.00	-.49	16961.420	3.0	41757.470	3.0
403.1789	25.00	-.63	25285.430	4.5	50081.310	5.5
403.1800	6.00	-2.79	60393.140	2.0	85188.950	1.0
403.1835	13.01	-1.29	121480.900	2.0	146276.500	3.0
403.1924	22.00	-1.28	20062.980	1.0	44858.030	1.0
403.1942	23.00	-1.40	9824.580	2.5	34619.520	2.5
403.1958	26.00	-.75	26406.490	1.0	51201.330	2.0
403.1982	28.01	-2.29	104503.220	2.5	129297.910	3.5
403.2027	18.01	-3.80	183797.360	2.5	208591.780	1.5
403.2086	26.00	-4.30	19621.004	5.0	44415.057	4.0
403.2106	16.02	-2.51	148397.800	1.0	173191.730	2.0
403.2158	27.00	-3.91	30102.960	2.5	54896.570	3.5
403.2187	24.00	-2.33	37244.170	4.0	62037.600	5.0
403.2190	24.00	-3.61	33934.880	3.0	58728.290	4.0
403.2200	44.00	-1.68	2661.698	0.0	27462.055	0.0
403.2218	25.00	-.71	34938.700	4.5	59731.940	4.5
403.2222	8.01	-1.62	231350.080	2.5	256143.300	3.5
403.2225	16.00	-2.37	55329.861	1.0	80123.060	0.0
403.2268	23.00	-3.50	14548.830	2.5	39341.760	3.5
403.2270	72.00	-1.83	2339.068	0.0	27138.995	0.0
403.2345	28.01	-2.04	68735.980	2.5	93528.440	3.5
403.2371	30.02	-4.24	258178.300	4.0	282970.600	3.0
403.2380	38.00	-.87	14760.326	0.0	39559.576	0.0
403.2395	26.00	-2.67	29320.050	1.0	54112.203	2.0
403.2452	23.00	-3.01	9636.960	1.5	34428.760	1.5
403.2493	8.01	-1.94	231296.050	1.5	256087.600	2.5
403.2500	42.00	-.99	16615.449	0.0	41413.961	0.0
403.2520	41.00	-.39	2742.356	0.0	27540.745	0.0
403.2535	28.01	-3.39	104503.220	2.5	129294.510	2.5
403.2600	29.01	-2.04	120092.200	2.0	144883.090	2.0
403.2617	24.00	-1.93	31364.330	3.0	56155.120	2.0
403.2625	22.00	-1.28	21739.713	5.0	46530.450	4.0
403.2629	26.00	-2.56	11976.239	4.0	36766.950	3.0
403.2662	18.01	-2.38	186815.960	3.5	211606.470	3.5
403.2683	10.01	-4.78	303527.740	4.5	328318.120	3.5
403.2691	25.00	-.43	41230.300	3.5	66020.630	2.5
403.2706	9.02	-.68	441406.460	3.5	466196.700	3.5
403.2745	8.03	-.02	600092.000	1.5	624882.000	2.5
403.2747	22.00	-1.51	22404.690	3.0	47194.680	4.0
403.2794	27.02	-4.28	146950.700	2.5	171740.400	1.5
403.2794	27.02	-4.28	146950.700	2.5	171740.400	1.5
403.2805	24.00	-1.52	33935.650	2.0	58725.280	1.0
403.2808	16.01	.17	131028.760	1.5	155818.370	2.5
403.2818	16.00	-1.90	55329.861	1.0	80119.410	1.0
403.2839	10.01	-4.50	303528.530	3.5	328317.950	2.5
403.2849	23.00	-2.77	0.000	1.5	24789.360	.5
403.2890	21.00	-1.19	15881.760	3.5	40670.870	4.5
403.2903	25.02	-4.74	115774.000	3.5	140563.030	3.5
403.2920	76.00	.26	23874.626	0.0	48670.556	0.0
403.2937	26.01	-3.94	36252.960	2.5	61041.780	2.5
403.2952	25.02	-.54	192172.890	2.5	216961.620	3.5
403.2973	30.02	-2.22	260623.100	4.0	285411.700	3.0
403.2980	31.00	-.62	0.000	0.0	24795.561	0.0
403.2987	26.00	-4.22	29469.010	2.0	54257.520	2.0
403.3020	27.00	-3.86	1809.330	1.5	26597.640	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
403.3057	23.00	-4.93	323.420	3.5	25111.500	4.5
403.3062	25.00	-.70	0.000	2.5	24788.050	2.5
403.3070	73.00	-1.15	11695.340	0.0	36490.347	0.0
403.3098	22.01	-1.74	42208.840	2.5	66996.670	3.5
403.3160	8.01	-.85	231296.050	1.5	256083.500	1.5
403.3188	26.00	-2.96	20641.110	4.0	45428.385	4.0
403.3200	41.00	-2.16	1129.205	0.0	25923.413	0.0
403.3207	25.00	-1.79	25285.430	4.5	50072.590	4.5
403.3228	6.00	-2.28	64086.920	3.0	88873.950	2.0
403.3234	9.02	-4.98	466608.570	5.5	491395.560	5.5
403.3258	24.00	-.73	20519.600	6.0	45306.450	5.0
403.3261	24.00	-3.21	24833.860	3.0	49620.690	4.0
403.3298	19.02	-2.68	212725.400	1.5	237512.000	2.5
403.3310	75.00	-.77	14921.641	0.0	39715.173	0.0
403.3363	30.02	-3.89	260805.900	2.0	285592.100	2.0
403.3383	25.01	-2.89	82099.820	4.0	106885.900	4.0
403.3430	92.01	-1.29	4355.506	0.0	29148.300	0.0
403.3440	23.00	-3.82	14514.750	1.5	39300.480	2.5
403.3444	22.00	-2.38	6842.964	5.0	31628.668	5.0
403.3490	64.00	.60	7178.519	0.0	31970.944	0.0
403.3520	28.00	-3.98	32982.280	1.0	57767.520	1.0
403.3550	51.00	-1.26	18309.257	0.0	43101.314	0.0
403.3583	25.00	-.75	25287.740	3.5	50072.590	4.5
403.3628	9.02	-2.07	441406.460	3.5	466191.030	2.5
403.3630	42.00	-.45	21051.613	0.0	45843.178	0.0
403.3630	73.00	-3.05	1935.780	0.0	26727.345	0.0
403.3653	25.00	-.86	25281.040	2.5	50065.460	3.5
403.3684	15.01	-4.14	103166.370	1.0	127950.600	2.0
403.3705	6.00	-4.73	64089.850	1.0	88873.950	2.0
403.3760	28.01	-2.43	105981.500	4.5	130765.260	3.5
403.3760	77.00	-.33	12985.861	0.0	37776.627	0.0
403.3809	25.02	-4.74	115774.000	3.5	140557.460	4.5
403.3812	18.01	-.52	158167.710	1.5	182951.150	.5
403.3860	59.01	-.57	2984.328	0.0	27774.479	0.0
403.3880	22.00	-3.01	17423.853	2.0	42206.880	2.0
403.3884	6.00	-3.30	64090.950	2.0	88873.950	2.0
403.3917	25.02	-4.07	115780.230	2.5	140563.030	3.5
403.3923	24.00	-1.98	20523.690	4.0	45306.450	5.0
403.3951	28.00	-2.55	27414.893	2.0	52197.482	3.0
403.3964	24.00	-3.05	20523.940	5.0	45306.450	5.0
403.4003	16.00	-1.69	55329.861	1.0	80112.130	2.0
403.4010	60.01	-2.21	483.945	0.0	25273.175	0.0
403.4049	20.00	-2.34	23652.304	1.0	48434.290	2.0
403.4068	22.01	-2.95	20891.880	3.5	45673.750	4.5
403.4081	23.00	-3.98	8578.520	2.5	33360.310	3.5
403.4090	40.01	-1.58	6371.944	0.0	31160.682	0.0
403.4117	26.00	-2.46	26627.612	4.0	51409.180	4.0
403.4141	28.01	-3.89	111120.540	1.5	135901.960	2.5
403.4164	28.01	-3.34	104503.220	2.5	129284.500	2.5
403.4229	26.01	-4.11	38164.240	2.5	62945.120	3.5
403.4250	90.01	-1.52	6129.972	0.0	30917.727	0.0
403.4300	59.01	-1.36	1693.808	0.0	26481.256	0.0
403.4368	25.00	-3.73	25285.430	4.5	50065.460	3.5
403.4371	24.00	-4.18	27223.050	2.0	52003.060	1.0
403.4456	27.00	-.45	29735.180	3.5	54514.670	3.5
403.4483	25.00	-.90	0.000	2.5	24779.320	1.5
403.4500	92.00	-.27	4355.506	0.0	29141.725	0.0
403.4661	18.01	-2.55	186890.950	2.5	211669.180	2.5
403.4734	23.00	-2.73	137.380	2.5	24915.160	1.5
403.4744	25.00	-1.92	25287.740	3.5	50065.460	3.5
403.4783	18.01	-1.25	186815.960	3.5	211593.440	4.5
403.4894	22.00	-2.95	17369.590	1.0	42146.390	1.0
403.4926	13.01	-1.32	124792.000	2.0	149568.600	3.0
403.4970	25.00	-1.30	35041.370	3.5	59817.700	2.5
403.5022	28.01	-2.58	105981.500	4.5	130757.510	4.5
403.5024	8.03	.13	600106.000	2.5	624882.000	3.5
403.5024	8.03	-1.17	600106.000	2.5	624882.000	2.5
403.5070	8.01	-1.13	231350.080	2.5	256125.800	2.5
403.5081	7.01	.56	186511.580	2.0	211287.230	3.0
403.5100	41.00	-.29	13308.491	0.0	38091.024	0.0
403.5110	62.01	-1.03	2661.698	0.0	27444.170	0.0
403.5177	24.00	-1.89	27816.880	5.0	52591.940	5.0
403.5178	22.00	-5.24	6598.749	2.0	31373.801	3.0
403.5185	25.00	-1.51	38669.600	3.5	63444.610	4.5
403.5210	28.01	-4.89	109148.050	4.5	133922.910	4.5
403.5241	22.00	-3.71	11639.804	3.0	36414.470	3.0
403.5244	26.00	-3.88	29056.312	3.0	53830.960	3.0
403.5272	14.01	-1.30	84004.520	1.5	108779.000	1.5
403.5285	18.01	-2.95	189414.960	3.5	214189.360	4.5
403.5330	23.00	-2.36	15264.830	5.5	40038.950	4.5
403.5360	74.00	-1.12	15324.929	0.0	40105.866	0.0
403.5366	25.01	-2.57	82193.040	2.0	106966.940	2.0
403.5400	64.00	-.57	161.315	0.0	24942.006	0.0
403.5425	26.02	.13	166144.630	2.0	190918.170	3.0
403.5462	18.01	-.77	148620.070	1.5	173393.380	2.5
403.5503	28.01	-1.46	104646.520	3.5	129419.580	4.5
403.5510	8.01	-4.01	231350.080	2.5	256123.100	3.5
403.5535	27.00	.41	28845.220	5.5	53618.080	6.5
403.5535	26.01	-5.86	20516.980	2.5	45289.840	1.5
403.5566	23.00	-1.11	15664.750	1.5	40437.420	1.5
403.5586	18.01	-3.32	186890.950	2.5	211663.500	3.5
403.5623	23.01	-.73	14461.730	3.0	39234.050	3.0
403.5659	15.01	-1.91	107361.100	3.0	132133.200	3.0
403.5719	25.00	-.19	17282.000	3.5	42053.730	2.5
403.5741	30.02	-2.43	260981.900	3.0	285753.500	2.0
403.5741	25.03	-3.60	152858.200	3.0	177629.800	2.0
403.5820	26.02	-3.20	93392.450	3.0	118163.560	2.0
403.5821	22.00	-1.34	17540.205	3.0	42311.310	3.0
403.5889	22.01	-2.41	41996.740	.5	66767.430	.5
403.5890	40.00	-1.10	1209.863	0.0	25987.545	0.0
403.5890	73.00	-1.37	10888.765	0.0	35666.447	0.0
403.5900	24.00	-2.92	37205.880	3.0	61976.500	4.0
403.5900	23.00	-3.51	0.000	1.5	24770.620	.5
403.5930	41.00	-.04	15324.929	0.0	40102.366	0.0
403.5947	28.00	-3.97	29481.020	4.0	54251.353	3.0
403.5972	28.00	-1.17	32973.414	4.0	57743.596	3.0
403.5972	27.00	-4.21	23207.760	1.5	47977.940	.5
403.5977	18.01	-3.50	186815.960	3.5	211586.110	2.5
403.5983	26.00	-4.30	24338.766	3.0	49108.876	4.0
403.6029	18.01	-4.26	189414.960	3.5	214184.790	3.5
403.6036	9.01	-3.91	270508.290	2.0	295276.080	1.0
403.6041	9.02	-4.80	466637.990	4.5	491407.750	4.5
403.6050	90.00	-1.16	0.000	0.0	24776.700	0.0
403.6054	9.02	-4.76	466722.420	2.5	491492.100	2.5
403.6054	9.02	-4.06	466722.420	2.5	491492.100	3.5
403.6063	29.01	-3.54	110365.980	2.0	135135.600	1.0
403.6078	28.01	-1.16	105981.500	4.5	130751.030	5.5
403.6080	25.01	-2.08	82193.040	2.0	106962.560	1.0
403.6166	23.00	-.45	15078.250	.5	39847.240	1.5
403.6207	25.01	-3.55	82117.160	5.0	106885.900	4.0
403.6208	25.00	-.62	37586.030	1.5	62354.760	1.5
403.6223	24.00	-2.73	39158.630	4.0	63927.270	5.0
403.6241	15.01	-.77	103166.370	1.0	127934.900	1.0
403.6246	28.01	-1.34	104503.220	2.5	129271.720	3.5
403.6316	25.00	-1.72	37737.220	3.5	62505.290	3.5
403.6340	66.01	-.95	4274.849	0.0	29049.769	0.0
403.6347	9.00	-3.32	129659.500	3.5	154427.380	4.5
403.6361	9.01	-2.50	270508.290	2.0	295276.060	2.0
403.6370	26.00	-3.13	22249.430	3.0	47017.170	3.0
403.6419	26.00	-3.11	32873.623	4.0	57641.060	3.0
403.6490	25.00	-3.63	27248.000	1.5	52015.000	1.5
403.6539	17.01	-.75	150019.000	0.0	174785.700	1.0
403.6544	22.00	-4.83	11531.760	2.0	36298.430	1.0
403.6560	90.01	-1.82	1774.465	0.0	26548.035	0.0
403.6562	25.00	-1.10	30419.610	2.5	55186.170	2.5
403.6590	28.01	-4.43	112422.190	5.5	137188.580	4.5
403.6590	57.01	-1.83	7339.834	0.0	32113.219	0.0
403.6697	23.00	-2.69	8715.720	3.5	33481.450	3.5
403.6777	23.01	-1.57	11908.270	2.0	36673.510	2.0
403.6790	24.00	-2.20	20520.920	3.0	45286.080	4.0
403.6840	64.00	.16	7178.519	0.0	31950.370	0.0
403.6842	24.01	-3.93	39684.000	3.5	64448.840	2.5
403.6860	74.00	-.05	19115.832	0.0	43887.561	0.0
403.6865	21.00	-.93	15756.510	2.5	40521.210	1.5
403.6897	9.02	.36	441276.720	2.5	466041.220	3.5
403.6943	24.00	-3.30	24833.860	3.0	49598.080	2.0
403.7011	15.01	-2.65	86744.700	1.0	111508.500	0.0
403.7012	30.02	-2.64	258075.700	3.0	282839.500	3.0
403.7012	30.02	-3.27	257491.100	0.0	282254.900	1.0
403.7100	62.01	-1.70	2177.753	0.0	26948.009	0.0
403.7115	26.00	-3.63	33946.920	2.0	58710.090	3.0
403.7130	26.00	-3.99	19788.248	4.0	44551.325	3.0
403.7191	27.00	-2.52	18775.010	.5	43537.710	1.5
403.7210	57.00	-.86	0.000	0.0	24769.581	0.0
403.7214	9.01	-1.71	270508.290	2.0	295270.850	3.0
403.7242	24.00	-1.77	20523.690	4.0	45286.080	4.0
403.7251	25.00	-3.78	38351.780	.5	63114.110	1.5
403.7273	25.00	-1.69	37630.620	4.5	62392.820	4.5
403.7282	24.00	-.76	20523.940	5.0	45286.080	4.0
403.7300	42.00	-.47	20809.640	0.0	45578.669	0.0
403.7330	64.01	-.12	5242.739	0.0	30011.584	0.0
403.7390	58.01	-.85	8711.012	0.0	33479.489	0.0
403.7395	9.02	-1.12	441276.720	2.5	466038.170	2.5
403.7408	28.01	-3.85	109846.000	3.5	134607.370	4.5
403.7411	23.00	-4.76	137.380	2.5	24898.730	2.5
403.7490	75.00	-1.06	15082.956	0.0	39850.819	0.0
403.7556	25.00	-1.32	30425.710	1.5	55186.170	2.5
403.7566	26.02	-4.84	157684.300	2.0	182444.700	3.0
403.7582	12.02	-.79	582074.400	2.0	606834.700	2.0
403.7670	58.01	-.42	5887.999	0.0	30654.758	0.0
403.7740	44.00	-1.44	9517.587	0.0	34283.917	0.0
403.7780	42.00	-.17	20809.640	0.0	45575.724	0.0
403.7806	26.01	-3.98	83871.310	4.5	108630.240	5.5
403.7823	26.00	-4.83	22996.661	4.0	47755.485	3.0
403.7827	28.01	-4.22	96535.870	3.5	121294.670	4.5
403.7840	76.00	-1.88	5726.684	0.0	30492.400	0.0
403.7900	64.01	-.53	4436.164	0.0	29201.512	0.0
403.7961	7.01	-1.52	186652.490	4.0	211410.470	3.0
403.7980	27.00	-3.40	16467.900	4.5	41225.760	4.5
403.8013	24.01	-.80	52321.300	4.5	77078.960	5.5
403.8028	9.02	-3.85	466637.990	4.5	491395.560	4.5
403.8028	9.02	-2.40	466637.990	4.5	491395.560	5.5
403.8039	12.02	-3.96	584354.100	2.0	609111.600	3.0
403.8052	28.01	-3.92	74283.330	.5	99040.750	1.5
403.8057	14.03	-.65	305682.270	1.5	330439.660	.5
403.8080	42.00	-.52	16534.792	0.0	41299.036	0.0
403.8088	25.01	-4.17	82193.040	2.0	106950.240	3.0
403.8100	62.01	-1.63	3468.273	0.0	28232.395	0.0
403.8120	60.01	-1.49	1451.835	0.0	26215.834	0.0
403.8121	12.02	-.19	582134.800	4.0	606891.800	4.0
403.8214	24.00	-4.72	35618.510	1.0	60374.940	2.0
403.8235	12.02	-1.73	582134.800	4.0	606891.100	3.0
403.8235	12.02	.41	582074.400	2.0	606830.700	3.0
403.8250	58.01	-.11	10808.108	0.0	35571.310	0.0
403.8265	28.00	-2.18	29481.020	4.0	54237.136	4.0
403.8378	26.00	-4.47	29356.780	2.0	54112.203	2.0
403.8453	26.01	-3.35	47674.780	1.5	72429.740	.5
403.8470	59.01	-1.06	0.000	0.0	24761.853	0.0
403.8502	20.02	-.50	323003.560	1.0	347758.220	2.0
403.8555	23.01	-2.52	22273.540	1.0	47027.880	0.0
403.8617	26.00	-3.68	27543.000	1.0	52296.960	2.0
403.8617	23.00	-4.05	26122.040	3.5	50876.000	4.5
403.8631	23.00	-2.63	15571.900	2.5	40325.770	2.5
403.8640	76.00	-.50	18954.517	0.0	43715.328	0.0
403.8674	9.00	-2.29	104731.050	1.5	129484.660	1.5
403.8723	25.00	-.74	30354.210	3.5	55107.520	3.5
403.8770	24.00	-.50	35862.820	4.0	60615.840	3.0
403.8785	22.00	-1.90	16961.420	3.0	41714.350	2.0
403.8808	18.01	-1.65	132481.140	2.5	157233.930	3.5
403.8827	24.00	-2.20	24897.550	4.0	49650.220	3.0
403.8961	23.00	-2.06	14514.750	1.5	39266.600	1.5
403.8972	25.00	-4.29	23549.200	2.5	48300.980	1.5
403.8994	23.00	-2.58	14548.830	2.5	39300.480	2.5
403.9021	26.02	-3.73	199300.150	2.0	224051.630	3.0
403.9035	28.00	-3.41	15609.861	2.0	40361.254	3.0
403.9083	24.00	.49	31048.000	7.0	55799.100	7.0
403.9100	41.00	-.41	11453.368	0.0	36211.359	0.0
403.9132	12.02	-.94	559987.100	1.0	584737.900	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
403.9132	12.02	-.94	559987.100	1.0	584737.900	2.0
403.9160	26.02	-2.52	93412.930	2.0	118163.560	2.0
403.9210	44.00	.08	14599.011	0.0	39356.327	0.0
403.9240	25.00	-.71	37737.220	3.5	62487.360	2.5
403.9300	24.00	-.67	31049.330	6.0	55799.100	7.0
403.9304	27.00	-2.85	22475.360	4.5	47225.110	3.5
403.9328	25.02	-4.14	193756.790	4.5	218506.390	3.5
403.9338	7.01	-.89	186652.490	4.0	211402.030	4.0
403.9345	13.01	-1.68	123468.100	3.0	148217.600	4.0
403.9345	13.01	-1.46	123468.100	3.0	148217.600	4.0
403.9360	59.01	-1.05	1613.150	0.0	26369.547	0.0
403.9394	6.00	-2.87	64086.920	3.0	88836.120	3.0
403.9450	28.01	-3.57	106283.160	2.5	131032.010	2.5
403.9488	23.00	-.65	15688.800	2.5	40437.420	1.5
403.9530	41.00	.23	12905.203	0.0	37660.558	0.0
403.9566	23.01	-1.89	14655.630	5.0	39403.770	4.0
403.9609	22.00	-2.70	17075.310	4.0	41823.190	3.0
403.9628	26.01	-4.95	38214.500	1.5	62962.260	1.5
403.9648	22.01	-2.38	42068.850	1.5	66816.490	1.5
403.9653	23.00	-4.34	26004.220	2.5	50751.830	3.5
403.9674	25.01	-3.67	43536.900	4.0	68284.380	3.0
403.9795	24.00	-4.13	24093.160	2.0	48839.900	1.0
403.9802	22.00	-2.87	6742.757	4.0	31489.451	4.0
403.9830	39.00	-.95	0.000	0.0	24753.517	0.0
403.9860	74.00	-.21	18873.860	0.0	43627.193	0.0
403.9870	26.00	-3.99	26627.612	4.0	51373.894	5.0
403.9890	58.01	-.67	8711.012	0.0	33464.161	0.0
403.9941	26.00	-3.09	21999.132	4.0	46744.975	3.0
404.0028	24.00	-4.87	35870.530	4.0	60615.840	3.0
404.0030	27.01	-2.71	27484.300	3.0	52229.600	2.0
404.0052	6.00	-3.78	64090.950	2.0	88836.120	3.0
404.0080	77.00	-1.66	5726.684	0.0	30478.669	0.0
404.0240	40.01	-1.45	7420.492	0.0	32171.497	0.0
404.0304	23.00	-1.09	17116.920	3.5	41860.540	4.5
404.0308	30.02	-2.99	257908.200	1.0	282651.800	1.0
404.0342	22.00	-.54	17075.310	4.0	41818.700	4.0
404.0406	24.00	-1.47	37233.500	5.0	61976.500	4.0
404.0417	23.00	-4.86	15571.900	2.5	40314.830	3.5
404.0470	41.00	-1.67	2097.096	0.0	26846.692	0.0
404.0471	28.01	-3.08	76402.030	2.5	101144.630	3.5
404.0480	44.00	.07	22422.791	0.0	47172.326	0.0
404.0587	27.00	-1.26	29735.180	3.5	54477.070	3.5
404.0590	74.00	-.61	19519.120	0.0	44267.981	0.0
404.0634	30.02	-3.34	260981.900	3.0	285723.500	3.0
404.0638	26.00	-.86	26623.726	2.0	51365.300	3.0
404.0668	27.00	-4.25	21215.900	.5	45957.290	.5
404.0726	24.00	-2.08	24286.540	1.0	49027.580	2.0
404.0760	58.01	.09	3548.931	0.0	28296.751	0.0
404.0764	28.00	-2.47	29013.228	2.0	53754.036	2.0
404.0786	27.00	-1.67	18389.570	1.5	43130.240	.5
404.0800	60.01	-.44	1451.835	0.0	26199.410	0.0
404.0810	67.00	.29	0.000	0.0	24747.513	0.0
404.0839	26.00	-3.37	29371.860	3.0	54112.203	2.0
404.0863	17.01	-1.93	146469.000	3.0	171209.200	2.0
404.0870	73.00	-1.75	5565.369	0.0	30312.515	0.0
404.0917	25.02	-4.06	193235.430	2.5	217975.300	2.5
404.0925	28.01	-4.96	74300.930	1.5	99040.750	1.5
404.0940	79.00	-1.21	21293.585	0.0	46040.302	0.0
404.1031	24.00	-2.82	24833.860	3.0	49573.030	4.0
404.1060	73.00	-2.60	0.000	0.0	24745.982	0.0
404.1101	26.02	-4.56	182379.860	5.0	207118.600	5.0
404.1120	42.00	.01	27584.872	0.0	52330.487	0.0
404.1183	26.02	-3.78	182379.860	5.0	207118.100	6.0
404.1204	24.00	-2.52	20517.400	2.0	45255.510	3.0
404.1222	30.02	-4.13	258239.600	4.0	282977.600	4.0
404.1270	58.01	-.89	5887.999	0.0	30632.696	0.0
404.1273	26.00	-2.10	26627.612	4.0	51365.300	3.0
404.1300	8.01	-.77	231350.080	2.5	256087.600	2.5
404.1310	7.01	.88	186652.490	4.0	211389.950	5.0
404.1332	25.00	-.25	41031.480	4.5	65768.810	4.5
404.1351	28.01	-4.48	105499.050	3.5	130236.260	2.5
404.1355	25.00	.28	17052.290	4.5	41789.480	4.5
404.1490	22.00	-2.50	14028.470	2.0	38764.832	3.0
404.1506	23.00	-.87	17181.980	4.5	41918.240	5.5
404.1605	23.01	-3.16	30613.970	4.0	55349.630	3.0
404.1632	28.01	-4.82	111783.790	3.5	136519.280	4.5
404.1636	26.01	-3.22	44915.070	3.5	69650.540	2.5
404.1640	40.00	.01	15082.956	0.0	39825.387	0.0
404.1680	62.01	-1.27	1451.835	0.0	26194.021	0.0
404.1696	30.02	-2.27	260988.400	4.0	285723.500	3.0
404.1779	24.00	-1.60	20520.920	3.0	45255.510	3.0
404.1838	26.01	-6.82	18886.750	.5	43620.980	1.5
404.1851	23.00	-1.54	14514.750	1.5	39248.900	1.5
404.1871	15.01	-1.82	103166.370	1.0	127900.400	0.0
404.1895	26.02	-3.80	93512.640	4.0	118246.520	3.0
404.1920	76.00	.23	19277.147	0.0	44017.864	0.0
404.1971	8.01	-1.35	231350.080	2.5	256083.500	1.5
404.2015	25.00	-3.80	27281.850	.5	52015.000	1.5
404.2045	26.00	-2.36	19552.474	1.0	44285.436	2.0
404.2140	58.01	-.83	8872.327	0.0	33611.698	0.0
404.2149	24.00	-2.35	37244.170	4.0	61976.500	4.0
404.2220	40.00	-.09	11130.738	0.0	35869.619	0.0
404.2232	24.00	-.88	20523.690	4.0	45255.510	3.0
404.2301	25.01	-4.68	81780.700	3.0	106512.100	4.0
404.2319	25.00	-4.39	38120.180	4.5	62851.470	3.5
404.2360	28.00	-2.05	31441.665	2.0	56172.704	3.0
404.2366	30.02	-2.31	258239.600	4.0	282970.600	3.0
404.2395	23.01	-4.08	12621.570	5.0	37352.390	5.0
404.2503	29.01	-4.85	114511.440	1.0	139241.600	1.0
404.2570	41.00	-.34	12017.970	0.0	36754.709	0.0
404.2580	58.01	-.22	3952.218	0.0	28688.896	0.0
404.2616	23.00	-.75	15270.420	1.5	39999.890	2.5
404.2716	22.01	-2.60	42208.840	2.5	66937.700	2.5
404.2720	62.01	-1.32	322.630	0.0	25058.451	0.0
404.2746	26.00	-4.25	26479.366	1.0	51208.040	1.0
404.2760	92.00	-.07	564.603	0.0	25300.180	0.0
404.2870	42.00	.47	25407.119	0.0	50142.023	0.0
404.2881	23.00	-5.79	0.000	1.5	24727.850	2.5
404.2896	18.01	.11	148620.070	1.5	173347.830	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
404.2900	62.01	-1.18	806.575	0.0	25541.295	0.0
404.2907	24.00	-3.20	24299.890	2.0	49027.580	2.0
404.2910	57.01	.05	7420.492	0.0	32155.151	0.0
404.2977	26.02	-4.87	158729.890	3.0	183457.150	4.0
404.3053	30.02	-2.06	236560.000	0.0	261286.800	1.0
404.3160	41.00	.05	15163.614	0.0	39896.744	0.0
404.3179	24.01	-4.91	53051.550	1.5	77777.580	.5
404.3208	25.00	-3.28	38669.600	3.5	63395.450	3.5
404.3270	27.00	-1.99	28470.510	1.5	53195.980	2.5
404.3305	24.01	-4.92	64448.840	2.5	89174.100	3.5
404.3400	90.00	-.91	4920.109	0.0	29651.770	0.0
404.3411	26.02	-3.88	157684.300	2.0	182408.910	3.0
404.3476	23.00	-4.84	25930.510	1.5	50654.720	2.5
404.3483	24.00	-2.48	37205.880	3.0	61930.050	3.0
404.3532	7.01	.44	186570.980	3.0	211294.850	4.0
404.3569	24.00	-3.30	24303.940	3.0	49027.580	2.0
404.3580	40.00	-.56	4113.534	0.0	28844.095	0.0
404.3590	60.01	-1.18	2500.383	0.0	27230.882	0.0
404.3651	24.00	-2.12	24897.550	4.0	49620.690	4.0
404.3669	25.00	-2.12	34845.260	.5	59568.290	.5
404.3682	24.00	.64	35934.020	6.0	60656.970	7.0
404.3687	26.00	-2.40	20037.815	0.0	44760.739	1.0
404.3704	26.01	-4.19	60956.820	3.5	85679.640	2.5
404.3710	64.00	.38	7339.834	0.0	32069.599	0.0
404.3718	29.01	-.83	120092.200	2.0	144814.930	3.0
404.3750	22.00	-2.56	17423.853	2.0	42146.390	1.0
404.3780	23.00	-5.12	14514.750	1.5	39237.100	.5
404.3795	21.00	-.04	15881.760	3.5	40604.020	3.5
404.3838	27.00	-2.65	30443.630	1.5	55165.630	2.5
404.3888	26.00	-3.52	21999.132	4.0	46720.824	4.0
404.3889	26.00	-3.26	26140.164	3.0	50861.850	3.0
404.3890	74.00	-.66	19115.832	0.0	43844.497	0.0
404.3976	26.00	-3.32	26140.164	3.0	50861.320	2.0
404.3977	25.01	-3.88	43696.190	3.0	68417.340	2.0
404.4009	26.01	-2.59	44929.590	2.5	69650.540	2.5
404.4020	64.00	-1.44	483.945	0.0	25211.815	0.0
404.4099	30.02	-4.42	257908.200	1.0	282628.600	2.0
404.4100	41.00	.06	13066.518	0.0	37793.899	0.0
404.4102	9.02	-4.57	466771.720	3.5	491492.100	3.5
404.4114	27.00	-2.60	29216.370	2.5	53936.680	2.5
404.4137	19.00	-1.68	0.000	.5	24720.170	1.5
404.4155	24.00	-3.31	24897.550	4.0	49617.610	5.0
404.4237	27.00	-3.22	29563.170	1.5	54282.730	2.5
404.4290	74.00	.54	26052.379	0.0	50778.598	0.0
404.4390	72.00	-.44	16050.847	0.0	40776.455	0.0
404.4414	18.00	-2.25	93750.639	1.0	118469.117	2.0
404.4470	69.00	-1.29	0.000	0.0	24725.118	0.0
404.4476	24.00	-4.62	35572.940	2.0	60291.040	1.0
404.4484	26.00	-1.16	33095.922	4.0	57813.970	3.0
404.4488	10.01	-4.77	303599.930	3.5	328317.950	2.5
404.4489	22.00	-3.05	13981.750	1.0	38699.767	2.0
404.4530	23.00	-2.66	14548.830	2.5	39266.600	1.5
404.4538	26.00	-2.17	26351.049	5.0	51068.770	5.0
404.4560	40.00	-.57	4839.451	0.0	29564.019	0.0
404.4606	15.01	.63	107361.100	3.0	132078.400	4.0
404.4613	26.00	-1.86	22838.320	2.0	47555.584	1.0
404.4710	41.00	-.01	13389.148	0.0	38112.799	0.0
404.4720	26.00	-4.72	29732.721	1.0	54449.330	1.0
404.4726	25.00	-2.63	41230.300	3.5	65946.870	2.5
404.4734	25.01	-4.90	81802.580	6.0	106519.100	5.0
404.4778	7.01	-.31	186570.980	3.0	211287.230	3.0
404.4779	24.00	-4.49	25106.340	3.0	49822.590	2.0
404.4820	59.01	-.80	0.000	0.0	24722.979	0.0
404.4898	18.01	-1.13	186890.950	2.5	211606.470	3.5
404.4924	25.00	-3.53	37789.930	2.5	62505.290	3.5
404.4932	8.01	-1.62	231427.990	3.5	256143.300	3.5
404.5010	64.00	.07	0.000	0.0	24721.818	0.0
404.5050	62.01	-1.38	806.575	0.0	25528.148	0.0
404.5088	24.00	-2.28	23512.000	1.0	48226.360	0.0
404.5104	9.02	-4.26	466418.120	4.5	491132.380	3.5
404.5114	25.00	.18	34938.700	4.5	59652.900	5.5
404.5139	28.01	-.56	107082.210	2.5	131796.260	2.5
404.5150	64.01	-1.26	4436.164	0.0	29157.126	0.0
404.5192	20.02	-2.41	326186.320	3.0	350900.040	2.0
404.5193	25.00	.15	34138.880	6.5	58852.600	7.5
404.5210	58.01	-.39	6452.602	0.0	31173.197	0.0
404.5261	30.02	-2.43	260878.800	3.0	285592.100	2.0
404.5344	22.00	-3.52	6661.003	3.0	31373.801	3.0
404.5358	26.00	-3.84	29056.312	3.0	53769.020	4.0
404.5371	23.00	-2.31	9824.580	2.5	34537.210	1.5
404.5374	25.00	-3.30	34138.880	6.5	58851.490	5.5
404.5377	28.00	-2.14	25753.578	4.0	50466.172	4.0
404.5384	27.00	-1.30	8460.810	2.5	33173.360	3.5
404.5450	24.00	-3.02	24940.610	2.0	49652.760	2.0
404.5473	28.01	-2.06	91800.050	4.5	116512.060	3.5
404.5584	26.00	-3.01	25899.974	4.0	50611.303	3.0
404.5600	74.00	-1.35	2903.671	0.0	27621.883	0.0
404.5610	40.01	-.66	5646.026	0.0	30364.177	0.0
404.5674	18.01	-4.03	147503.020	1.5	172213.800	1.5
404.5759	24.00	-2.34	35807.900	2.0	60518.160	3.0
404.5760	44.00	.12	16938.079	0.0	41655.314	0.0
404.5815	26.00	.25	11976.239	4.0	36686.159	4.0
404.5865	24.00	-3.11	24940.610	2.0	49650.220	3.0
404.5886	28.00	-1.29	34408.574	1.0	59118.060	2.0
404.5962	18.00	-2.82	93750.639	1.0	118459.662	1.0
404.6061	26.00	-3.55	26339.682	2.0	51048.100	1.0
404.6088	26.02	-4.41	157684.300	2.0	182392.550	2.0
404.6095	8.01	-1.83	231427.990	3.5	256136.200	4.5
404.6142	23.01	-1.61	30641.710	3.0	55349.630	3.0
404.6160	62.01	-1.48	806.575	0.0	25521.366	0.0
404.6162	24.00	-1.70	20517.400	2.0	45225.200	2.0
404.6231	6.00	-4.07	64086.920	3.0	88794.300	2.0
404.6270	23.01	-.95	25191.080	2.0	49898.220	2.0
404.6340	58.01	-.34	4436.164	0.0	29149.856	0.0
404.6378	24.01	-4.74	39742.360	2.5	64448.840	2.5
404.6383	26.02	-4.65	182412.650	4.0	207119.100	4.0
404.6437	24.00	-3.94	25106.340	3.0	49812.460	3.0
404.6465	26.02	-4.22	182412.650	4.0	207118.600	5.0
404.6480	29.01	-4.42	114511.440	1.0	139217.300	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
404.6484	24.00	-4.99	23512.000	1.0	48217.830	2.0
404.6560	80.00	.94	37425.089	0.0	62137.437	0.0
404.6616	28.01	-4.99	96535.870	3.5	121240.900	3.5
404.6632	25.00	-4.99	38669.600	3.5	63374.530	4.5
404.6700	74.00	-1.08	13227.833	0.0	37939.326	0.0
404.6701	25.00	-2.44	34138.880	6.5	58843.390	6.5
404.6711	6.00	-3.86	64089.850	1.0	88794.300	2.0
404.6714	24.00	-2.31	35813.730	3.0	60518.160	3.0
404.6714	24.00	-1.65	35813.730	3.0	60518.160	3.0
404.6738	24.00	-1.03	20520.920	3.0	45225.200	2.0
404.6746	28.00	-.94	32973.414	4.0	57677.649	5.0
404.6778	23.00	-3.74	26171.960	4.5	50876.000	4.5
404.6807	26.01	-4.22	36252.960	2.5	60956.820	3.5
404.6860	23.00	-1.18	17054.870	2.5	41758.410	3.5
404.6866	28.01	-2.97	109269.830	1.5	133973.330	2.5
404.6866	9.02	-4.69	466788.600	2.5	491492.100	3.5
404.6891	6.00	-3.09	64090.950	2.0	88794.300	2.0
404.6994	25.00	-.22	35114.980	2.5	59817.700	2.5
404.7073	24.00	-4.05	23933.900	4.0	48636.140	3.0
404.7090	64.00	.23	7581.807	0.0	32290.919	0.0
404.7160	62.01	-1.18	1451.835	0.0	26160.520	0.0
404.7173	28.01	-2.27	75917.630	3.5	100619.260	4.5
404.7176	22.00	-3.94	17215.440	5.0	41917.050	4.0
404.7206	19.00	-2.00	0.000	.5	24701.430	.5
404.7246	23.00	-5.60	137.380	2.5	24838.560	3.5
404.7276	6.00	-3.32	64089.850	1.0	88790.850	1.0
404.7280	58.01	-.93	5242.739	0.0	29950.691	0.0
404.7298	22.00	-3.55	11639.804	3.0	36340.670	2.0
404.7304	26.00	-2.86	18378.187	2.0	43079.013	1.0
404.7313	26.00	-3.94	29313.008	6.0	54013.780	5.0
404.7335	10.01	-4.68	283322.350	1.5	308022.990	.5
404.7350	62.01	-1.94	2177.753	0.0	26885.278	0.0
404.7356	23.00	-3.14	553.020	4.5	25253.530	5.5
404.7428	23.00	-3.20	14548.830	2.5	39248.900	1.5
404.7443	25.02	-.42	192012.750	1.5	216712.730	2.5
404.7456	30.02	-4.90	258277.700	3.0	282977.600	4.0
404.7456	26.02	-4.93	182418.700	4.0	207118.600	5.0
404.7456	6.00	-3.93	64090.950	2.0	88790.850	1.0
404.7481	18.01	-1.94	159393.310	1.5	184093.060	.5
404.7610	23.01	-2.33	48579.960	3.0	73278.920	4.0
404.7620	92.00	-.47	564.603	0.0	25270.480	0.0
404.7637	17.01	-.62	121635.000	3.0	146333.800	2.0
404.7640	39.00	-.55	0.000	0.0	24705.754	0.0
404.7672	22.01	-3.29	42068.850	1.5	66767.430	.5
404.7747	28.00	-1.06	33112.368	3.0	57810.494	4.0
404.7761	24.00	-4.44	23512.000	1.0	48210.040	1.0
404.7794	21.00	-.88	168.340	2.5	24866.180	1.5
404.7799	8.01	-1.80	231427.990	3.5	256125.800	2.5
404.7800	30.02	-2.64	260805.900	2.0	285503.700	1.0
404.7861	25.00	-2.79	37789.930	2.5	62487.360	2.5
404.7939	24.01	-2.97	64924.300	3.5	89621.250	3.5
404.7940	74.00	-2.81	1613.150	0.0	26317.073	0.0
404.7946	23.00	-2.62	17054.870	2.5	41751.780	1.5
404.7960	72.01	.79	30811.173	0.0	55514.974	0.0
404.8016	24.01	-3.21	45730.740	2.5	70427.220	3.5
404.8026	28.01	-4.94	109038.840	1.5	133735.260	2.5
404.8030	27.01	-6.82	21624.400	5.0	46320.800	4.0
404.8050	76.00	-.52	15324.929	0.0	40028.181	0.0
404.8111	12.02	-1.48	582134.800	4.0	606830.700	3.0
404.8164	27.00	-1.62	29563.170	1.5	54258.750	2.5
404.8203	28.01	-2.67	105439.850	1.5	130135.190	1.5
404.8232	18.01	-2.10	186890.950	2.5	211586.110	2.5
404.8241	8.01	-.37	231427.990	3.5	256123.100	3.5
404.8328	26.02	-3.49	109570.840	2.0	134265.420	2.0
404.8344	10.01	-2.34	282375.330	1.5	307069.810	1.5
404.8350	68.00	-.67	7097.862	0.0	31799.284	0.0
404.8356	25.00	-4.71	33825.490	2.5	58519.900	3.5
404.8410	45.00	-.90	13873.093	0.0	38574.148	0.0
404.8430	90.01	-1.51	9517.587	0.0	34218.520	0.0
404.8439	26.01	-3.67	73751.340	4.5	98445.240	4.5
404.8526	28.01	-3.72	109846.000	3.5	134539.370	2.5
404.8533	25.00	-4.79	34423.270	3.5	59116.600	2.5
404.8569	24.00	-2.12	31048.000	7.0	55741.110	6.0
404.8603	30.02	-2.81	258277.700	3.0	282970.600	3.0
404.8620	23.00	-2.56	137.380	2.5	24830.180	1.5
404.8620	62.01	-1.49	3468.273	0.0	28168.047	0.0
404.8670	40.01	-.39	6371.944	0.0	31071.413	0.0
404.8723	26.00	-3.80	29469.010	2.0	54161.182	3.0
404.8743	25.00	-.25	17451.520	2.5	42143.570	1.5
404.8762	28.01	-4.83	96535.870	3.5	121227.800	2.5
404.8787	24.00	.30	31049.330	6.0	55741.110	6.0
404.8792	23.00	-2.04	15270.420	1.5	39962.170	2.5
404.8821	26.01	-2.30	44915.070	3.5	69606.640	3.5
404.8876	26.00	-4.23	29056.312	3.0	53747.547	3.0
404.8903	26.01	-3.38	73603.530	5.5	98294.600	5.5
404.8969	28.00	-1.94	29013.228	2.0	53703.899	1.0
404.8985	25.00	.03	35041.370	3.5	59731.940	4.5
404.8990	75.00	-.66	16212.162	0.0	40909.679	0.0
404.9018	23.01	-1.59	30613.970	4.0	55304.340	4.0
404.9030	58.01	-1.14	3952.218	0.0	28649.491	0.0
404.9040	45.00	-1.35	13389.148	0.0	38086.360	0.0
404.9044	24.00	-2.14	35813.730	3.0	60503.940	4.0
404.9058	26.01	-3.60	61726.090	3.5	86416.220	3.5
404.9100	27.00	-4.69	8460.810	2.5	33150.680	1.5
404.9135	24.01	-1.12	52298.120	3.5	76987.780	2.5
404.9194	30.02	-2.83	257962.500	2.0	282651.800	1.0
404.9200	64.00	.22	7501.149	0.0	32197.385	0.0
404.9276	30.02	-2.89	257566.100	1.0	282254.900	1.0
404.9279	27.00	-2.18	21215.900	.5	45904.680	1.5
404.9329	26.00	-2.45	20874.482	3.0	45562.959	3.0
404.9397	28.01	-3.88	106022.790	.5	130710.850	.5
404.9400	22.00	-.75	17215.440	5.0	41903.480	5.0
404.9410	44.00	-.55	14921.641	0.0	39616.597	0.0
404.9422	25.00	-1.48	30419.610	2.5	55107.520	3.5
404.9430	64.01	-.16	5242.739	0.0	29937.573	0.0
404.9450	72.01	-.54	17744.654	0.0	42439.366	0.0
404.9561	10.01	-3.37	279137.620	3.5	303824.680	2.5
404.9580	62.01	-2.12	1935.780	0.0	26629.699	0.0
404.9635	10.01	-1.96	279137.620	3.5	303824.230	3.5
404.9674	9.02	-3.92	466722.420	2.5	491408.790	3.5
404.9713	28.00	-2.61	29888.505	2.0	54574.640	1.0
404.9755	24.00	-1.85	37244.170	4.0	61930.050	3.0
404.9756	23.01	-1.43	48730.760	4.0	73416.630	5.0
404.9758	24.00	-4.11	24833.860	3.0	49519.720	3.0
404.9760	41.00	.08	13066.518	0.0	37759.339	0.0
404.9774	24.00	-.69	31055.350	5.0	55741.110	6.0
404.9786	25.01	-4.45	39808.140	3.0	64493.830	4.0
404.9810	62.01	-1.46	0.000	0.0	24692.516	0.0
404.9943	27.00	-4.06	17233.680	3.5	41918.410	3.5
404.9968	10.01	-2.69	283322.350	1.5	308006.930	.5
404.9991	24.00	-1.17	20517.400	2.0	45201.840	1.0
405.0040	92.01	-.84	0.000	0.0	24691.114	0.0
405.0080	57.01	.09	15647.559	0.0	40338.429	0.0
405.0090	42.00	-.60	20809.640	0.0	45500.449	0.0
405.0114	16.01	-.91	128599.110	3.5	153282.800	2.5
405.0198	24.00	-2.29	39158.630	4.0	63841.810	4.0
405.0288	25.00	-.76	34845.260	.5	59527.890	1.5
405.0330	40.01	-.96	5726.684	0.0	30416.030	0.0
405.0365	22.00	-2.00	17075.310	4.0	41757.470	3.0
405.0370	64.00	.23	7581.807	0.0	32270.909	0.0
405.0375	25.00	-1.20	34845.260	.5	59527.360	.5
405.0447	23.00	-3.44	15770.720	4.5	40452.380	5.5
405.0480	40.00	-1.02	4355.506	0.0	29043.938	0.0
405.0496	23.00	-4.16	26344.940	4.5	51026.300	5.5
405.0503	18.01	-3.30	186890.950	2.5	211572.270	1.5
405.0516	28.01	-4.56	109846.000	3.5	134527.240	3.5
405.0580	66.01	-.32	4678.136	0.0	29365.958	0.0
405.0617	29.00	-1.52	46136.101	0.0	70823.698	0.0
405.0650	22.00	-4.04	19573.968	4.0	44254.390	3.0
405.0662	25.01	-3.12	43131.400	2.0	67811.750	3.0
405.0810	58.01	-.89	7017.204	0.0	31703.625	0.0
405.0910	23.00	-4.03	25253.530	5.5	49932.370	4.5
405.0915	28.01	-3.30	67694.640	2.5	92373.450	2.5
405.0946	25.00	-2.80	41230.300	3.5	65908.920	4.5
405.0956	23.00	.10	17181.980	4.5	41860.540	4.5
405.0997	25.00	-2.47	38669.600	3.5	63347.910	4.5
405.1054	23.01	-1.90	14556.090	4.0	39234.050	3.0
405.1089	20.01	-4.53	56839.250	1.5	81517.000	1.5
405.1102	23.00	-3.69	25111.500	4.5	49789.170	3.5
405.1150	60.01	-.81	2984.328	0.0	27668.677	0.0
405.1172	28.00	-1.77	33112.368	3.0	57789.611	4.0
405.1191	6.00	-3.93	64089.850	1.0	88766.980	1.0
405.1204	26.01	-3.03	44929.590	2.5	69606.640	3.5
405.1206	26.00	-3.39	26627.612	4.0	51304.650	4.0
405.1247	25.00	-2.72	23549.200	2.5	48225.990	3.5
405.1296	23.01	-.55	30673.140	2.0	55349.630	3.0
405.1345	23.00	.48	17242.050	5.5	41918.240	5.5
405.1372	6.00	-4.06	64090.950	2.0	88766.980	1.0
405.1400	44.00	.02	8711.012	0.0	33393.838	0.0
405.1430	58.01	-.73	5081.424	0.0	29764.067	0.0
405.1430	76.00	-.86	16131.504	0.0	40814.147	0.0
405.1462	24.00	-2.90	24897.550	4.0	49573.030	4.0
405.1483	28.01	-2.98	75917.630	3.5	100592.980	3.5
405.1520	41.00	-.39	9275.615	0.0	33957.710	0.0
405.1618	9.02	-.29	442147.190	2.5	466821.720	3.5
405.1646	27.00	-.84	31871.150	3.5	56545.510	2.5
405.1688	13.01	-3.91	123415.900	2.0	148090.000	2.0
405.1688	13.01	-3.18	123415.900	2.0	148090.000	1.0
405.1693	25.02	-4.68	91906.100	2.5	116580.170	1.5
405.1751	26.01	-3.44	58631.650	4.5	83305.370	3.5
405.1833	21.00	-.80	15881.760	3.5	40554.980	2.5
405.1869	30.02	-2.50	258277.700	3.0	282950.700	2.0
405.1906	26.00	-2.85	27394.676	3.0	52067.450	2.0
405.1910	92.01	-.67	5162.081	0.0	29841.800	0.0
405.1948	24.01	-2.51	25033.950	3.5	49706.470	2.5
405.1954	22.00	-3.45	13981.750	1.0	38654.230	1.0
405.1990	58.01	-.62	5887.999	0.0	30567.231	0.0
405.2010	26.00	-2.72	26351.049	5.0	51023.190	6.0
405.2033	13.01	-3.01	123418.000	3.0	148090.000	2.0
405.2033	13.01	-3.92	123418.000	3.0	148090.000	3.0
405.2048	26.02	-.76	198658.800	3.0	223330.710	3.0
405.2149	22.00	-3.22	14028.470	2.0	38699.767	2.0
405.2200	44.00	-.86	8952.985	0.0	33630.938	0.0
405.2253	26.00	-4.38	28604.610	2.0	53275.270	2.0
405.2264	26.00	-2.63	34039.495	4.0	58710.090	3.0
405.2284	26.00	-2.71	27166.804	4.0	51837.279	3.0
405.2314	26.00	-2.25	29313.008	6.0	53983.300	5.0
405.2380	29.00	-1.78	46620.047	0.0	71296.904	0.0
405.2439	26.00	-3.89	26479.366	1.0	51148.892	2.0
405.2450	23.00	-3.18	323.420	3.5	24992.880	3.5
405.2472	25.00	-.11	35114.980	2.5	59784.310	3.5
405.2493	13.01	-2.85	123420.800	4.0	148090.000	3.0
405.2514	26.02	.23	198658.800	3.0	223327.870	2.0
405.2526	8.01	-4.77	250251.000	.5	274920.000	1.5
405.2526	8.01	-4.50	250251.000	1.5	274920.000	2.5
405.2598	28.01	-3.46	106022.790	.5	130691.350	1.5
405.2605	28.01	-.42	107082.210	2.5	131750.730	3.5
405.2655	26.00	-2.36	24574.655	4.0	49242.872	3.0
405.2697	26.02	-2.34	198658.800	3.0	223326.760	4.0
405.2708	26.00	-3.89	26140.164	3.0	50808.053	4.0
405.2725	29.01	-3.80	116576.810	0.0	141244.600	1.0
405.2908	22.00	-2.28	17540.205	3.0	42206.880	2.0
405.2918	18.01	.20	167307.920	.5	191974.530	1.5
405.2919	27.00	-.11	28845.220	5.5	53511.830	5.5
405.3002	30.02	-3.53	257962.500	2.0	282628.600	2.0
405.3030	92.01	-1.59	1693.808	0.0	26366.707	0.0
405.3035	10.02	-2.72	412293.590	0.0	436959.490	1.0
405.3112	26.02	.28	166252.740	3.0	190918.170	3.0
405.3185	25.01	-4.46	39808.140	3.0	64473.130	3.0
405.3241	23.00	-.91	15270.420	1.5	39935.070	1.5
405.3249	13.01	-3.11	123468.100	3.0	148132.700	2.0
405.3273	27.00	-3.90	30742.650	.5	55407.100	1.5
405.3334	25.01	-4.65	41182.530	7.0	65846.610	7.0
405.3435	26.00	-4.26	29469.010	2.0	54132.480	1.0
405.3440	45.00	-1.42	10888.765	0.0	35559.168	0.0
405.3448	9.02	-2.41	466468.990	4.5	491132.380	3.5
405.3451	24.01	-3.52	25043.100	1.5	49706.470	2.5
405.3474	26.02	-1.58	204907.130	1.0	229570.360	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
405.3510	58.01	-.83	0.000	0.0	24669.977	0.0
405.3543	9.02	-4.12	466468.560	5.5	491131.370	4.5
405.3548	18.01	-2.25	158428.030	.5	183090.810	1.5
405.3559	28.01	-2.89	106369.300	1.5	131032.010	2.5
405.3573	23.01	-.44	30641.710	3.0	55304.340	4.0
405.3599	29.01	-1.49	122223.840	0.0	146886.310	1.0
405.3614	9.02	-4.27	466468.990	4.5	491131.370	4.5
405.3640	23.00	-2.85	9824.580	2.5	34486.800	2.5
405.3640	64.00	.39	967.890	0.0	25637.076	0.0
405.3658	25.00	-3.46	38008.700	5.5	62670.810	4.5
405.3724	28.01	-4.04	109148.050	4.5	133809.760	3.5
405.3803	22.01	-1.32	15265.600	3.5	39926.830	2.5
405.3808	30.02	-2.40	258178.300	4.0	282839.500	3.0
405.3826	26.00	-2.60	24772.019	1.0	49433.108	2.0
405.3837	23.00	-2.28	15664.750	1.5	40325.770	2.5
405.3862	28.01	-3.22	68131.210	3.5	92792.080	3.5
405.3891	28.01	-4.70	108548.610	1.5	133209.300	2.5
405.3911	27.00	-2.30	18775.010	.5	43435.580	.5
405.3930	67.00	.77	0.000	0.0	24667.421	0.0
405.3940	74.00	-.88	14840.984	0.0	39508.345	0.0
405.4028	23.01	-3.85	12545.150	4.0	37205.010	3.0
405.4046	25.01	-4.03	39813.380	2.0	64473.130	3.0
405.4050	44.00	-.28	8711.012	0.0	33377.703	0.0
405.4069	8.01	-1.22	231427.990	3.5	256087.600	2.5
405.4071	29.01	-4.99	114482.500	2.0	139142.100	2.0
405.4099	24.01	-2.61	25047.040	2.5	49706.470	2.5
405.4144	22.00	-5.59	14105.680	3.0	38764.832	3.0
405.4146	28.01	-3.72	106283.160	2.5	130942.300	1.5
405.4169	26.00	-4.29	26339.682	2.0	50998.686	2.0
405.4211	20.01	-4.00	56839.250	1.5	81498.000	.5
405.4219	8.01	-1.31	251220.900	3.5	275879.600	2.5
405.4219	8.01	.15	251220.900	3.5	275879.600	3.5
405.4245	20.01	-3.58	56858.460	2.5	81517.000	1.5
405.4310	92.01	-.81	6210.629	0.0	30875.738	0.0
405.4404	26.00	-4.46	26550.466	0.0	51208.040	1.0
405.4421	24.00	-4.28	24940.610	2.0	49598.080	2.0
405.4430	40.00	-1.62	1209.863	0.0	25874.242	0.0
405.4450	71.00	-1.25	4113.534	0.0	28777.792	0.0
405.4522	18.00	-3.15	93750.639	1.0	118407.494	1.0
405.4531	21.00	-1.91	0.000	1.5	24656.800	1.5
405.4531	21.00	-.77	0.000	1.5	24656.800	.5
405.4618	27.00	-4.65	1406.840	2.5	26063.110	1.5
405.4620	25.01	-2.96	81862.840	4.0	106519.100	5.0
405.4688	12.00	-2.89	35051.264	1.0	59707.110	0.0
405.4720	64.00	-.24	0.000	0.0	24662.615	0.0
405.4728	25.00	-4.34	37737.220	3.5	62392.820	4.5
405.4745	26.01	-3.68	60807.280	4.5	85462.780	3.5
405.4745	8.01	.02	251224.100	2.5	275879.600	2.5
405.4745	8.01	-1.31	251224.100	2.5	275879.600	3.5
405.4771	24.00	-1.50	35862.820	4.0	60518.160	3.0
405.4771	24.00	-1.38	35862.820	4.0	60518.160	3.0
405.4803	26.00	-1.04	27394.676	3.0	52049.820	2.0
405.4850	59.01	-.37	1693.808	0.0	26355.633	0.0
405.4866	26.00	-1.30	27559.568	2.0	52214.330	1.0
405.4903	9.00	-4.68	129772.830	2.5	154427.370	3.5
405.4913	23.00	-4.25	15724.220	3.5	40378.700	4.5
405.4978	28.01	-3.83	68735.980	2.5	93390.060	2.5
405.4983	28.01	-.90	107142.210	1.5	131796.260	2.5
405.4990	58.01	-.71	2581.041	0.0	27242.014	0.0
405.5012	22.00	-.66	8436.618	0.0	33090.492	1.0
405.5030	40.00	-.35	5000.766	0.0	29661.496	0.0
405.5031	23.00	-4.51	25930.510	1.5	50584.270	1.5
405.5038	25.01	-1.62	82232.180	5.0	106885.900	4.0
405.5038	26.00	-1.91	20641.110	4.0	45294.830	5.0
405.5077	23.00	-1.99	15571.900	2.5	40225.380	1.5
405.5118	25.00	-1.45	34463.370	1.5	59116.600	2.5
405.5160	58.01	-.95	6452.602	0.0	31112.541	0.0
405.5214	25.00	-.65	35165.050	1.5	59817.700	2.5
405.5237	26.00	-.43	24574.655	4.0	49227.160	3.0
405.5273	9.02	-.57	441385.880	1.5	466038.170	2.5
405.5421	28.01	-1.84	104646.520	3.5	129297.910	3.5
405.5485	27.02	-4.01	146815.600	3.5	171466.600	2.5
405.5485	27.02	-4.01	146815.600	3.5	171466.600	2.5
405.5516	9.00	-3.14	104731.050	1.5	129381.860	2.5
405.5544	25.00	-.07	17282.000	3.5	41932.640	3.5
405.5567	23.00	-4.29	26004.220	2.5	50654.720	2.5
405.5592	24.00	-4.95	35640.690	0.0	60291.040	1.0
405.5710	40.00	.48	12663.231	0.0	37319.826	0.0
405.5771	25.01	-4.10	81862.840	4.0	106512.100	4.0
405.5781	12.02	-4.85	584462.400	5.0	609111.600	4.0
405.5814	12.02	-3.63	584462.400	5.0	609111.400	5.0
405.5831	25.00	-2.49	38934.940	2.5	63583.840	1.5
405.5882	22.00	-2.94	20209.444	2.0	44858.030	1.0
405.5884	10.02	-2.92	374434.000	2.0	399082.570	1.0
405.5962	23.00	-4.97	0.000	1.5	24648.100	1.5
405.5962	12.02	-4.89	584463.500	4.0	609111.600	3.0
405.5972	26.00	-3.69	29356.780	2.0	54004.820	3.0
405.5980	28.01	-2.67	104646.520	3.5	129294.510	2.5
405.5995	12.02	-3.78	584463.500	4.0	609111.400	4.0
405.5995	12.02	-4.00	584463.500	4.0	609111.400	5.0
405.6010	42.00	-.18	16615.449	0.0	41270.221	0.0
405.6040	24.00	-1.78	35870.530	4.0	60518.160	3.0
405.6040	24.00	-.91	35870.530	4.0	60518.160	3.0
405.6060	6.02	.40	324212.000	0.0	348866.468	0.0
405.6061	24.01	-2.25	45669.540	1.5	70317.040	2.5
405.6064	8.00	-4.08	101135.407	3.0	125782.889	2.0
405.6130	27.00	-4.46	30742.650	.5	55389.730	1.5
405.6181	22.01	-3.27	4897.600	3.5	29544.370	2.5
405.6228	22.00	-3.83	6842.964	5.0	31489.451	4.0
405.6245	10.02	-2.68	412313.110	1.0	436959.490	1.0
405.6268	23.01	-2.40	12706.150	6.0	37352.390	5.0
405.6278	26.01	-4.81	60402.380	2.5	85048.560	1.5
405.6301	25.00	-.76	41230.300	3.5	65876.340	3.5
405.6316	25.01	-3.97	43850.420	2.0	68496.370	1.0
405.6320	42.00	.32	26616.982	0.0	51269.869	0.0
405.6326	23.01	-2.07	48853.040	5.0	73498.930	6.0
405.6340	45.00	-1.88	9114.300	0.0	33767.066	0.0
405.6472	12.02	-.20	582074.400	2.0	606719.400	2.0
405.6540	23.00	-6.14	8715.720	3.5	33360.310	3.5
405.6540	59.01	.04	5000.766	0.0	29652.316	0.0
405.6545	26.00	-4.92	23110.925	3.0	47755.485	3.0
405.6579	21.00	.11	16026.520	4.5	40670.870	4.5
405.6588	27.01	-4.00	27585.300	1.0	52229.600	2.0
405.6670	25.03	-2.53	152986.000	2.0	177629.800	2.0
405.6701	25.02	-2.94	193756.790	4.5	218400.400	3.5
405.6772	24.00	-3.34	24833.860	3.0	49477.040	2.0
405.6777	24.00	.52	35884.400	5.0	60527.550	6.0
405.6785	25.00	-2.20	41230.300	3.5	65873.400	2.5
405.6802	26.00	-4.16	29732.721	1.0	54375.719	2.0
405.6810	25.01	-4.35	39813.380	2.0	64456.330	2.0
405.6841	23.01	-2.11	48579.960	3.0	73222.720	4.0
405.6900	58.01	-.72	8307.725	0.0	32957.088	0.0
405.6907	7.01	-.25	186652.490	4.0	211294.850	4.0
405.6940	27.00	-.27	29294.520	3.5	53936.680	2.5
405.6940	41.00	-.65	12905.203	0.0	37554.323	0.0
405.6981	14.01	-2.76	103556.290	3.5	128198.200	3.5
405.6981	14.01	-1.22	103556.290	3.5	128198.200	4.5
405.7002	14.01	-1.33	103556.420	2.5	128198.200	3.5
405.7035	28.01	-4.47	108548.610	1.5	133190.190	1.5
405.7050	23.00	.02	17116.920	3.5	41758.410	3.5
405.7062	9.02	-4.10	466818.830	5.5	491460.250	5.5
405.7063	9.02	-.34	442147.190	2.5	466788.600	2.5
405.7111	24.00	-1.78	35862.820	4.0	60503.940	4.0
405.7133	9.02	-3.99	466819.260	6.5	491460.250	5.5
405.7182	27.00	-3.14	1809.330	1.5	26450.020	2.5
405.7197	12.02	-.86	582134.800	4.0	606775.400	4.0
405.7212	24.00	-1.70	24897.550	4.0	49538.060	5.0
405.7216	8.00	-4.10	101147.526	2.0	125788.008	1.0
405.7266	28.00	-2.11	26665.903	3.0	51306.085	3.0
405.7270	41.00	-.42	15324.929	0.0	39972.044	0.0
405.7281	8.00	-3.32	101135.407	3.0	125775.493	3.0
405.7329	17.01	-4.60	146333.800	2.0	170973.600	3.0
405.7345	12.02	.76	582134.800	4.0	606774.500	5.0
405.7346	26.00	-2.09	22249.430	3.0	46889.126	4.0
405.7414	10.02	-3.89	412320.210	2.0	436959.490	1.0
405.7427	15.02	-1.04	116873.600	1.5	141512.800	1.5
405.7450	26.00	-3.78	22249.430	3.0	46888.494	2.0
405.7459	26.01	-1.73	58666.360	3.5	83305.370	3.5
405.7470	56.01	-1.76	48483.290	0.0	73129.190	0.0
405.7505	12.00	-1.97	35051.264	1.0	59689.991	2.0
405.7510	12.02	-1.17	582074.400	2.0	606713.100	1.0
405.7536	28.01	-4.83	95017.710	4.5	119656.250	3.5
405.7580	42.00	-.01	25487.776	0.0	50133.008	0.0
405.7625	22.00	-.13	18593.990	3.0	43231.990	4.0
405.7628	28.01	-3.86	104646.520	3.5	129284.500	2.5
405.7648	26.01	-3.07	61041.780	2.5	85679.640	2.5
405.7655	26.00	-1.48	27543.000	1.0	52160.820	1.0
405.7674	18.01	-2.08	135601.650	.5	160239.350	1.5
405.7680	22.00	-2.71	11776.806	4.0	36414.470	3.0
405.7768	24.00	-1.44	31049.330	6.0	55686.460	5.0
405.7795	23.00	-2.24	15688.800	2.5	40325.770	2.5
405.7800	7.03	-.03	388858.000	0.0	413501.896	0.0
405.7830	82.00	.35	10566.135	0.0	35209.849	0.0
405.7842	28.01	-4.40	110021.920	4.5	134658.600	4.5
405.7898	18.02	-1.95	243145.760	2.0	267782.100	3.0
405.7926	25.01	-4.47	81886.330	5.0	106522.500	6.0
405.7949	25.00	-.84	24779.320	1.5	49415.350	2.5
405.8059	8.00	-3.43	101147.526	2.0	125782.889	2.0
405.8108	24.00	-2.51	25177.390	4.0	49812.460	3.0
405.8109	23.00	-.22	15664.750	1.5	40299.810	.5
405.8145	22.00	.08	18695.230	4.0	43330.070	5.0
405.8159	9.02	-1.35	441406.460	3.5	466041.220	3.5
405.8162	7.01	-1.82	186652.490	4.0	211287.230	3.0
405.8183	27.00	-3.13	4142.660	3.5	28777.270	3.5
405.8208	26.00	-.81	25899.974	4.0	50534.435	3.0
405.8220	64.00	.29	161.315	0.0	24802.660	0.0
405.8225	27.00	-3.25	16470.600	1.5	41104.960	2.5
405.8240	58.01	-1.30	3629.588	0.0	28270.812	0.0
405.8316	22.00	-5.06	6556.828	1.0	31190.631	2.0
405.8371	22.00	-1.93	22404.690	3.0	47038.160	3.0
405.8381	24.00	-1.21	35870.530	4.0	60503.940	4.0
405.8455	26.00	-4.03	29371.860	3.0	54004.820	3.0
405.8460	73.00	-1.34	11130.738	0.0	35770.626	0.0
405.8486	25.01	-3.80	81886.330	5.0	106519.100	5.0
405.8517	8.00	-3.62	101155.422	1.0	125788.008	1.0
405.8599	27.00	-1.45	16195.680	.5	40827.770	1.5
405.8661	9.02	-2.60	441406.460	3.5	466038.170	2.5
405.8694	16.01	-3.25	131186.860	2.5	155818.370	2.5
405.8741	28.00	-1.14	33112.368	3.0	57743.596	3.0
405.8744	28.01	-2.95	67694.640	2.5	92325.850	3.5
405.8745	27.00	-2.89	16470.600	1.5	41101.800	.5
405.8756	26.00	-2.40	19552.474	1.0	44183.607	2.0
405.8760	24.00	.25	31055.350	5.0	55686.460	5.0
405.8771	22.00	-4.29	6742.757	4.0	31373.801	3.0
405.8780	58.01	-1.53	3629.588	0.0	28267.533	0.0
405.8870	62.01	-1.11	3871.561	0.0	28508.960	0.0
405.8914	20.00	-3.13	21849.634	2.0	46479.813	1.0
405.8930	25.00	-.46	17568.480	1.5	42198.560	.5
405.8940	41.00	.57	967.890	0.0	25604.864	0.0
405.8978	23.00	-4.26	26122.040	3.5	50751.830	3.5
405.8982	25.01	-3.95	39826.570	1.0	64456.330	2.0
405.9007	8.00	-4.30	102662.026	2.0	127291.638	1.0
405.9124	28.02	-4.96	156853.400	3.0	181482.300	4.0
405.9139	10.01	-3.11	282680.650	.5	307309.460	.5
405.9141	17.02	-1.09	179495.200	2.5	204124.000	1.5
405.9250	90.00	-.65	6291.287	0.0	30926.380	0.0
405.9278	8.00	-4.22	101147.526	2.0	125775.493	3.0
405.9290	15.02	-.08	116884.900	2.5	141512.800	1.5
405.9307	27.00	-5.47	0.000	4.5	24627.790	4.5
405.9360	8.00	-4.10	101155.422	1.0	125782.889	2.0
405.9370	64.01	-.19	13792.436	0.0	38426.800	0.0
405.9383	26.02	-3.51	90483.590	3.0	115110.920	4.0
405.9388	25.00	-.68	24788.050	2.5	49415.350	2.5
405.9406	22.00	-4.63	6556.828	1.0	31184.021	1.0
405.9421	26.02	-.39	204943.260	2.0	229570.360	2.0
405.9510	41.00	-.20	10082.190	0.0	34715.705	0.0
405.9549	8.00	-3.12	102662.026	2.0	127288.349	2.0
405.9597	23.00	-4.44	15688.800	2.5	40314.830	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
405.9610	42.00	.22	21212.928	0.0	45845.836	0.0
405.9642	22.00	-4.17	14028.470	2.0	38654.230	1.0
405.9656	28.00	-2.51	27414.893	2.0	52040.568	2.0
405.9713	26.00	-1.29	28604.610	2.0	53229.940	1.0
405.9734	28.01	-1.72	104646.520	3.5	129271.720	3.5
405.9768	18.02	-2.12	214568.490	0.0	239193.480	1.0
405.9844	9.02	.16	442147.190	2.5	466771.720	3.5
405.9850	27.01	-6.38	22414.500	3.0	47039.000	3.0
405.9880	64.00	.55	7178.519	0.0	31809.789	0.0
405.9917	25.02	-4.91	89052.440	3.5	113676.530	2.5
405.9958	9.02	-3.75	466771.720	3.5	491395.560	4.5
405.9960	60.01	-.98	1613.150	0.0	26243.935	0.0
405.9967	24.01	-3.91	63802.410	.5	88426.200	.5
406.0008	26.02	-.46	204907.130	1.0	229530.670	1.0
406.0084	22.00	-.34	18525.070	2.0	43148.150	3.0
406.0098	24.00	-4.90	35618.510	1.0	60241.500	0.0
406.0234	24.00	-2.35	24897.550	4.0	49519.720	3.0
406.0245	17.01	-2.51	140740.000	1.0	165362.100	0.0
406.0263	22.00	-.58	8492.421	1.0	33114.412	2.0
406.0291	10.02	-2.81	374460.750	1.0	399082.570	1.0
406.0310	41.00	-1.37	2742.356	0.0	27371.017	0.0
406.0330	57.00	-.17	4032.876	0.0	28661.416	0.0
406.0382	27.00	-3.75	29735.180	3.5	54356.450	4.5
406.0492	8.00	-2.37	102662.026	2.0	127282.626	3.0
406.0502	18.01	-3.83	135085.920	1.5	159706.460	.5
406.0525	8.01	-.89	251220.900	3.5	275841.300	3.5
406.0525	8.01	.70	251220.900	3.5	275841.300	4.5
406.0540	20.00	-4.94	20335.360	1.0	44955.670	0.0
406.0560	9.02	-3.53	466788.600	2.5	491408.790	3.5
406.0564	26.01	-4.18	76129.580	1.5	100749.750	2.5
406.0578	24.00	-1.76	24833.860	3.0	49453.940	4.0
406.0625	28.01	-4.79	112906.930	1.5	137526.730	2.5
406.0667	24.00	-.81	35884.400	5.0	60503.940	4.0
406.0710	74.00	-.59	19680.435	0.0	44306.670	0.0
406.0727	25.00	-1.96	38669.600	3.5	63288.780	3.5
406.0756	20.02	-2.25	326186.320	3.0	350805.320	4.0
406.0786	25.02	-1.82	193756.790	4.5	218375.610	4.5
406.0790	41.00	-1.21	80.658	0.0	24706.408	0.0
406.0841	23.00	-.06	17242.050	5.5	41860.540	4.5
406.0898	25.01	-4.56	78085.200	5.0	102703.340	4.0
406.1006	28.01	-4.49	106283.160	2.5	130900.650	2.5
406.1053	8.01	.59	251224.100	2.5	275841.300	3.5
406.1067	27.00	-4.57	29735.180	3.5	54352.300	3.5
406.1073	25.02	-3.14	193498.070	3.5	218115.150	3.5
406.1090	60.01	.03	3710.246	0.0	28334.177	0.0
406.1095	8.01	-2.65	231296.050	1.5	255913.000	1.5
406.1119	21.02	.64	112254.200	1.5	136871.000	2.5
406.1159	25.02	-.42	191915.430	.5	216531.990	1.5
406.1185	27.01	-3.06	61260.100	2.0	85876.500	1.0
406.1228	25.00	-3.29	34250.520	5.5	58866.660	4.5
406.1251	10.03	-.13	648060.000	1.5	672676.000	.5
406.1260	8.01	-2.49	231296.050	1.5	255912.000	.5
406.1260	41.00	-.93	10162.848	0.0	34785.748	0.0
406.1340	59.01	-1.26	5081.424	0.0	29703.839	0.0
406.1390	20.02	-2.30	340748.720	2.0	365363.680	1.0
406.1400	73.00	-1.18	5968.656	0.0	30590.708	0.0
406.1527	24.01	-4.43	40415.340	.5	65029.670	.5
406.1530	40.00	-.83	4113.534	0.0	28734.797	0.0
406.1540	41.00	-1.30	2742.356	0.0	27363.559	0.0
406.1565	27.02	-4.00	83789.300	.5	108403.400	1.5
406.1580	23.00	-2.91	15270.420	1.5	39884.430	1.5
406.1728	26.02	.30	198717.600	4.0	223330.710	3.0
406.1730	25.00	-.57	24802.250	3.5	49415.350	2.5
406.1740	8.01	-2.83	231530.260	4.5	256143.300	3.5
406.1799	26.01	-2.45	48039.230	2.5	72651.910	3.5
406.1830	20.00	-4.96	20349.260	2.0	44961.757	2.0
406.1860	75.00	-1.42	14921.641	0.0	39540.904	0.0
406.1862	24.01	-4.55	25033.950	3.5	49646.250	3.5
406.2080	42.00	.52	16696.107	0.0	41314.037	0.0
406.2140	82.00	-.10	21293.585	0.0	45911.151	0.0
406.2144	15.01	-.95	103340.010	2.0	127950.600	2.0
406.2209	30.02	-4.74	260981.900	3.0	285592.100	2.0
406.2220	58.01	.12	10969.423	0.0	35586.504	0.0
406.2275	28.00	-1.05	30163.140	2.0	54772.940	3.0
406.2322	28.01	-4.92	94705.930	3.5	119315.440	2.5
406.2380	26.02	-1.58	198717.600	4.0	223326.760	4.0
406.2402	24.00	-4.98	23163.270	0.0	47772.300	1.0
406.2444	26.00	-.68	22946.810	1.0	47555.584	1.0
406.2493	9.02	-4.36	466787.080	4.5	491395.560	5.5
406.2507	20.00	-4.59	20349.260	2.0	44957.655	1.0
406.2550	92.01	-1.11	0.000	0.0	24615.082	0.0
406.2575	23.00	-3.37	15770.720	4.5	40378.700	4.5
406.2630	22.01	-3.76	42208.840	2.5	66816.490	1.5
406.2641	24.00	-4.07	35398.020	4.0	60005.600	5.0
406.2641	29.00	-.50	30811.173	0.0	55425.703	0.0
406.2685	22.00	-3.44	15108.121	3.0	39715.437	3.0
406.2698	22.00	-4.84	6598.749	2.0	31205.985	3.0
406.2704	23.00	-3.26	15270.420	1.5	39877.620	.5
406.2715	25.00	-2.79	23296.670	3.5	47903.800	4.5
406.2760	10.01	-2.51	294333.220	.5	318940.080	1.5
406.2791	20.00	-3.73	23652.304	1.0	48258.980	2.0
406.2820	59.01	.01	3387.616	0.0	28001.062	0.0
406.2836	23.01	-3.91	22273.540	1.0	46879.940	2.0
406.2840	72.00	-.74	10404.820	0.0	35018.145	0.0
406.2850	44.00	-.02	19922.407	0.0	44535.671	0.0
406.2874	18.01	-3.96	183985.940	1.5	208592.110	.5
406.2899	10.01	-2.04	279218.660	2.5	303824.680	2.5
406.2912	8.01	-.09	231530.260	4.5	256136.200	4.5
406.2929	18.01	-4.70	183985.940	1.5	208591.780	1.5
406.2935	30.02	-4.50	260805.900	2.0	285411.700	3.0
406.2937	25.02	.07	192665.800	4.5	217271.590	4.5
406.2940	58.01	-1.01	2500.383	0.0	27113.102	0.0
406.2973	10.01	-.38	279218.660	2.5	303824.230	3.5
406.2990	44.00	-.42	13873.093	0.0	38485.509	0.0
406.2998	23.01	-4.45	12545.150	4.0	37150.570	4.0
406.3062	24.00	-1.90	35862.820	4.0	60467.850	5.0
406.3082	10.02	-3.25	374477.660	0.0	399082.570	1.0
406.3117	30.02	-4.94	258075.700	3.0	282680.400	4.0
406.3154	9.02	-4.30	444957.110	1.5	469561.580	1.5

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
406.3165	27.00	-1.68	28470.510	1.5	53074.920	1.5
406.3176	27.00	-3.89	4690.180	2.5	29294.520	3.5
406.3203	23.00	-3.86	9824.580	2.5	34428.760	1.5
406.3270	26.00	-.80	27166.804	4.0	51770.577	3.0
406.3354	22.00	-2.32	17215.440	5.0	41818.700	4.0
406.3392	26.01	-4.60	59663.450	1.5	84266.480	2.5
406.3400	90.01	-.60	11614.683	0.0	36224.616	0.0
406.3411	22.01	-4.94	40581.800	2.5	65184.720	3.5
406.3528	25.00	-.59	17451.520	2.5	42053.730	2.5
406.3540	62.01	-1.45	322.630	0.0	24931.715	0.0
406.3577	6.00	-4.62	60333.430	0.0	84935.340	1.0
406.3590	64.01	-.71	3952.218	0.0	28561.000	0.0
406.3596	26.00	.01	12560.933	3.0	37162.729	3.0
406.3612	12.02	-1.18	582290.100	3.0	606891.800	4.0
406.3617	26.00	-.41	33095.922	4.0	57697.590	4.0
406.3637	23.00	-1.85	15724.220	3.5	40325.770	2.5
406.3668	10.01	-3.29	280797.260	2.5	305398.620	1.5
406.3681	10.02	-3.56	412313.110	1.0	436914.390	2.0
406.3727	12.02	-.23	582290.100	3.0	606891.100	3.0
406.3733	25.00	-2.05	34250.520	5.5	58851.490	5.5
406.3848	25.00	-.75	37789.930	2.5	62390.200	1.5
406.3920	58.01	-1.17	3710.246	0.0	28317.030	0.0
406.3921	23.00	-.17	17054.870	2.5	41654.700	2.5
406.4023	24.01	-3.86	25047.040	2.5	49646.250	3.5
406.4025	10.00	-3.40	148257.790	1.0	172856.990	1.0
406.4100	44.00	-1.01	9436.930	0.0	34042.624	0.0
406.4124	25.00	-3.90	23719.520	1.5	48318.120	.5
406.4133	22.00	-3.64	21469.494	3.0	46068.040	4.0
406.4160	40.00	-.03	5162.081	0.0	29767.411	0.0
406.4212	22.00	-.78	8492.421	1.0	33090.492	1.0
406.4213	22.00	-.57	18482.860	1.0	43080.920	2.0
406.4255	26.00	-4.97	29469.010	2.0	54066.821	2.0
406.4336	24.00	-.01	35870.530	4.0	60467.850	5.0
406.4367	22.01	-1.68	20951.770	2.5	45548.900	1.5
406.4369	28.00	-.96	30979.789	4.0	55576.905	3.0
406.4453	26.00	-3.50	12560.933	3.0	37157.546	2.0
406.4460	44.00	-.59	8469.040	0.0	33072.554	0.0
406.4463	24.00	-3.65	25038.610	5.0	49635.160	6.0
406.4580	62.01	-.76	2661.698	0.0	27264.486	0.0
406.4630	73.00	-1.48	5968.656	0.0	30571.141	0.0
406.4656	25.00	-2.58	37148.660	5.5	61744.040	5.5
406.4737	25.01	-4.13	78085.200	5.0	102680.090	5.0
406.4737	15.01	-.94	103340.010	2.0	127934.900	1.0
406.4746	26.01	-5.65	23031.300	1.5	47626.140	.5
406.4790	57.00	-.39	3468.273	0.0	28069.790	0.0
406.4790	74.00	-.06	19115.832	0.0	43717.349	0.0
406.4810	41.00	-.28	12582.573	0.0	37183.969	0.0
406.4828	10.00	-3.70	148257.790	1.0	172852.130	0.0
406.4855	10.02	-4.08	412320.210	2.0	436914.390	2.0
406.4870	22.00	-4.90	14105.680	3.0	38699.767	2.0
406.4910	58.01	-1.30	3629.588	0.0	28230.379	0.0
406.4947	29.01	-1.31	121981.680	2.0	146575.300	2.0
406.4962	24.00	-.58	35934.020	6.0	60527.550	6.0
406.5025	20.02	-.88	326186.320	3.0	350779.470	3.0
406.5033	30.02	-1.13	237642.700	3.0	262235.800	3.0
406.5066	23.01	-.41	30613.970	4.0	55206.870	5.0
406.5071	25.00	.05	34250.520	5.5	58843.390	6.5
406.5074	15.01	-3.92	105550.450	2.0	130143.300	3.0
406.5076	8.01	-1.12	231530.260	4.5	256123.100	3.5
406.5080	79.00	-.68	37183.117	0.0	61782.879	0.0
406.5094	22.00	-.67	8492.421	1.0	33085.153	0.0
406.5111	28.01	-4.55	110021.920	4.5	134614.550	5.5
406.5111	18.01	-1.94	159393.310	1.5	183985.940	1.5
406.5160	58.01	-.87	7178.519	0.0	31777.797	0.0
406.5182	19.01	-.81	190134.800	1.0	214727.000	0.0
406.5235	22.00	-3.90	6598.749	2.0	31190.631	2.0
406.5243	6.00	-3.85	60393.140	2.0	84984.970	3.0
406.5253	26.02	-.42	198717.600	4.0	223309.370	5.0
406.5329	29.01	-3.31	110084.290	1.0	134675.600	2.0
406.5341	23.00	-2.93	8715.720	3.5	33306.960	4.5
406.5381	26.00	-1.45	27666.334	1.0	52257.330	0.0
406.5421	20.00	-4.23	20371.000	3.0	44961.757	2.0
406.5445	23.00	-2.98	15724.220	3.5	40314.830	3.5
406.5468	23.00	-4.40	137.380	2.5	24727.850	2.5
406.5557	15.01	-.44	103166.370	1.0	127756.300	2.0
406.5567	22.00	-1.10	17369.590	1.0	41959.460	0.0
406.5580	57.00	-1.11	1048.548	0.0	25645.285	0.0
406.5696	24.00	.29	33113.270	4.0	57702.360	5.0
406.5731	25.00	-4.14	38934.940	2.5	63523.820	2.5
406.5767	28.01	-3.60	107082.210	2.5	131670.870	2.5
406.5845	25.01	-3.84	43696.190	3.0	68284.380	3.0
406.5847	22.01	-2.06	43740.770	3.5	68328.950	4.5
406.5941	28.01	-4.91	75721.680	5.5	100309.290	5.5
406.5974	26.02	-.05	204943.260	2.0	229530.670	1.0
406.6013	26.00	-1.20	26874.534	5.0	51461.707	4.0
406.6030	9.02	-4.31	466821.720	3.5	491408.790	3.5
406.6040	64.00	.19	7501.149	0.0	32095.103	0.0
406.6120	41.00	-.48	10969.423	0.0	35562.893	0.0
406.6157	24.01	-3.24	45730.740	2.5	70317.040	2.5
406.6174	26.01	-4.07	61093.440	2.5	85679.640	2.5
406.6202	9.02	-3.71	466821.720	3.5	491407.750	4.5
406.6210	72.00	-.47	14437.696	0.0	39030.622	0.0
406.6225	25.00	-.29	41031.480	4.5	65617.370	3.5
406.6298	28.01	-3.28	110021.920	4.5	134607.370	4.5
406.6328	22.00	-3.90	6598.749	2.0	31184.021	1.0
406.6343	26.01	-3.92	62125.660	1.5	86710.840	1.5
406.6358	27.00	-1.22	7442.410	3.5	32027.500	3.5
406.6370	42.00	.23	24681.201	0.0	49273.159	0.0
406.6500	58.01	-.26	12179.286	0.0	36770.458	0.0
406.6547	28.00	-2.01	34408.574	1.0	58992.520	2.0
406.6587	26.00	-1.18	24118.815	4.0	48702.518	4.0
406.6601	24.00	-.38	36577.730	4.0	61161.350	5.0
406.6629	24.00	-2.31	35884.400	5.0	60467.850	5.0
406.6690	76.00	1.14	22503.448	0.0	47093.471	0.0
406.6730	25.02	-3.65	115711.600	4.5	140294.440	3.5
406.6736	28.01	-4.29	29593.460	.5	54176.260	.5
406.6740	62.01	-1.05	2177.753	0.0	26767.474	0.0
406.6797	28.00	-2.80	29668.918	3.0	54251.353	3.0
406.6856	24.00	-1.48	25038.610	5.0	49620.690	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
406.6922	26.00	-1.31	22838.320	2.0	47420.000	2.0
406.6933	23.00	-.85	15571.900	2.5	40153.510	2.5
406.6958	25.00	-4.31	23719.520	1.5	48300.980	1.5
406.6985	21.00	.29	16022.720	2.5	40604.020	3.5
406.7023	23.01	-2.65	11908.270	2.0	36489.340	1.0
406.7031	28.01	-1.86	32499.530	4.5	57080.550	3.5
406.7049	24.01	-2.84	52298.120	3.5	76879.030	3.5
406.7160	41.00	-.05	12017.970	0.0	36605.151	0.0
406.7221	23.00	-4.82	26171.960	4.5	50751.830	3.5
406.7234	25.00	-.85	37164.250	6.5	61744.040	5.5
406.7240	73.00	-2.28	1935.780	0.0	26522.478	0.0
406.7274	26.00	-1.37	20641.110	4.0	45220.662	3.0
406.7280	58.01	-.19	8469.040	0.0	33055.496	0.0
406.7297	25.01	-3.63	82387.530	3.0	106966.940	2.0
406.7347	24.00	-2.73	24940.610	2.0	49519.720	3.0
406.7365	24.00	-2.56	25038.610	5.0	49617.610	5.0
406.7390	57.01	-1.25	1371.178	0.0	25956.969	0.0
406.7450	90.00	-1.47	2823.013	0.0	27408.441	0.0
406.7481	26.00	-4.06	23783.617	5.0	48361.920	4.0
406.7534	22.00	-2.61	15108.121	3.0	39686.100	2.0
406.7596	26.00	-2.41	26623.726	2.0	51201.330	2.0
406.7610	44.00	.06	16050.847	0.0	40635.308	0.0
406.7613	21.00	-.93	16026.520	4.5	40604.020	3.5
406.7724	26.01	-4.28	75915.210	2.5	100492.040	3.5
406.7726	23.00	-.53	15270.420	1.5	39847.240	1.5
406.7760	92.01	-.57	6210.629	0.0	30794.184	0.0
406.7791	23.00	-.25	17181.980	4.5	41758.410	3.5
406.7829	30.02	-2.97	257678.700	2.0	282254.900	1.0
406.7841	26.00	-1.48	33695.378	5.0	58271.500	5.0
406.7910	73.00	-1.80	1935.780	0.0	26518.428	0.0
406.7943	28.01	-3.21	110021.920	4.5	134597.430	5.5
406.7970	26.00	-4.05	25899.974	4.0	50475.320	4.0
406.7976	23.00	-2.50	323.420	3.5	24898.730	2.5
406.7989	9.02	-.37	442147.190	2.5	466722.420	2.5
406.8002	28.01	-3.83	109038.840	1.5	133613.990	1.5
406.8006	22.00	-4.41	20006.032	2.0	44581.160	2.0
406.8012	25.00	-1.77	17568.480	1.5	42143.570	1.5
406.8040	29.01	-1.09	121981.680	2.0	146556.600	3.0
406.8047	24.01	-3.82	64061.820	1.5	88636.700	1.5
406.8133	22.00	-.80	17369.590	1.0	41943.950	1.0
406.8219	9.02	-3.15	466821.720	3.5	491395.560	4.5
406.8260	41.00	-.11	10808.108	0.0	35388.641	0.0
406.8330	62.01	-.96	3468.273	0.0	28048.383	0.0
406.8348	28.01	-4.10	106369.300	1.5	130942.360	1.5
406.8350	64.00	.48	7339.834	0.0	31919.823	0.0
406.8358	28.01	-3.51	106369.300	1.5	130942.300	1.5
406.8370	44.00	.47	14599.011	0.0	39178.880	0.0
406.8425	27.01	-2.70	28111.900	2.0	52684.500	1.0
406.8443	10.01	-3.06	283322.350	1.5	307894.840	2.5
406.8501	25.02	-4.10	193235.430	2.5	217807.570	1.5
406.8529	25.01	-3.99	41182.530	7.0	65754.500	6.0
406.8539	27.00	-1.08	15774.040	1.5	40345.950	2.5
406.8557	21.02	.79	112299.200	2.5	136871.000	3.5
406.8557	21.02	-.51	112299.200	2.5	136871.000	2.5
406.8597	24.01	-4.76	39877.280	3.5	64448.840	2.5
406.8648	22.00	-.85	18462.830	0.0	43034.080	1.0
406.8678	24.00	-.63	36552.130	3.0	61123.200	4.0
406.8706	28.01	-5.00	98276.700	4.5	122847.600	3.5
406.8708	25.00	-1.58	34845.260	.5	59416.150	1.5
406.8720	40.00	-.64	10808.108	0.0	35385.862	0.0
406.8726	28.01	-4.58	95573.390	3.5	120144.170	2.5
406.8740	64.00	.19	7501.149	0.0	32078.782	0.0
406.8840	58.01	-.36	5646.026	0.0	30223.055	0.0
406.8951	25.02	-.29	192392.200	3.5	216961.620	3.5
406.8973	28.00	-1.34	30163.140	2.0	54732.425	2.0
406.8988	25.02	-2.84	115711.600	4.5	140280.800	4.5
406.9001	25.02	-4.32	193498.070	3.5	218067.190	2.5
406.9010	22.00	-1.02	22081.198	2.0	46650.260	3.0
406.9065	26.00	-4.94	26479.366	1.0	51048.100	1.0
406.9150	28.00	-1.51	29668.918	3.0	54237.136	4.0
406.9165	28.01	-2.83	92325.850	3.5	116893.980	2.5
406.9186	9.02	-4.42	466893.650	5.5	491461.650	4.5
406.9200	90.01	-.66	6613.917	0.0	31188.772	0.0
406.9205	26.02	.19	205002.470	3.0	229570.360	2.0
406.9225	9.02	-4.23	466893.880	4.5	491461.650	4.5
406.9272	28.01	-1.87	105668.780	2.5	130236.260	2.5
406.9280	60.01	-1.01	483.945	0.0	25058.317	0.0
406.9332	24.00	-3.38	31377.960	4.0	55945.080	5.0
406.9339	28.01	-2.87	109148.050	4.5	133715.130	4.5
406.9365	25.01	-4.81	43850.420	2.0	68417.340	2.0
406.9418	9.02	-3.34	466893.650	5.5	491460.250	5.5
406.9468	26.02	-2.06	204943.260	2.0	229509.560	3.0
406.9530	29.00	-2.59	39038.240	0.0	63611.102	0.0
406.9533	27.00	-2.45	29948.760	2.5	54514.670	3.5
406.9541	25.00	-.92	37148.660	5.5	61714.520	4.5
406.9551	23.02	-2.22	63315.050	3.5	87880.850	2.5
406.9564	23.01	-3.53	48579.960	3.0	73145.680	3.0
406.9597	24.00	-2.06	21856.940	3.0	46422.460	4.0
406.9678	22.00	-4.95	14105.680	3.0	38670.710	4.0
406.9711	25.00	-2.42	37789.930	2.5	62354.760	1.5
406.9715	24.00	-1.85	35862.820	4.0	60427.630	5.0
406.9800	74.00	-.09	19680.435	0.0	44251.667	0.0
406.9844	25.01	-4.61	41190.470	6.0	65754.500	6.0
406.9874	26.01	-3.23	47674.780	1.5	72238.630	2.5
406.9880	42.00	.74	16696.107	0.0	41266.856	0.0
406.9900	28.01	-4.24	29070.930	1.5	53634.620	1.5
406.9920	77.00	-.34	12824.546	0.0	37395.054	0.0
406.9950	74.00	-1.23	4758.794	0.0	29329.120	0.0
407.0005	23.01	-2.71	48730.760	4.0	73293.820	5.0
407.0005	26.02	-2.45	205694.090	1.0	230257.150	2.0
407.0015	26.00	-4.86	23192.486	2.0	47755.485	3.0
407.0026	26.01	-5.44	20516.980	2.5	45079.910	2.5
407.0028	8.01	-2.64	231350.080	2.5	255913.000	1.5
407.0041	24.00	-2.44	24277.060	0.0	48839.900	1.0
407.0063	25.01	-3.85	82387.530	3.0	106950.240	3.0
407.0213	30.02	-4.98	258277.700	3.0	282839.500	3.0
407.0278	25.00	-1.09	17637.150	.5	42198.560	.5
407.0290	64.01	-.51	4436.164	0.0	29004.438	0.0
407.0305	18.01	-2.55	190106.230	1.5	214667.480	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
407.0337	9.02	-1.07	442147.190	2.5	466708.250	1.5
407.0407	28.01	-3.42	98276.700	4.5	122837.330	4.5
407.0407	23.00	-1.85	15664.750	1.5	40225.380	1.5
407.0454	26.00	-1.89	24574.655	4.0	49135.003	3.0
407.0529	17.01	-2.91	153257.000	2.0	177816.900	2.0
407.0610	74.00	-1.94	1613.150	0.0	26179.493	0.0
407.0639	26.01	-3.01	62151.610	2.5	86710.840	1.5
407.0641	26.01	-3.25	60625.470	5.5	85184.690	4.5
407.0680	77.00	-.87	11775.998	0.0	36341.918	0.0
407.0681	25.00	-.41	35041.370	3.5	59600.350	2.5
407.0688	22.00	-1.47	17369.590	1.0	41928.528	2.0
407.0736	22.00	-2.34	15156.787	4.0	39715.437	3.0
407.0760	26.00	-.69	26140.164	3.0	50698.666	2.0
407.0764	23.00	-2.71	553.020	4.5	25111.500	4.5
407.0785	18.01	-4.44	190507.360	1.5	215065.710	.5
407.0812	28.01	-2.31	75917.630	3.5	100475.820	3.5
407.0840	58.01	-.32	12259.943	0.0	36824.898	0.0
407.0860	76.00	-.40	14760.326	0.0	39325.160	0.0
407.0888	24.01	-1.02	52321.300	4.5	76879.030	3.5
407.0960	41.00	-.06	12905.203	0.0	37469.434	0.0
407.0993	24.00	-.01	35870.530	4.0	60427.630	5.0
407.1006	24.00	-2.03	35884.400	5.0	60441.420	6.0
407.1007	28.01	-3.76	32523.540	3.5	57080.550	3.5
407.1009	17.01	-2.51	161348.400	1.0	185905.400	1.0
407.1080	58.01	-1.09	5404.054	0.0	29967.560	0.0
407.1110	24.00	-1.70	24897.550	4.0	49453.940	4.0
407.1191	11.02	-3.33	440472.000	2.5	465027.900	1.5
407.1200	22.00	-.63	18525.070	2.0	43080.920	2.0
407.1239	8.01	-.09	231427.990	3.5	255983.600	4.5
407.1359	28.01	-3.80	107082.210	2.5	131637.100	3.5
407.1362	20.02	-2.31	326186.320	3.0	350741.190	3.0
407.1400	44.00	-.36	13550.463	0.0	38112.039	0.0
407.1478	26.02	-3.11	205694.090	1.0	230248.260	1.0
407.1480	22.00	-.55	18593.990	3.0	43148.150	3.0
407.1523	26.00	-2.09	20874.482	3.0	45428.385	4.0
407.1525	23.00	-.17	15571.900	2.5	40125.790	3.5
407.1546	14.02	-3.28	230301.660	4.0	254855.420	3.0
407.1560	76.00	-.51	14760.326	0.0	39320.937	0.0
407.1561	22.00	-.41	16961.420	3.0	41515.090	4.0
407.1604	14.02	-3.17	230302.010	4.0	254855.420	3.0
407.1613	24.00	-2.80	24286.540	1.0	48839.900	1.0
407.1689	30.02	-2.66	258075.700	3.0	282628.600	2.0
407.1704	26.02	.44	198773.950	5.0	223326.760	4.0
407.1732	10.02	-2.48	374434.000	2.0	398986.640	2.0
407.1740	26.00	-.03	12968.552	2.0	37521.144	2.0
407.1810	58.01	-.34	2581.041	0.0	27140.144	0.0
407.1891	24.00	-4.41	31393.400	5.0	55945.080	5.0
407.1930	74.00	-.79	15324.929	0.0	39883.308	0.0
407.1939	25.00	-2.81	23719.520	1.5	48270.910	2.5
407.1964	26.02	-3.22	189011.840	4.0	213563.080	5.0
407.1968	22.00	-.81	18482.860	1.0	43034.080	1.0
407.1976	24.00	-4.94	31364.330	3.0	55915.500	4.0
407.2002	18.01	.35	148842.370	2.5	173393.380	2.5
407.2039	9.00	-2.44	105056.282	.5	129607.070	.5
407.2041	24.01	-4.66	64924.300	3.5	89475.080	2.5
407.2065	25.00	-3.28	38120.180	4.5	62670.810	4.5
407.2070	41.01	-.59	13550.463	0.0	38107.998	0.0
407.2075	22.00	-5.00	7255.369	2.0	31805.940	2.0
407.2120	27.01	-5.37	25147.200	4.0	49697.500	4.0
407.2132	23.00	-2.18	9824.580	2.5	34374.810	3.5
407.2288	15.01	-1.86	103340.010	2.0	127889.300	3.0
407.2326	18.01	-3.22	155043.070	2.5	179592.130	2.5
407.2352	8.02	-.40	350026.100	0.0	374575.000	1.0
407.2384	18.01	-.11	157673.320	2.5	182222.030	1.5
407.2475	23.01	-3.54	48730.760	4.0	73278.920	4.0
407.2502	26.00	-1.61	27666.334	1.0	52214.330	1.0
407.2508	22.01	-4.39	43780.990	4.5	68328.950	4.5
407.2551	12.02	-2.67	584563.900	3.0	609111.600	3.0
407.2551	12.02	-1.24	584563.900	3.0	609111.600	4.0
407.2565	24.01	-2.59	29952.080	.5	54499.700	1.5
407.2576	27.00	-2.18	29735.180	3.5	54282.730	2.5
407.2591	25.01	-3.22	82419.480	3.0	106966.940	2.0
407.2608	23.00	-1.37	15571.900	2.5	40119.260	2.5
407.2700	40.00	.11	5484.711	0.0	30038.447	0.0
407.2709	14.01	-2.74	79338.760	1.5	103885.510	1.5
407.2764	24.00	-1.79	25106.340	3.0	49652.760	2.0
407.2856	28.00	-2.10	31031.042	3.0	55576.905	3.0
407.2920	58.01	-.94	2581.041	0.0	27133.451	0.0
407.2921	24.00	-1.04	36577.730	4.0	61123.200	4.0
407.3000	44.00	-.80	9114.300	0.0	33666.227	0.0
407.3000	73.00	-1.08	15324.929	0.0	39876.856	0.0
407.3002	22.00	-3.73	6661.003	3.0	31205.985	3.0
407.3011	28.01	-3.28	98276.700	4.5	122821.630	5.5
407.3053	7.01	-.16	186511.580	2.0	211056.260	3.0
407.3066	12.02	-1.43	582290.100	3.0	606834.700	2.0
407.3150	66.01	-.19	4274.849	0.0	28825.872	0.0
407.3150	74.00	-.93	15002.299	0.0	39553.322	0.0
407.3185	24.00	-2.98	25106.340	3.0	49650.220	3.0
407.3200	64.01	-.70	3387.616	0.0	27938.338	0.0
407.3224	29.00	-1.59	40086.787	0.0	64637.364	0.0
407.3272	28.01	-3.43	110573.360	2.5	135116.720	2.5
407.3288	26.01	-4.96	73751.340	4.5	98294.600	5.5
407.3293	24.00	-.96	35884.400	5.0	60427.630	5.0
407.3335	24.00	-3.07	24093.160	2.0	48636.140	3.0
407.3349	8.00	-4.91	105441.657	1.0	129984.553	0.0
407.3366	9.02	-2.84	442278.930	2.5	466821.720	3.5
407.3480	58.01	.05	3790.903	0.0	28339.937	0.0
407.3510	41.00	.05	15324.929	0.0	39873.782	0.0
407.3522	18.01	-3.55	179592.130	2.5	204133.980	2.5
407.3730	12.02	-1.63	582290.100	3.0	606830.700	3.0
407.3740	58.01	-.33	8388.382	0.0	32935.849	0.0
407.3747	12.02	-1.40	584571.100	2.0	609111.600	3.0
407.3751	26.00	-.76	26339.682	2.0	50880.152	1.0
407.3760	64.01	-.65	6533.259	0.0	31080.606	0.0
407.3789	23.01	-3.68	25191.080	2.0	49731.320	2.0
407.3828	24.00	-4.99	24299.890	2.0	48839.900	1.0
407.3856	25.02	-.84	192172.890	2.5	216712.730	2.5
407.3896	8.02	-.04	350122.900	1.0	374662.500	2.0
407.3964	25.00	-1.11	34845.260	.5	59384.450	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
407.4052	24.00	-1.82	21810.840	1.0	46349.500	2.0
407.4070	26.02	-4.60	189024.530	5.0	213563.080	5.0
407.4077	25.00	-1.38	41230.300	3.5	65768.810	4.5
407.4108	26.01	-3.84	47674.780	1.5	72213.100	.5
407.4112	28.02	-4.14	121412.200	2.0	145950.500	1.0
407.4122	28.01	-3.42	107082.210	2.5	131620.450	1.5
407.4198	23.00	-.29	17116.920	3.5	41654.700	2.5
407.4207	8.00	-4.93	105441.657	2.0	129979.384	1.0
407.4220	8.00	-3.62	105441.736	2.0	129979.384	1.0
407.4238	24.00	-4.84	31377.960	4.0	55915.500	4.0
407.4344	26.01	-3.76	61587.240	5.5	86124.140	4.5
407.4354	24.00	-1.98	24833.860	3.0	49370.700	3.0
407.4360	74.00	-.63	2903.671	0.0	27447.403	0.0
407.4367	22.00	-.61	18695.230	4.0	43231.990	4.0
407.4375	28.00	-2.09	30163.140	2.0	54699.852	3.0
407.4397	23.00	-1.49	15688.800	2.5	40225.380	1.5
407.4422	24.00	-2.24	24940.610	2.0	49477.040	2.0
407.4481	6.01	.19	196557.870	.5	221093.950	1.5
407.4544	6.01	.39	196563.410	1.5	221099.110	2.5
407.4590	26.02	-.76	198773.950	5.0	223309.370	5.0
407.4650	58.01	-2.07	1371.178	0.0	25913.163	0.0
407.4680	76.00	-.44	14760.326	0.0	39302.131	0.0
407.4699	26.00	-2.57	29356.780	2.0	53891.540	3.0
407.4756	24.00	-4.73	25038.610	5.0	49573.030	4.0
407.4789	26.00	-.49	24574.655	4.0	49108.876	4.0
407.4811	26.01	-3.05	62065.570	3.5	86599.660	2.5
407.4840	6.01	.58	196571.820	2.5	221105.730	3.5
407.4854	24.00	-.36	35934.020	6.0	60467.850	5.0
407.4889	28.00	-4.22	3409.925	2.0	27943.543	1.0
407.4930	40.00	-.84	4355.506	0.0	28895.805	0.0
407.4959	21.00	.11	16021.780	1.5	40554.980	2.5
407.5008	30.02	-4.31	260878.800	3.0	285411.700	3.0
407.5033	28.01	-3.65	106283.160	2.5	130815.910	3.5
407.5058	12.00	-.44	21870.464	1.0	46403.065	2.0
407.5115	21.00	-.47	16022.720	2.5	40554.980	2.5
407.5120	60.01	-1.07	1613.150	0.0	26152.305	0.0
407.5149	26.00	-4.85	22845.856	5.0	47377.909	4.0
407.5250	42.00	-.36	16615.449	0.0	41153.821	0.0
407.5251	25.00	-.64	34938.700	4.5	59470.140	3.5
407.5266	28.01	-4.52	106369.300	1.5	130900.650	2.5
407.5280	60.01	-1.38	483.945	0.0	25022.136	0.0
407.5314	23.00	-4.66	26344.940	4.5	50876.000	4.5
407.5344	23.00	-4.03	9636.960	1.5	34167.840	2.5
407.5364	25.01	-3.45	82419.480	3.0	106950.240	3.0
407.5400	6.01	-.21	196563.410	1.5	221093.950	1.5
407.5452	14.01	-1.79	79355.280	2.5	103885.510	1.5
407.5488	18.01	-2.98	189654.780	2.5	214184.790	3.5
407.5500	90.00	-1.52	2500.383	0.0	27037.250	0.0
407.5552	22.00	-3.32	6661.003	3.0	31190.631	2.0
407.5572	29.00	-.98	46620.047	0.0	71156.480	0.0
407.5630	24.01	-3.77	25035.640	.5	49564.800	1.5
407.5656	23.01	-2.92	12621.570	5.0	37150.570	4.0
407.5710	58.01	.19	5565.369	0.0	30100.971	0.0
407.5713	28.01	-2.88	107142.210	1.5	131670.870	2.5
407.5771	27.00	-.59	29948.760	2.5	54477.070	3.5
407.5778	8.00	-3.91	105441.736	2.0	129970.000	2.0
407.5778	8.00	-3.00	105441.736	3.0	129970.000	2.0
407.5816	23.01	-3.75	30613.970	4.0	55142.010	3.0
407.5822	27.01	-2.23	61348.500	1.0	85876.500	1.0
407.5840	62.01	-.79	4355.506	0.0	28890.326	0.0
407.5850	17.00	-4.00	71958.363	2.5	96486.198	1.5
407.5850	58.01	.10	4839.451	0.0	29374.211	0.0
407.5852	6.01	.74	196581.960	3.5	221109.780	4.5
407.5940	6.01	-.09	196571.820	2.5	221099.110	2.5
407.5950	26.01	-5.16	20516.980	2.5	45044.210	1.5
407.5974	28.01	-4.39	110573.360	2.5	135100.450	3.5
407.6052	24.00	-.15	33060.740	3.0	57587.360	4.0
407.6080	26.01	-4.32	73603.530	5.5	98129.980	6.5
407.6090	41.00	-1.67	2742.356	0.0	27275.671	0.0
407.6123	27.00	-4.27	4690.180	2.5	29216.370	2.5
407.6128	24.00	-2.59	24940.610	2.0	49466.770	2.0
407.6130	24.00	-1.26	36552.130	3.0	61078.280	3.0
407.6173	10.02	-3.18	374460.750	1.0	398986.640	2.0
407.6190	42.00	.52	23955.283	0.0	48487.996	0.0
407.6201	26.01	-4.12	38164.240	2.5	62689.960	2.5
407.6214	26.00	-1.50	24772.019	1.0	49297.660	1.0
407.6240	58.01	-.57	6452.602	0.0	30985.014	0.0
407.6343	26.02	-4.82	90423.680	2.0	114948.550	3.0
407.6358	26.02	-3.61	205732.370	3.0	230257.150	2.0
407.6360	22.00	-2.82	170.132	3.0	24694.695	4.0
407.6400	17.00	-2.89	71958.363	2.5	96482.689	2.5
407.6417	10.02	-3.85	412320.210	2.0	436844.630	3.0
407.6487	10.01	-2.47	282375.330	1.5	306899.330	2.5
407.6492	26.00	-2.16	21038.987	2.0	45562.959	3.0
407.6525	6.01	-.20	196581.960	3.5	221105.730	3.5
407.6530	40.00	-1.05	4113.534	0.0	28644.201	0.0
407.6545	28.01	-4.74	114052.040	3.5	138575.690	2.5
407.6559	27.00	-.88	29735.180	3.5	54258.750	2.5
407.6618	26.00	-.17	25899.974	4.0	50423.185	4.0
407.6634	18.01	-.56	158428.030	.5	182951.150	.5
407.6650	62.01	-1.69	806.575	0.0	25336.520	0.0
407.6693	25.00	-2.02	34343.900	4.5	58866.660	4.5
407.6697	26.01	-3.38	61156.900	3.5	85679.640	2.5
407.6710	57.01	-2.31	0.000	0.0	24529.584	0.0
407.6730	44.00	-.12	8952.985	0.0	33482.449	0.0
407.6780	14.01	-2.04	79338.760	1.5	103861.000	.5
407.6792	26.00	-3.64	26339.682	2.0	50861.850	3.0
407.6798	6.01	-1.35	196571.820	2.5	221093.950	1.5
407.6803	24.00	-4.93	31393.400	5.0	55915.500	4.0
407.6845	18.01	-4.45	194800.180	4.5	219322.030	5.5
407.6860	62.01	-2.25	322.630	0.0	24851.311	0.0
407.6870	24.01	-3.05	25043.100	1.5	49564.800	1.5
407.6880	26.00	-3.71	26339.682	2.0	50861.320	2.0
407.6890	18.01	-4.59	179592.130	2.5	204113.710	1.5
407.6928	7.01	-.68	186511.580	2.0	211032.930	2.0
407.6945	18.01	-.58	159393.310	1.5	183914.560	.5
407.7011	26.02	-2.10	205672.010	4.0	230192.860	3.0
407.7014	22.00	-4.62	19322.988	2.0	43843.820	3.0
407.7074	24.00	-1.50	21847.880	2.0	46368.350	3.0
407.7079	25.02	-2.89	115774.000	3.5	140294.440	3.5
407.7090	41.00	0.00	15324.929	0.0	39852.227	0.0
407.7136	22.00	-.70	17423.853	2.0	41943.950	1.0
407.7197	24.00	-.79	36558.550	2.0	61078.280	3.0
407.7205	26.00	-3.07	29371.860	3.0	53891.540	3.0
407.7212	26.02	-1.97	205737.510	2.0	230257.150	2.0
407.7265	26.00	-3.94	26479.366	1.0	50998.686	2.0
407.7279	25.02	-2.90	192012.750	1.5	216531.990	1.5
407.7280	70.01	-.25	38151.007	0.0	62677.162	0.0
407.7310	27.00	-1.30	29269.730	4.5	53788.780	4.5
407.7350	57.01	-.68	1855.123	0.0	26380.857	0.0
407.7380	39.00	.03	0.000	0.0	24525.553	0.0
407.7382	22.01	-7.28	10024.740	2.5	34543.360	3.5
407.7393	27.00	-.51	28345.860	4.5	52864.410	4.5
407.7404	7.01	-.61	186511.580	2.0	211030.070	3.0
407.7470	58.01	-.77	2339.068	0.0	26864.080	0.0
407.7483	27.00	-.94	32027.500	3.5	56545.510	2.5
407.7525	24.01	-3.28	25047.040	2.5	49564.800	1.5
407.7570	45.00	-.89	13389.148	0.0	37913.558	0.0
407.7586	27.00	-4.17	27497.060	2.5	52014.450	1.5
407.7627	6.01	-1.50	196581.960	3.5	221099.110	2.5
407.7643	8.01	-2.98	231296.050	1.5	255813.100	2.5
407.7663	24.00	-.09	33040.100	2.0	57557.030	3.0
407.7709	38.01	.17	0.000	0.0	24523.574	0.0
407.7793	8.01	-1.54	231296.050	1.5	255812.200	1.5
407.7810	80.00	-.20	39199.555	0.0	63722.522	0.0
407.7832	22.00	-4.41	14028.470	2.0	38544.380	3.0
407.7834	27.02	-4.37	146950.700	2.5	171466.600	2.5
407.7834	27.02	-4.37	146950.700	2.5	171466.600	2.5
407.7961	23.00	-4.21	323.420	3.5	24838.560	3.5
407.7980	66.01	-.15	806.575	0.0	25328.520	0.0
407.8030	24.00	-3.13	31393.400	5.0	55908.120	6.0
407.8064	29.01	-3.39	121981.680	2.0	146496.200	3.0
407.8092	24.00	-3.65	25106.340	3.0	49620.690	4.0
407.8115	25.02	-4.11	115780.230	2.5	140294.440	3.5
407.8198	28.01	-4.56	98276.700	4.5	122790.410	4.5
407.8213	28.01	-.93	107142.210	1.5	131655.830	.5
407.8240	63.00	-.20	13711.778	0.0	38232.159	0.0
407.8310	40.00	-.97	4113.534	0.0	28633.494	0.0
407.8320	58.01	-.02	7662.464	0.0	32182.364	0.0
407.8350	41.00	-2.05	322.630	0.0	24842.350	0.0
407.8356	26.00	-1.50	21038.987	2.0	45551.748	1.0
407.8380	23.00	-3.78	14910.040	3.5	39422.660	2.5
407.8415	26.00	-3.61	29056.312	3.0	53568.720	2.0
407.8440	64.01	-.23	4758.794	0.0	29277.973	0.0
407.8471	22.00	-.11	8602.340	2.0	33114.412	2.0
407.8520	58.01	-.35	7501.149	0.0	32019.847	0.0
407.8538	28.01	-4.60	114052.040	3.5	138563.710	3.5
407.8566	21.00	-.10	16009.710	.5	40521.210	1.5
407.8581	24.00	-2.62	21856.940	3.0	46368.350	3.0
407.8600	41.00	-.60	12905.203	0.0	37423.420	0.0
407.8624	24.00	-3.93	35572.940	2.0	60084.090	1.0
407.8679	27.00	-4.38	28345.860	4.5	52856.680	3.5
407.8691	26.02	-2.99	205737.510	2.0	230248.260	1.0
407.8696	23.00	-4.30	137.380	2.5	24648.100	1.5
407.8700	64.00	.36	483.945	0.0	25001.561	0.0
407.8727	18.01	-3.66	186074.350	2.5	210584.880	1.5
407.8799	28.02	-3.88	156972.200	3.0	181482.300	4.0
407.8870	9.02	-2.39	442278.930	2.5	466788.600	2.5
407.8969	22.01	-4.23	40798.370	3.5	65307.450	4.5
407.8981	22.00	-1.54	18525.070	2.0	43034.080	1.0
407.9020	58.01	-.90	7017.204	0.0	31532.896	0.0
407.9168	26.00	-3.39	27559.568	2.0	52067.450	2.0
407.9179	25.02	-.70	191915.430	.5	216423.250	.5
407.9180	57.00	-.94	0.000	0.0	24514.731	0.0
407.9217	25.00	-.04	34343.900	4.5	58851.490	5.5
407.9235	25.00	-.64	17282.000	3.5	41789.480	4.5
407.9248	24.00	-1.32	35934.020	6.0	60441.420	6.0
407.9300	26.02	-.55	205002.470	3.0	229509.560	3.0
407.9348	25.02	-3.74	115774.000	3.5	140280.800	4.5
407.9412	25.00	-.57	17637.150	.5	42143.570	1.5
407.9425	27.00	-3.26	30443.630	1.5	54949.970	1.5
407.9488	26.01	-2.93	60956.820	3.5	85462.780	3.5
407.9571	18.01	-.50	148842.370	2.5	173347.830	1.5
407.9595	28.01	-3.58	110021.920	4.5	134527.240	3.5
407.9670	58.01	-.66	7178.519	0.0	31690.305	0.0
407.9698	25.01	-4.69	81659.500	3.0	106164.200	4.0
407.9702	22.00	-.55	17423.853	2.0	41928.528	2.0
407.9730	41.00	.37	645.260	0.0	25156.686	0.0
407.9806	24.00	-3.02	24282.340	4.0	48786.390	5.0
407.9830	62.00	-.57	2258.411	0.0	26769.236	0.0
407.9841	26.00	-1.54	23051.744	0.0	47555.584	1.0
407.9936	27.00	-3.22	30443.630	1.5	54946.900	2.5
408.0056	26.02	-4.28	181825.670	4.0	206328.220	3.0
408.0113	29.01	-4.76	117231.690	1.0	141733.900	2.0
408.0131	15.02	-.34	116873.600	1.5	141375.700	.5
408.0137	8.01	-4.49	214229.480	1.5	238731.540	1.5
408.0181	16.01	-3.37	115817.000	2.5	140318.800	3.5
408.0205	26.00	-1.01	26479.366	1.0	50981.020	0.0
408.0211	24.00	-1.68	21847.880	2.0	46349.500	2.0
408.0230	60.01	-1.38	483.945	0.0	24992.367	0.0
408.0312	26.02	-2.04	198333.760	6.0	222834.770	6.0
408.0389	24.00	-2.66	36577.730	4.0	61078.280	3.0
408.0431	23.01	-2.88	30641.710	3.0	55142.010	3.0
408.0437	27.01	-4.64	62440.200	1.0	86940.460	2.0
408.0440	58.01	-.91	2823.013	0.0	27330.174	0.0
408.0486	18.01	-4.60	194822.100	3.5	219322.070	4.5
408.0516	10.01	-.68	279324.890	1.5	303824.680	2.5
408.0530	64.00	-.84	161.315	0.0	24667.935	0.0
408.0534	29.00	-1.12	46620.047	0.0	71126.643	0.0
408.0554	26.02	-4.58	181828.660	2.0	206328.220	3.0
408.0560	62.01	-1.54	2661.698	0.0	27166.138	0.0
408.0572	24.00	-1.52	25038.610	5.0	49538.060	5.0
408.0576	21.00	-.56	16021.780	1.5	40521.210	1.5
408.0600	44.00	.36	6452.602	0.0	30958.802	0.0
408.0606	25.00	-3.68	23818.870	.5	48318.120	.5
408.0639	18.01	-.87	184093.060	.5	208592.110	.5
408.0694	26.02	-4.43	157982.000	3.0	182480.720	2.0
408.0694	26.02	-3.70	198333.760	6.0	222832.480	5.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
408.0694	18.01	-.58	184093.060	.5	208591.780	1.5
408.0732	21.00	-1.80	16022.720	2.5	40521.210	1.5
408.0764	28.01	-2.61	92325.850	3.5	116824.150	2.5
408.0780	26.02	-4.36	181830.020	3.0	206328.220	3.0
408.0782	26.02	-1.00	198336.580	5.0	222834.770	6.0
408.0792	14.02	-3.60	230268.620	3.0	254766.750	2.0
408.0795	26.02	-2.84	198773.950	5.0	223272.060	6.0
408.0862	26.00	-4.02	29469.010	2.0	53966.720	2.0
408.0947	17.01	-3.00	153257.000	2.0	177754.200	1.0
408.0977	24.00	-3.61	31377.960	4.0	55874.980	5.0
408.1005	27.00	-2.88	29948.760	2.5	54445.610	2.5
408.1007	26.02	.38	166421.330	4.0	190918.170	3.0
408.1020	59.01	-1.05	1613.150	0.0	26116.828	0.0
408.1097	8.02	.23	350302.300	2.0	374798.600	3.0
408.1099	24.00	-1.77	33060.740	3.0	57557.030	3.0
408.1109	26.02	-4.06	181828.660	2.0	206324.890	2.0
408.1134	26.00	-2.68	34328.733	3.0	58824.810	2.0
408.1164	26.02	-2.05	198336.580	5.0	222832.480	5.0
408.1200	24.01	-3.75	42898.120	2.5	67393.800	3.5
408.1210	68.00	-1.21	403.288	0.0	24905.825	0.0
408.1220	39.00	.28	18389.915	0.0	42892.392	0.0
408.1220	40.00	.15	5807.341	0.0	30309.818	0.0
408.1220	58.01	-.39	3790.903	0.0	28293.380	0.0
408.1223	26.00	-3.79	22249.430	3.0	46744.975	3.0
408.1335	26.02	-4.72	181830.020	3.0	206324.890	2.0
408.1380	27.00	-2.96	29294.520	3.5	53789.120	3.5
408.1430	75.00	-.60	16212.162	0.0	40713.378	0.0
408.1432	9.02	-.35	442294.310	1.5	466788.600	2.5
408.1437	27.00	-.46	29294.520	3.5	53788.780	4.5
408.1490	25.01	-2.26	49291.310	3.0	73785.250	2.0
408.1504	26.02	-1.39	198338.620	4.0	222832.480	5.0
408.1527	10.01	-4.64	303824.230	3.5	328317.950	2.5
408.1545	24.00	-1.83	35934.020	6.0	60427.630	5.0
408.1682	9.02	-.25	442278.930	2.5	466771.720	3.5
408.1720	24.00	-3.19	21856.940	3.0	46349.500	2.0
408.1762	20.02	-1.46	247696.390	1.0	272188.700	1.0
408.1820	23.01	-3.10	48730.760	4.0	73222.720	4.0
408.1833	12.00	-.92	21911.178	2.0	46403.065	2.0
408.1857	24.00	-3.61	25106.340	3.0	49598.080	2.0
408.1970	62.01	-1.94	1451.835	0.0	25949.810	0.0
408.1988	26.02	-.91	198333.760	6.0	222824.710	7.0
408.2104	7.00	-4.35	86220.480	1.5	110710.739	2.5
408.2105	26.00	-1.47	27559.568	2.0	52049.820	2.0
408.2219	26.00	-3.84	29056.312	3.0	53545.882	3.0
408.2230	25.01	-4.28	49291.310	3.0	73780.810	3.0
408.2260	90.01	-.98	11453.368	0.0	35949.603	0.0
408.2270	7.01	.15	186570.980	3.0	211060.240	4.0
408.2284	24.01	-1.09	42898.120	2.5	67387.300	2.5
408.2300	40.00	-1.89	1209.863	0.0	25705.858	0.0
408.2315	25.00	-4.88	37586.030	1.5	62075.020	2.5
408.2354	23.00	-2.82	15664.750	1.5	40153.510	2.5
408.2386	18.01	-1.58	134241.650	2.5	158730.210	2.5
408.2404	21.00	-.47	168.340	2.5	24656.800	1.5
408.2427	26.00	-1.44	29320.050	1.0	53808.370	1.0
408.2429	28.00	-4.53	31786.210	3.0	56274.516	2.0
408.2451	13.02	-1.05	178433.430	.5	202921.600	.5
408.2455	22.00	-.60	8602.340	2.0	33090.492	1.0
408.2484	26.02	.53	198821.390	6.0	223309.370	5.0
408.2519	27.00	-1.26	29216.370	2.5	53704.140	2.5
408.2535	18.01	-2.62	187589.230	2.5	212076.900	2.5
408.2567	24.00	-1.67	21810.840	1.0	46298.320	1.0
408.2590	27.00	-5.97	5075.830	1.5	29563.170	1.5
408.2600	62.01	-.98	5242.739	0.0	29736.934	0.0
408.2659	22.00	-1.44	18593.990	3.0	43080.920	2.0
408.2689	26.02	-3.82	198336.580	5.0	222823.330	4.0
408.2712	23.00	-4.81	10892.500	3.5	35379.110	3.5
408.2769	26.02	-1.71	198337.060	3.0	222823.330	4.0
408.2780	45.00	-.69	7743.122	0.0	32236.237	0.0
408.2790	44.00	-.90	11695.340	0.0	36188.395	0.0
408.2854	27.00	-4.72	29216.370	2.5	53702.130	3.5
408.2897	23.00	-3.26	9544.540	.5	34030.040	1.5
408.2915	26.01	-3.34	48039.230	2.5	72524.620	1.5
408.2930	12.02	.63	582290.100	3.0	606775.400	4.0
408.2933	7.01	-1.67	186570.980	3.0	211056.260	3.0
408.2938	18.01	-2.44	159706.460	.5	184191.710	.5
408.2939	25.00	-.43	17568.480	1.5	42053.730	2.5
408.2970	74.00	-.17	19115.832	0.0	43607.807	0.0
408.3029	26.02	-2.54	198338.620	4.0	222823.330	4.0
408.3080	40.00	-.36	11534.025	0.0	36025.340	0.0
408.3230	58.01	-.04	5565.369	0.0	30055.785	0.0
408.3240	62.01	-1.65	5242.739	0.0	29733.095	0.0
408.3350	72.00	-.85	10404.820	0.0	34894.516	0.0
408.3360	75.00	-1.28	16212.162	0.0	40701.798	0.0
408.3361	28.01	-3.04	93390.060	2.5	117872.780	2.5
408.3386	18.01	-1.32	187589.230	2.5	212071.800	3.5
408.3407	23.00	-.96	17116.920	3.5	41599.360	4.5
408.3462	25.00	-3.09	23818.870	.5	48300.980	1.5
408.3464	28.01	-3.32	106283.160	2.5	130765.260	3.5
408.3470	90.00	-1.26	3790.903	0.0	28279.879	0.0
408.3480	58.01	-.53	8952.985	0.0	33441.901	0.0
408.3514	24.01	-2.46	42898.120	2.5	67379.920	1.5
408.3551	24.00	-3.70	31393.400	5.0	55874.980	5.0
408.3553	26.00	-2.47	18378.187	2.0	42859.756	2.0
408.3580	62.01	-1.55	1935.780	0.0	26424.097	0.0
408.3580	75.00	-1.28	16212.162	0.0	40700.479	0.0
408.3614	26.02	-3.08	189024.530	5.0	213505.730	6.0
408.3628	25.00	-.45	17451.520	2.5	41932.640	3.5
408.3639	23.01	-4.29	22273.540	1.0	46754.590	1.0
408.3644	22.00	-.27	17075.310	4.0	41556.330	5.0
408.3651	23.00	-3.60	14910.040	3.5	39391.020	4.5
408.3700	26.00	-1.33	34039.495	4.0	58520.180	4.0
408.3700	64.00	.41	6936.547	0.0	31424.144	0.0
408.3703	25.01	-8.21	14325.860	4.0	38806.530	4.0
408.3710	39.00	-.64	0.000	0.0	24487.537	0.0
408.3724	24.00	-2.94	28637.000	3.0	53117.540	4.0
408.3753	26.00	-1.65	27559.568	2.0	52039.939	1.0
408.3780	41.00	-2.00	1532.493	0.0	26019.610	0.0
408.3805	22.00	-4.78	19421.576	3.0	43901.630	4.0
408.3881	25.02	-4.43	124754.800	3.5	149234.400	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
408.3890	22.00	-1.88	21588.496	4.0	46068.040	4.0
408.3928	8.01	.15	231350.080	2.5	255829.400	3.5
408.3965	12.02	-1.87	564289.800	1.0	588768.900	2.0
408.4108	28.01	-2.55	107142.210	1.5	131620.450	1.5
408.4115	27.00	-1.31	29216.370	2.5	53694.570	3.5
408.4168	27.00	-4.50	29948.760	2.5	54426.640	1.5
408.4173	25.00	-3.69	23296.670	3.5	47774.520	3.5
408.4180	41.00	-1.19	5242.739	0.0	29727.458	0.0
408.4193	23.00	-2.33	17181.980	4.5	41659.710	5.5
408.4211	26.00	-4.41	22249.430	3.0	46727.055	2.0
408.4232	13.01	-1.21	124792.000	2.0	149269.500	3.0
408.4243	8.02	-2.65	273080.070	1.0	297557.500	1.0
408.4277	25.02	-3.23	193498.070	3.5	217975.360	2.5
408.4280	45.00	-2.80	2581.041	0.0	27065.161	0.0
408.4300	40.00	.12	14599.011	0.0	39083.011	0.0
408.4315	24.00	-2.66	24833.860	3.0	49310.860	3.0
408.4363	28.00	-3.26	31786.210	3.0	56262.920	3.0
408.4380	42.00	.34	16615.449	0.0	41098.969	0.0
408.4400	62.01	-1.57	2661.698	0.0	27145.098	0.0
408.4487	26.00	-.60	26874.534	5.0	51350.505	4.0
408.4522	28.01	-4.30	91800.050	4.5	116275.810	3.5
408.4719	23.00	-2.32	9544.540	.5	34019.120	1.5
408.4756	24.01	-4.01	64448.840	2.5	88923.200	2.5
408.4760	28.00	-2.07	33112.368	3.0	57586.700	2.0
408.4801	24.00	-.48	33113.270	4.0	57587.360	4.0
408.4829	26.02	.12	199577.710	2.0	224051.630	3.0
408.4860	41.00	-1.16	1532.493	0.0	26013.136	0.0
408.4930	92.01	-1.08	5726.684	0.0	30206.908	0.0
408.4932	26.01	-4.21	60989.480	4.5	85462.780	3.5
408.4951	26.00	-1.41	22946.810	1.0	47420.000	2.0
408.4957	24.00	-3.47	24897.550	4.0	49370.700	3.0
408.5011	24.00	-1.87	25177.390	4.0	49650.220	3.0
408.5040	90.01	-.35	10082.190	0.0	34561.754	0.0
408.5041	25.01	-2.60	43339.100	2.0	67811.750	3.0
408.5168	28.01	-3.82	75917.630	3.5	100389.520	2.5
408.5223	28.01	-4.09	95573.390	3.5	120044.950	4.5
408.5230	58.01	-.37	5404.054	0.0	29882.480	0.0
408.5251	26.00	-2.27	22249.430	3.0	46720.824	4.0
408.5293	26.00	-4.05	26140.164	3.0	50611.303	3.0
408.5373	26.00	-2.33	24772.019	1.0	49242.680	2.0
408.5380	63.01	-1.51	9840.217	0.0	34317.744	0.0
408.5420	22.00	-5.88	7255.369	2.0	31725.750	1.0
408.5430	44.00	.31	16615.449	0.0	41094.677	0.0
408.5430	90.00	-.58	8711.012	0.0	33168.240	0.0
408.5438	25.01	-2.87	44745.460	2.0	69215.730	1.0
408.5467	25.00	-.84	38669.600	3.5	63139.700	2.5
408.5510	24.00	-4.00	37205.880	3.0	61675.720	2.0
408.5559	22.00	-5.08	13981.750	1.0	38451.298	2.0
408.5560	64.01	-.04	5807.341	0.0	30283.790	0.0
408.5601	15.04	.36	410631.100	2.5	435100.400	1.5
408.5601	15.04	-.59	410631.100	1.5	435100.400	1.5
408.5650	30.02	-2.87	258171.200	5.0	282640.200	5.0
408.5660	40.00	-.12	12663.231	0.0	37139.081	0.0
408.5672	23.01	-2.44	30673.140	2.0	55142.010	3.0
408.5702	24.00	-1.29	31048.000	7.0	55516.690	6.0
408.5740	26.01	-4.11	60402.380	2.5	84870.840	2.5
408.5800	73.00	-.86	17099.394	0.0	41574.405	0.0
408.5820	60.01	-1.75	0.000	0.0	24474.891	0.0
408.5846	25.01	-4.03	41190.470	6.0	65658.300	5.0
408.5924	24.00	-.27	31049.330	6.0	55516.690	6.0
408.5947	28.00	-.96	33500.854	3.0	57968.080	3.0
408.5959	26.02	-4.07	181828.660	2.0	206295.810	1.0
408.5975	26.00	-1.03	33507.102	3.0	57974.160	2.0
408.6020	42.00	.05	20809.640	0.0	45283.333	0.0
408.6033	21.00	-.53	14926.240	2.5	39392.950	3.5
408.6036	24.00	-2.83	25106.340	3.0	49573.030	4.0
408.6060	28.00	-1.97	34163.294	2.0	58629.840	2.0
408.6078	23.01	-3.73	22273.540	1.0	46739.980	2.0
408.6081	25.01	-3.76	82419.480	3.0	106885.900	4.0
408.6083	28.01	-3.49	105668.780	2.5	130135.190	1.5
408.6106	26.01	-2.93	62244.570	1.5	86710.840	1.5
408.6109	28.00	-1.09	34163.294	2.0	58629.550	3.0
408.6151	24.01	-2.61	29952.080	.5	54418.080	.5
408.6292	28.01	-4.28	98969.440	5.5	123434.600	4.5
408.6298	27.00	-.72	15184.040	2.5	39649.160	3.5
408.6325	26.02	-4.21	90483.590	3.0	114948.550	3.0
408.6367	23.00	-1.34	15688.800	2.5	40153.510	2.5
408.6420	58.01	-1.24	4194.191	0.0	28665.489	0.0
408.6520	90.01	-1.60	0.000	0.0	24470.699	0.0
408.6586	26.02	.23	199595.300	3.0	224058.700	4.0
408.6614	22.00	-3.04	6742.757	4.0	31205.985	3.0
408.6630	41.00	-.69	9356.272	0.0	33826.312	0.0
408.6649	8.01	-1.44	231350.080	2.5	255813.100	2.5
408.6656	21.00	-1.61	16141.040	2.5	40604.020	3.5
408.6672	10.01	-2.31	279137.620	3.5	303600.500	2.5
408.6703	26.02	-4.36	157982.000	3.0	182444.700	3.0
408.6720	57.01	-.62	0.000	0.0	24469.501	0.0
408.6767	10.01	-.86	279137.620	3.5	303599.930	3.5
408.6786	12.02	-3.61	564664.600	2.0	589126.800	1.0
408.6799	8.01	-3.13	231350.080	2.5	255812.200	1.5
408.6828	26.00	-3.63	34362.860	1.0	58824.810	2.0
408.6828	7.01	-1.54	186570.980	3.0	211032.930	2.0
408.6836	30.02	-3.95	258178.300	4.0	282640.200	5.0
408.6926	27.00	-.75	30443.630	1.5	54904.990	2.5
408.6930	24.00	-3.39	31055.350	5.0	55516.690	6.0
408.6986	17.02	-4.00	179663.000	1.5	204124.000	1.5
408.7050	41.00	-.55	13308.491	0.0	37776.016	0.0
408.7062	28.01	-3.40	113321.950	4.5	137782.500	4.5
408.7068	25.00	-1.30	38934.940	2.5	63395.450	3.5
408.7072	26.02	-1.66	205732.370	3.0	230192.860	3.0
408.7086	26.00	-3.84	26874.534	5.0	51334.940	4.0
408.7131	26.00	-3.41	27559.568	2.0	52019.706	1.0
408.7142	21.00	.46	16210.800	3.5	40670.870	4.5
408.7195	8.01	.38	231296.050	1.5	255755.800	2.5
408.7267	26.01	-5.00	20830.520	2.5	45289.840	1.5
408.7306	7.01	-.68	186570.980	3.0	211030.070	3.0
408.7340	46.00	-1.34	11614.683	0.0	36080.472	0.0
408.7346	22.01	-3.51	40425.800	1.5	64884.650	2.5
408.7360	58.01	-.77	4194.191	0.0	28659.861	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
408.7468	21.00	-2.34	16096.860	1.5	40554.980	2.5
408.7570	58.01	-.80	8469.040	0.0	32933.453	0.0
408.7580	11.01	-2.47	268766.670	1.0	293224.120	1.0
408.7595	24.01	-3.53	25035.640	.5	49493.000	.5
408.7602	25.02	-4.32	86654.070	4.5	111111.390	4.5
408.7602	25.00	-3.72	23296.670	3.5	47753.990	2.5
408.7690	40.00	-.42	12663.231	0.0	37126.926	0.0
408.7767	26.02	-.84	199595.300	3.0	224051.630	3.0
408.7780	26.00	-4.06	29469.010	2.0	53925.260	1.0
408.7790	45.00	-.75	16050.847	0.0	40513.943	0.0
408.7904	25.01	-2.81	43311.000	1.0	67766.510	2.0
408.7911	27.00	-4.44	29269.730	4.5	53725.200	4.5
408.7919	26.00	-5.00	19788.248	4.0	44243.668	5.0
408.7931	26.02	-3.02	205737.510	2.0	230192.860	3.0
408.7960	72.00	-.89	16050.847	0.0	40512.926	0.0
408.7972	22.00	-3.42	20126.055	3.0	44581.160	2.0
408.7974	26.02	-.88	199603.610	4.0	224058.700	4.0
408.8071	23.00	-2.56	15664.750	1.5	40119.260	2.5
408.8163	25.01	-4.92	41204.340	5.0	65658.300	5.0
408.8250	92.01	-1.63	0.000	0.0	24460.344	0.0
408.8267	8.01	-.90	231530.260	4.5	255983.600	4.5
408.8282	27.00	-4.95	816.000	3.5	25269.250	3.5
408.8330	74.00	-2.18	3306.958	0.0	27766.823	0.0
408.8337	22.00	-1.63	18695.230	4.0	43148.150	3.0
408.8366	18.01	-2.38	186074.350	2.5	210527.100	2.5
408.8386	26.02	-4.17	181808.700	5.0	206261.330	4.0
408.8431	10.01	-2.63	283322.350	1.5	307774.710	1.5
408.8440	76.00	-.92	15082.956	0.0	39542.163	0.0
408.8474	8.02	-.52	350122.900	1.0	374575.000	1.0
408.8500	45.00	-1.67	7743.122	0.0	32201.970	0.0
408.8559	26.00	-1.39	29356.780	2.0	53808.370	1.0
408.8571	10.01	-4.78	280947.100	1.5	305398.620	1.5
408.8580	58.01	-1.25	6533.259	0.0	30991.628	0.0
408.8611	13.02	-.75	178470.320	1.5	202921.600	.5
408.8708	28.01	-4.61	92373.450	2.5	116824.150	2.5
408.8713	26.02	-1.08	198821.390	6.0	223272.060	6.0
408.8720	90.00	-.96	6291.287	0.0	30748.819	0.0
408.8747	26.01	-4.95	22939.350	2.5	47389.820	1.5
408.8752	24.00	-2.32	21847.880	2.0	46298.320	1.0
408.8760	23.01	-3.84	30267.460	2.0	54717.850	1.0
408.8770	74.00	-.64	19438.462	0.0	43895.695	0.0
408.8842	24.01	-3.89	25043.100	1.5	49493.000	.5
408.8850	58.01	-.64	5646.026	0.0	30102.780	0.0
408.8862	14.03	.20	193978.890	.5	218428.670	1.5
408.8928	28.00	-6.53	2216.519	2.0	26665.903	3.0
408.9140	90.00	-1.48	2823.013	0.0	27278.033	0.0
408.9151	26.01	-2.94	62151.610	2.5	86599.660	2.5
408.9156	26.02	-1.88	199603.610	4.0	224051.630	3.0
408.9208	26.00	-1.98	23783.617	5.0	48231.330	5.0
408.9265	28.01	-3.01	106283.160	2.5	130730.530	2.5
408.9287	8.01	.86	231530.260	4.5	255977.500	5.5
408.9427	25.02	-4.68	121197.050	2.5	145643.450	2.5
408.9444	24.01	-4.49	42898.120	2.5	67344.420	2.5
408.9508	29.01	-1.83	121981.680	2.0	146427.600	1.0
408.9610	57.00	-.40	2984.328	0.0	27436.537	0.0
408.9740	58.01	-.95	7259.177	0.0	31710.609	0.0
408.9747	25.02	-4.26	115762.600	1.5	140207.090	2.5
408.9824	28.01	-3.73	93528.440	3.5	117972.470	3.5
408.9860	58.01	-1.05	6452.602	0.0	30903.317	0.0
408.9869	24.00	-1.91	33113.270	4.0	57557.030	3.0
408.9914	9.02	-.46	442278.930	2.5	466722.420	2.5
408.9920	75.00	-1.59	14518.354	0.0	38968.710	0.0
408.9929	24.00	-4.06	35640.690	0.0	60084.090	1.0
408.9931	25.00	-.12	34423.270	3.5	58866.660	4.5
408.9941	26.02	-.07	198333.560	2.0	222776.890	1.0
408.9946	24.00	-4.78	25177.390	4.0	49620.690	4.0
409.0057	24.00	-1.58	31009.000	3.0	55451.640	3.0
409.0063	26.00	-3.55	27394.676	3.0	51837.279	3.0
409.0140	92.01	-.52	1693.808	0.0	26142.849	0.0
409.0160	41.00	-.18	11937.313	0.0	36386.234	0.0
409.0211	23.00	-2.19	14949.300	4.5	39391.020	4.5
409.0300	69.01	-1.71	8872.327	0.0	33320.411	0.0
409.0304	27.00	-5.49	1809.330	1.5	26250.490	.5
409.0305	26.00	-3.42	26627.612	4.0	51068.770	5.0
409.0335	26.00	-4.98	12968.552	2.0	37409.530	1.0
409.0364	30.02	-2.93	258239.600	4.0	282680.400	4.0
409.0368	23.01	-3.11	48853.040	5.0	73293.820	5.0
409.0388	26.02	-.54	198333.560	2.0	222774.220	2.0
409.0410	64.00	-.32	161.315	0.0	24608.742	0.0
409.0462	24.00	-3.18	25177.390	4.0	49617.610	5.0
409.0470	58.01	-.79	6452.602	0.0	30899.670	0.0
409.0510	40.01	-1.04	6049.314	0.0	30496.143	0.0
409.0522	23.00	-2.66	553.020	4.5	24992.880	3.5
409.0535	22.00	-1.16	17075.310	4.0	41515.090	4.0
409.0569	23.00	.18	8715.720	3.5	33155.300	4.5
409.0594	25.00	-1.38	35041.370	3.5	59480.800	2.5
409.0674	25.01	-3.46	56883.380	1.0	81322.330	1.0
409.0716	22.00	-7.57	14105.680	3.0	38544.380	3.0
409.0727	18.01	-3.57	186074.350	2.5	210512.980	1.5
409.0749	26.00	-3.88	29798.960	4.0	54237.460	4.0
409.0790	40.00	-.15	12421.258	0.0	36866.414	0.0
409.0930	23.00	-1.06	17054.870	2.5	41492.290	3.5
409.0943	26.00	-1.09	27166.804	4.0	51604.146	3.0
409.0950	58.01	-.78	6533.259	0.0	30977.459	0.0
409.0954	28.01	-3.77	106133.140	1.5	130570.420	.5
409.0974	26.02	.06	198337.060	3.0	222774.220	2.0
409.1002	23.00	-2.06	15688.800	2.5	40125.790	3.5
409.1051	26.02	-3.61	157982.000	3.0	182418.700	4.0
409.1060	44.00	-.10	16938.079	0.0	41381.622	0.0
409.1155	24.01	-3.31	42898.120	2.5	67334.200	3.5
409.1193	25.00	-3.80	38351.780	.5	62787.630	1.5
409.1225	26.02	-4.70	181825.670	4.0	206261.330	4.0
409.1260	73.00	-1.02	15808.874	0.0	40251.222	0.0
409.1285	25.00	-2.75	35165.050	1.5	59600.350	2.5
409.1315	26.02	.35	199603.610	4.0	224038.730	5.0
409.1340	90.01	-1.63	9114.300	0.0	33556.170	0.0
409.1419	24.00	-4.74	27597.220	3.0	52031.720	3.0
409.1490	69.01	-1.71	8872.327	0.0	33313.301	0.0
409.1499	29.01	-2.61	121981.680	2.0	146415.700	2.0
409.1510	25.01	-4.49	43850.420	2.0	68264.380	3.0
409.1557	26.00	-1.69	22838.320	2.0	47271.999	1.0
409.1565	15.01	-1.09	103166.370	1.0	127600.000	1.0
409.1628	28.00	-1.78	29320.782	3.0	53754.036	2.0
409.1640	92.00	-1.14	0.000	0.0	24440.078	0.0
409.1655	25.02	-3.75	115774.000	3.5	140207.090	2.5
409.1699	28.01	-3.09	113321.950	4.5	137754.780	5.5
409.1750	64.00	-.61	7339.834	0.0	31779.255	0.0
409.1757	26.02	-.32	198333.560	2.0	222766.040	3.0
409.1771	27.00	-2.20	29269.730	4.5	53702.130	3.5
409.1819	28.00	-3.28	31441.665	2.0	55873.780	2.0
409.1820	76.00	-1.18	6049.314	0.0	30488.317	0.0
409.1851	28.01	-2.93	113321.950	4.5	137753.870	4.5
409.1885	23.00	-2.44	14910.040	3.5	39341.760	3.5
409.1925	23.00	-1.58	9544.540	.5	33976.020	1.5
409.1953	26.02	-4.25	181830.020	3.0	206261.330	4.0
409.1992	20.00	-.04	23652.304	1.0	48083.383	2.0
409.2059	27.00	-3.08	29294.520	3.5	53725.200	4.5
409.2064	26.02	-4.28	157982.000	3.0	182412.650	4.0
409.2090	58.01	-1.49	4113.534	0.0	28550.924	0.0
409.2096	23.00	-1.39	15688.800	2.5	40119.260	2.5
409.2116	24.00	-1.27	36577.730	4.0	61008.070	5.0
409.2158	24.00	-1.61	24940.610	2.0	49370.700	3.0
409.2206	30.02	-3.22	260981.900	3.0	285411.700	3.0
409.2238	27.00	-4.51	28345.860	4.5	52775.470	4.5
409.2240	30.02	-.75	237506.800	1.0	261936.400	1.0
409.2262	28.01	-4.61	95573.390	3.5	120002.860	3.5
409.2270	62.01	-1.23	0.000	0.0	24436.315	0.0
409.2275	26.02	-.11	198336.580	5.0	222765.970	4.0
409.2287	9.02	-2.24	442278.930	2.5	466708.250	1.5
409.2290	12.02	-2.56	582290.100	3.0	606719.400	2.0
409.2292	23.00	-1.34	15724.220	3.5	40153.510	2.5
409.2293	23.00	-3.39	15571.900	2.5	40001.180	3.5
409.2344	26.02	.38	198337.060	3.0	222766.040	3.0
409.2355	26.02	-.14	198337.060	3.0	222765.970	4.0
409.2379	25.00	-.64	35041.370	3.5	59470.140	3.5
409.2384	27.00	-2.04	7442.410	3.5	31871.150	3.5
409.2399	23.00	-1.19	9636.960	1.5	34065.610	2.5
409.2445	9.00	-4.33	105056.282	.5	129484.660	1.5
409.2458	26.00	-4.29	7376.762	4.0	31805.059	3.0
409.2490	9.02	-.12	442294.310	1.5	466722.420	2.5
409.2509	23.00	-.60	15571.900	2.5	39999.890	2.5
409.2516	27.00	-3.88	23184.230	2.5	47612.180	1.5
409.2598	25.00	-2.81	44288.760	4.5	68716.220	4.5
409.2605	26.02	-.14	198338.620	4.0	222766.040	3.0
409.2607	25.01	-3.35	43339.100	2.0	67766.510	2.0
409.2610	77.00	-.89	12985.861	0.0	37420.146	0.0
409.2617	26.02	.53	198338.620	4.0	222765.970	4.0
409.2632	20.00	-1.42	20335.360	1.0	44762.620	2.0
409.2685	23.00	-.30	2311.370	3.5	26738.310	4.5
409.2690	26.02	-3.42	157982.000	3.0	182408.910	3.0
409.2697	28.01	-3.63	108763.320	.5	133190.190	1.5
409.2699	25.02	-3.32	115780.230	2.5	140207.090	2.5
409.2710	64.00	.08	1693.808	0.0	26127.496	0.0
409.2720	58.01	-.99	5726.684	0.0	30160.312	0.0
409.2853	27.00	-2.00	16195.680	.5	40621.620	1.5
409.2863	23.01	-4.15	48853.040	5.0	73278.920	4.0
409.2979	28.01	-4.33	97273.830	2.5	121699.020	1.5
409.3032	28.00	-1.54	34163.294	2.0	58588.168	3.0
409.3037	27.00	-.63	29269.730	4.5	53694.570	3.5
409.3040	62.01	-2.11	3468.273	0.0	27899.991	0.0
409.3057	26.02	.32	198333.560	2.0	222758.280	2.0
409.3109	28.01	-3.36	68965.650	1.5	93390.060	2.5
409.3119	21.00	-1.91	16096.860	1.5	40521.210	1.5
409.3160	40.00	-1.59	4355.506	0.0	28786.508	0.0
409.3160	72.01	-1.39	3629.588	0.0	28060.590	0.0
409.3194	8.02	-2.68	300310.310	1.0	324734.220	2.0
409.3225	26.01	-2.85	54063.530	.5	78487.250	1.5
409.3229	12.02	-2.50	584687.900	3.0	609111.600	3.0
409.3229	12.02	-3.96	584687.900	3.0	609111.600	4.0
409.3232	26.02	.60	198848.380	7.0	223272.060	6.0
409.3262	12.02	-1.58	584687.900	3.0	609111.400	4.0
409.3294	24.00	-.96	31028.330	2.0	55451.640	3.0
409.3295	30.02	-4.62	260988.400	4.0	285411.700	3.0
409.3347	27.00	-.85	29735.180	3.5	54158.170	4.5
409.3375	22.00	-5.22	14028.470	2.0	38451.298	2.0
409.3390	90.01	-1.63	7259.177	0.0	31688.806	0.0
409.3447	12.02	-3.94	584689.200	4.0	609111.600	3.0
409.3447	12.02	-2.39	584689.200	4.0	609111.600	4.0
409.3458	28.01	-2.64	77332.470	2.5	101754.800	2.5
409.3476	23.00	-2.02	17116.920	3.5	41539.140	4.5
409.3480	12.02	-3.14	584689.200	4.0	609111.400	4.0
409.3480	12.02	-1.50	584689.200	4.0	609111.400	5.0
409.3483	23.00	-1.52	9544.540	.5	33966.720	.5
409.3514	12.02	-.83	584628.500	2.0	609050.500	2.0
409.3527	24.00	-3.66	24093.160	2.0	48515.080	3.0
409.3610	28.00	-5.65	1332.153	3.0	25753.578	4.0
409.3644	26.02	-.34	198337.060	3.0	222758.280	2.0
409.3665	19.01	-.41	188154.400	2.0	212575.500	2.0
409.3681	28.01	-2.96	113321.950	4.5	137742.950	5.5
409.3681	26.01	-3.32	61041.780	2.5	85462.780	3.5
409.3720	64.00	.16	7339.834	0.0	31767.494	0.0
409.3818	26.00	-4.19	21715.735	5.0	46135.920	5.0
409.3960	58.01	-.98	4194.191	0.0	28620.419	0.0
409.3969	25.01	-3.52	82099.820	4.0	106519.100	5.0
409.3973	26.02	-3.52	205002.470	3.0	229421.730	4.0
409.4013	26.01	-4.35	50187.950	3.5	74606.970	2.5
409.4019	10.01	-3.26	280989.530	1.5	305408.510	.5
409.4045	25.00	-.27	41230.300	3.5	65649.130	2.5
409.4050	62.01	-1.45	2661.698	0.0	27087.389	0.0
409.4083	27.01	-2.23	61457.900	0.0	85876.500	1.0
409.4093	28.00	-3.56	29832.810	3.0	54251.353	3.0
409.4176	22.00	-4.51	21739.713	5.0	46157.760	5.0
409.4190	69.00	.12	0.000	0.0	24424.856	0.0
409.4214	27.00	-3.99	28345.860	4.5	52763.680	3.5
409.4241	23.00	-.90	17242.050	5.5	41659.710	5.5
409.4270	40.00	-.28	12259.943	0.0	36684.321	0.0
409.4288	23.00	.08	17181.980	4.5	41599.360	4.5
409.4328	25.02	-4.03	115762.600	1.5	140179.740	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
409.4347	26.02	.23	205092.530	4.0	229509.560	3.0
409.4368	12.02	-1.85	584628.500	2.0	609045.400	3.0
409.4370	23.01	-3.16	22273.540	1.0	46690.430	1.0
409.4402	12.02	.52	584628.500	2.0	609045.200	3.0
409.4407	26.02	-1.60	198333.560	2.0	222750.230	3.0
409.4418	17.01	-1.42	161348.400	1.0	185765.000	2.0
409.4456	25.00	-3.41	38351.780	.5	62768.160	.5
409.4470	15.01	-1.57	103340.010	2.0	127756.300	2.0
409.4480	64.01	-1.01	4194.191	0.0	28617.317	0.0
409.4632	24.00	-2.60	25038.610	5.0	49453.940	4.0
409.4650	24.00	-4.38	27597.220	3.0	52012.440	2.0
409.4700	23.01	-3.87	48730.760	4.0	73145.680	3.0
409.4721	30.02	-3.46	237506.800	1.0	261921.600	2.0
409.4750	90.01	-1.61	0.000	0.0	24421.515	0.0
409.4778	28.01	-2.75	75917.630	3.5	100332.090	4.5
409.4865	21.00	-1.74	16141.040	2.5	40554.980	2.5
409.4865	9.02	-.32	442294.310	1.5	466708.250	1.5
409.4918	18.01	-2.50	186171.260	.5	210584.880	1.5
409.4925	20.00	-1.25	20349.260	2.0	44762.639	3.0
409.4959	24.00	-2.36	25106.340	3.0	49519.720	3.0
409.4962	20.00	-2.15	20349.260	2.0	44762.620	2.0
409.4970	24.00	-2.04	24897.550	4.0	49310.860	3.0
409.4994	26.02	-.35	198337.060	3.0	222750.230	3.0
409.5038	25.00	-.70	35114.980	2.5	59527.890	1.5
409.5059	16.01	-4.67	115817.000	2.5	140229.780	2.5
409.5239	27.00	-1.01	30102.960	2.5	54514.670	3.5
409.5244	25.00	-.07	38669.600	3.5	63081.280	2.5
409.5256	26.02	.27	198338.620	4.0	222750.230	3.0
409.5274	28.00	-3.10	30163.140	2.0	54574.640	1.0
409.5277	28.01	-4.10	106620.530	3.5	131032.010	2.5
409.5313	9.00	-3.30	130016.100	2.5	154427.370	3.5
409.5353	26.02	-.24	198333.760	6.0	222744.790	5.0
409.5425	26.02	-3.20	122944.150	4.0	147354.750	5.0
409.5442	25.02	-.11	192012.750	1.5	216423.250	.5
409.5475	23.00	.02	8578.520	2.5	32988.820	3.5
409.5550	73.01	-.92	11695.340	0.0	36112.085	0.0
409.5560	41.00	-.46	13308.491	0.0	37725.176	0.0
409.5589	27.00	-3.82	29294.520	3.5	53704.140	2.5
409.5621	26.00	-2.19	29313.008	6.0	53722.440	5.0
409.5640	8.01	.36	231350.080	2.5	255759.400	3.5
409.5655	23.01	-4.84	30306.400	3.0	54715.630	2.0
409.5678	10.01	-3.37	280989.530	1.5	305398.620	1.5
409.5700	74.00	-.61	16857.422	0.0	41273.273	0.0
409.5786	24.00	-1.30	36552.130	3.0	60960.580	4.0
409.5823	18.02	-1.51	243424.970	3.0	267833.200	4.0
409.5826	26.02	.63	198336.580	5.0	222744.790	5.0
409.5829	28.01	-2.92	106283.160	2.5	130691.350	1.5
409.5903	7.01	-.48	186652.490	4.0	211060.240	4.0
409.5927	27.00	-.27	29294.520	3.5	53702.130	3.5
409.5955	22.00	-3.33	16961.420	3.0	41368.860	4.0
409.5973	26.00	-1.51	20874.482	3.0	45281.816	2.0
409.5996	13.01	-1.33	124792.000	2.0	149199.200	3.0
409.6012	27.00	-4.34	18389.570	1.5	42796.670	1.5
409.6113	26.00	-.99	29356.780	2.0	53763.280	3.0
409.6168	26.02	-.34	198338.620	4.0	222744.790	5.0
409.6209	24.00	-3.31	23512.000	1.0	47917.930	2.0
409.6211	26.00	-6.00	7728.058	3.0	32133.977	2.0
409.6227	22.00	-4.34	17075.310	4.0	41481.130	5.0
409.6244	8.01	-.41	231350.080	2.5	255755.800	2.5
409.6308	25.01	-3.86	82117.160	5.0	106522.500	6.0
409.6325	23.00	-2.98	26249.480	1.5	50654.720	2.5
409.6346	28.01	-4.20	110573.360	2.5	134978.470	2.5
409.6356	28.01	-3.61	109038.840	1.5	133443.890	2.5
409.6460	23.00	-3.54	323.420	3.5	24727.850	2.5
409.6462	27.00	-3.16	23207.760	1.5	47612.180	1.5
409.6478	28.00	-3.02	29832.810	3.0	54237.136	4.0
409.6489	25.00	-1.71	44288.760	4.5	68693.020	5.5
409.6525	18.01	-3.12	159393.310	1.5	183797.360	2.5
409.6543	18.01	-2.95	190507.360	1.5	214911.300	2.5
409.6565	26.02	.54	199634.920	6.0	224038.730	5.0
409.6572	7.01	-1.91	186652.490	4.0	211056.260	3.0
409.6610	27.00	-2.95	29948.760	2.5	54352.300	3.5
409.6630	25.00	-1.48	37630.620	4.5	62034.040	3.5
409.6630	18.01	-1.70	186074.350	2.5	210477.770	3.5
409.6630	40.01	-1.61	4436.164	0.0	28846.472	0.0
409.6652	26.02	-4.19	181830.020	3.0	206233.310	2.0
409.6660	25.00	-1.89	35165.050	1.5	59568.290	.5
409.6751	30.02	-4.03	258277.700	3.0	282680.400	4.0
409.6788	28.01	-4.29	105439.850	1.5	129842.330	2.5
409.6800	63.01	-1.63	10566.135	0.0	34975.430	0.0
409.6810	42.00	.16	21051.613	0.0	45460.848	0.0
409.6820	59.01	-.99	1693.808	0.0	26102.984	0.0
409.6878	25.01	-3.91	82117.160	5.0	106519.100	5.0
409.6924	23.00	-3.06	26182.600	.5	50584.270	1.5
409.6941	23.00	-.66	15724.220	3.5	40125.790	3.5
409.6950	26.00	-3.95	19621.004	5.0	44022.518	4.0
409.6968	8.01	-.75	231427.990	3.5	255829.400	3.5
409.7017	26.00	-4.49	27666.334	1.0	52067.450	2.0
409.7030	44.00	-1.11	8711.012	0.0	33118.937	0.0
409.7062	25.00	-.62	34938.700	4.5	59339.550	3.5
409.7072	26.00	-1.62	26479.366	1.0	50880.152	1.0
409.7099	20.01	-.97	60533.020	.5	84933.650	1.5
409.7103	30.02	-4.60	258239.600	4.0	282640.200	5.0
409.7109	24.01	-2.25	42986.730	1.5	67387.300	2.5
409.7117	24.00	-4.72	28637.000	3.0	53037.520	2.0
409.7137	18.01	-4.70	184191.710	.5	208592.110	.5
409.7186	18.01	-2.93	190511.190	2.5	214911.300	2.5
409.7190	73.00	-2.29	5565.369	0.0	29972.341	0.0
409.7196	27.00	-1.98	29294.520	3.5	53694.570	3.5
409.7245	26.00	-4.57	29732.721	1.0	54132.480	1.0
409.7270	8.01	.69	231427.990	3.5	255827.600	4.5
409.7275	22.00	-.26	17215.440	5.0	41615.020	6.0
409.7287	25.02	-4.67	115780.230	2.5	140179.740	2.5
409.7330	90.01	-1.57	9194.957	0.0	33601.095	0.0
409.7332	23.00	-2.95	26352.590	2.5	50751.830	3.5
409.7384	7.01	-.72	187091.370	2.0	211490.300	2.0
409.7507	28.01	-2.76	105838.060	3.5	130236.260	2.5
409.7520	45.00	-.90	10888.765	0.0	35293.771	0.0
409.7532	26.01	-2.88	61726.090	3.5	86124.140	4.5
409.7564	26.02	.44	199660.840	5.0	224058.700	4.0
409.7582	26.02	.34	198336.580	5.0	222734.330	4.0
409.7622	9.02	-1.10	442147.190	2.5	466544.760	1.5
409.7640	41.00	-.06	17341.367	0.0	41745.658	0.0
409.7644	27.00	-3.28	22475.360	4.5	46872.740	3.5
409.7658	28.00	-2.63	31786.210	3.0	56183.510	4.0
409.7659	24.00	-.96	23305.010	2.0	47702.300	3.0
409.7663	26.02	-1.50	198337.060	3.0	222734.330	4.0
409.7670	74.00	-.82	17986.627	0.0	42390.740	0.0
409.7740	90.00	-1.19	2823.013	0.0	27226.709	0.0
409.7790	44.00	-.14	9114.300	0.0	33517.698	0.0
409.7814	25.01	-4.41	59537.400	4.0	83933.770	3.0
409.7886	24.00	-.73	23305.010	2.0	47700.950	2.0
409.7915	22.01	-3.06	40581.800	2.5	64977.570	3.5
409.7923	23.00	-2.99	26480.280	3.5	50876.000	4.5
409.7925	26.02	-.67	198338.620	4.0	222734.330	4.0
409.7937	24.00	-2.47	25177.390	4.0	49573.030	4.0
409.8008	7.01	-3.63	187091.370	2.0	211486.580	1.0
409.8010	12.02	-3.18	564731.600	1.0	589126.800	1.0
409.8015	24.00	-.78	23305.010	2.0	47700.180	1.0
409.8030	92.01	-1.37	241.973	0.0	24643.942	0.0
409.8037	23.00	-1.25	15724.220	3.5	40119.260	2.5
409.8100	76.00	-1.14	13953.751	0.0	38355.303	0.0
409.8166	26.00	-.49	26140.164	3.0	50534.435	3.0
409.8176	18.02	-1.64	207233.090	2.0	231627.300	1.0
409.8180	42.00	-.50	20003.065	0.0	44404.141	0.0
409.8205	26.01	-3.51	50212.930	2.5	74606.970	2.5
409.8220	41.00	-.49	13066.518	0.0	37467.355	0.0
409.8287	8.01	-.08	231296.050	1.5	255689.600	2.5
409.8343	21.00	-.57	16210.800	3.5	40604.020	3.5
409.8348	24.01	-1.37	42986.730	1.5	67379.920	1.5
409.8367	23.00	-2.31	9636.960	1.5	34030.040	1.5
409.8471	27.00	-2.97	24326.110	3.5	48718.570	2.5
409.8471	23.00	-1.94	14949.300	4.5	39341.760	3.5
409.8528	20.00	-1.09	20371.000	3.0	44763.118	4.0
409.8575	20.00	-2.15	20371.000	3.0	44762.839	3.0
409.8582	25.01	-4.29	49291.310	3.0	73683.110	4.0
409.8595	24.00	-3.00	28682.180	2.0	53073.900	3.0
409.8610	64.01	.28	6533.259	0.0	30931.775	0.0
409.8612	20.00	-3.69	20371.000	3.0	44762.620	2.0
409.8644	25.02	-.96	192880.160	3.5	217271.590	4.5
409.8646	26.00	-1.92	29371.860	3.0	53763.280	3.0
409.8698	25.02	-2.44	192012.750	1.5	216403.860	2.5
409.8731	10.01	-1.78	279137.620	3.5	303528.530	3.5
409.8740	42.00	-.48	16534.792	0.0	40932.534	0.0
409.8777	27.00	-3.80	29269.730	4.5	53660.370	5.5
409.8810	23.00	-2.32	14910.040	3.5	39300.480	2.5
409.8823	18.01	-2.79	186074.350	2.5	210464.710	2.5
409.8839	23.00	-2.00	15571.900	2.5	39962.170	2.5
409.8854	23.00	-1.71	15000.840	5.5	39391.020	4.5
409.8864	10.01	-.21	279137.620	3.5	303527.740	4.5
409.8900	64.01	-.64	4758.794	0.0	29155.583	0.0
409.8940	90.01	-1.19	8388.382	0.0	32784.933	0.0
409.8970	62.01	-1.85	2661.698	0.0	27058.071	0.0
409.8980	58.01	-1.08	5646.026	0.0	30042.339	0.0
409.9012	24.00	-1.41	24056.110	5.0	48445.350	6.0
409.9025	10.01	-2.26	282680.650	.5	307069.810	1.5
409.9030	74.00	-.74	19438.462	0.0	43834.478	0.0
409.9042	26.00	-2.59	26224.961	3.0	50614.020	4.0
409.9070	41.00	-1.53	80.658	0.0	24476.436	0.0
409.9166	22.00	-.16	17540.205	3.0	41928.528	2.0
409.9225	16.02	-2.33	148397.800	1.0	172785.770	1.0
409.9310	40.00	-1.83	0.000	0.0	24394.349	0.0
409.9377	25.00	-1.38	41230.300	3.5	65617.370	3.5
409.9456	18.01	-1.35	159706.460	.5	184093.060	.5
409.9473	28.00	-4.05	31786.210	3.0	56172.704	3.0
409.9540	57.01	-.18	14034.408	0.0	38427.389	0.0
409.9672	28.01	-3.14	113321.950	4.5	137707.260	3.5
409.9691	25.02	-.70	192576.420	2.5	216961.620	3.5
409.9706	25.00	-1.79	38120.180	4.5	62505.290	3.5
409.9706	8.01	-3.36	231427.990	3.5	255813.100	2.5
409.9750	58.01	-1.01	8630.355	0.0	33022.086	0.0
409.9785	23.00	-.10	2220.130	2.5	26604.770	3.5
409.9810	25.02	-2.94	192172.890	2.5	216557.380	3.5
409.9810	23.00	-2.23	17116.920	3.5	41501.410	4.5
409.9873	25.00	-1.34	38008.700	5.5	62392.820	4.5
409.9926	28.02	-4.59	121566.700	1.0	145950.500	1.0
409.9977	25.01	-2.61	81780.700	3.0	106164.200	4.0
409.9979	26.00	-2.52	27666.334	1.0	52049.820	2.0
410.0005	25.01	-1.35	65567.070	2.0	89950.400	3.0
410.0047	2.01	-.73	411477.918	0.0	435867.882	0.0
410.0086	24.00	-.43	36577.730	4.0	60960.580	4.0
410.0111	26.02	-3.69	122944.150	4.0	147326.850	4.0
410.0166	28.00	-3.20	30192.268	0.0	54574.640	1.0
410.0202	23.00	-2.57	9636.960	1.5	34019.120	1.5
410.0220	59.01	-1.39	2984.328	0.0	27373.263	0.0
410.0236	25.01	-3.51	43528.300	5.0	67910.260	4.0
410.0237	26.00	-4.53	26479.366	1.0	50861.320	2.0
410.0240	60.01	-1.48	2984.328	0.0	27373.144	0.0
410.0256	10.01	-2.39	279218.660	2.5	303600.500	2.5
410.0260	64.00	-.23	967.890	0.0	25356.587	0.0
410.0271	21.00	-.43	15041.980	3.5	39423.730	4.5
410.0278	23.00	-1.77	17054.870	2.5	41436.580	3.5
410.0300	76.00	-1.46	8630.355	0.0	33016.814	0.0
410.0337	26.00	-1.34	34328.733	3.0	58710.090	3.0
410.0340	90.00	-1.40	0.000	0.0	24388.221	0.0
410.0352	10.01	-.73	279218.660	2.5	303599.930	3.5
410.0356	26.00	-4.46	22996.661	4.0	47377.909	4.0
410.0370	44.00	-2.09	2016.438	0.0	26404.481	0.0
410.0400	41.00	-1.09	322.630	0.0	24710.495	0.0
410.0410	20.00	-3.78	23652.304	1.0	48033.230	2.0
410.0414	16.01	-3.58	119242.130	1.5	143623.030	1.5
410.0475	26.02	.78	198333.760	6.0	222714.300	6.0
410.0537	21.00	-2.76	16141.040	2.5	40521.210	1.5
410.0559	25.01	-4.30	82142.460	6.0	106522.500	6.0
410.0739	26.00	-3.24	6928.266	5.0	31307.235	4.0
410.0750	59.01	.06	4355.506	0.0	28741.289	0.0
410.0903	26.00	-4.84	19788.248	4.0	44166.240	3.0
410.0915	28.00	-2.17	33590.159	4.0	57968.080	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
410.0920	26.02	-.80	199660.840	5.0	224038.730	5.0
410.0920	41.00	.09	322.630	0.0	24707.402	0.0
410.0937	25.01	-4.82	79458.380	2.0	103836.170	2.0
410.0949	26.02	-.27	198336.580	5.0	222714.300	6.0
410.0973	7.01	-1.94	186652.490	4.0	211030.070	3.0
410.1001	26.01	-2.84	60807.280	4.5	85184.690	4.5
410.1008	23.01	-2.51	25191.080	2.0	49568.450	3.0
410.1013	25.01	-3.63	82142.460	6.0	106519.800	7.0
410.1121	25.01	-3.66	81780.700	3.0	106157.400	3.0
410.1131	25.01	-2.83	82142.460	6.0	106519.100	5.0
410.1156	24.00	-1.50	23933.900	4.0	48310.390	5.0
410.1255	26.00	-1.45	27394.676	3.0	51770.577	3.0
410.1279	28.01	-4.28	97799.660	1.5	122175.420	2.5
410.1294	28.01	-4.29	94067.140	1.5	118442.810	1.5
410.1344	23.00	-.04	17116.920	3.5	41492.290	3.5
410.1395	28.01	-3.50	105861.190	2.5	130236.260	2.5
410.1410	25.01	-3.88	59537.400	4.0	83912.380	5.0
410.1440	24.00	-4.22	31987.060	4.0	56361.860	5.0
410.1556	27.00	-2.20	30102.960	2.5	54477.070	3.5
410.1561	23.01	-3.87	12545.150	4.0	36919.230	3.0
410.1565	23.00	-.06	17054.870	2.5	41428.930	2.5
410.1600	28.01	-2.48	93390.060	2.5	117763.910	1.5
410.1641	26.00	-2.14	27666.334	1.0	52039.939	1.0
410.1657	27.00	-3.90	29563.170	1.5	53936.680	2.5
410.1683	25.01	-4.27	43536.900	4.0	67910.260	4.0
410.1689	26.00	-3.11	20037.815	0.0	44411.137	1.0
410.1712	14.02	-.34	230301.220	3.0	254674.400	4.0
410.1725	26.01	-3.53	54870.620	2.5	79243.730	1.5
410.1731	20.02	-3.60	323655.060	2.0	348028.130	3.0
410.1740	44.00	-.58	8952.985	0.0	33332.882	0.0
410.1760	19.02	-1.12	238455.100	.5	262828.000	1.5
410.1760	49.00	-.33	0.000	0.0	24379.778	0.0
410.1770	58.01	-.19	6936.547	0.0	31316.266	0.0
410.1787	14.02	-1.89	230301.660	4.0	254674.400	4.0
410.1787	14.02	-.25	230301.660	4.0	254674.400	5.0
410.1787	14.02	-4.00	230301.660	4.0	254674.400	5.0
410.1797	10.01	-3.73	281025.940	2.5	305398.620	1.5
410.1800	18.01	-2.54	186074.350	2.5	210447.010	3.5
410.1845	14.02	-4.56	230302.010	4.0	254674.400	5.0
410.1845	14.02	-.24	230302.010	4.0	254674.400	5.0
410.1845	14.02	-1.99	230302.010	4.0	254674.400	4.0
410.1895	28.01	-4.98	115120.000	2.5	139492.100	2.5
410.1903	14.02	-1.88	230302.350	5.0	254674.400	5.0
410.1903	14.02	-1.99	230302.350	5.0	254674.400	5.0
410.1903	14.02	-.16	230302.350	5.0	254674.400	6.0
410.1903	14.02	-3.63	230302.350	5.0	254674.400	4.0
410.1910	92.00	.12	8065.752	0.0	32444.639	0.0
410.1928	10.01	-1.90	279137.620	3.5	303509.520	2.5
410.2073	23.01	-3.43	48579.960	3.0	72951.000	4.0
410.2130	24.00	-3.08	25106.340	3.0	49477.040	2.0
410.2150	42.00	-.25	16534.792	0.0	40912.253	0.0
410.2157	23.00	-.16	8476.200	1.5	32846.740	2.5
410.2157	23.00	-2.86	8476.200	1.5	32846.740	2.5
410.2206	24.00	-2.61	24940.610	2.0	49310.860	3.0
410.2280	44.00	-1.43	7420.492	0.0	31797.180	0.0
410.2302	23.01	-3.70	48853.040	5.0	73222.720	4.0
410.2360	58.01	-.76	8872.327	0.0	33248.540	0.0
410.2380	39.00	.11	483.945	0.0	24860.039	0.0
410.2620	90.00	-.92	7420.492	0.0	31795.160	0.0
410.2700	74.00	-.94	6129.972	0.0	30504.165	0.0
410.2744	28.00	-1.06	34163.294	2.0	58530.350	3.0
410.2866	10.01	-2.08	294086.490	1.5	318452.820	1.5
410.2936	14.00	-2.77	15394.370	0.0	39760.285	1.0
410.2952	25.00	-3.05	35114.980	2.5	59480.800	2.5
410.2997	24.00	-4.03	23512.000	1.0	47877.550	1.0
410.3004	24.00	-2.58	24093.160	2.0	48458.670	2.0
410.3031	24.00	-1.50	38537.680	5.0	62903.030	6.0
410.3034	26.02	.48	198333.760	6.0	222699.090	5.0
410.3070	25.01	-4.38	81802.580	6.0	106167.700	7.0
410.3194	24.01	-3.44	64061.820	1.5	88426.200	.5
410.3221	24.01	-4.39	65257.030	3.5	89621.250	3.5
410.3300	26.00	-2.62	24338.766	3.0	48702.518	4.0
410.3340	66.01	-.43	806.575	0.0	25176.966	0.0
410.3398	23.00	-1.51	15571.900	2.5	39935.070	1.5
410.3449	28.01	-4.55	113172.960	4.5	137535.830	5.5
410.3452	28.00	-2.11	29888.505	2.0	54251.353	3.0
410.3452	25.00	-2.10	23296.670	3.5	47659.520	2.5
410.3454	25.00	-2.08	35165.050	1.5	59527.890	1.5
410.3498	26.02	-4.04	117950.320	4.0	142312.900	3.0
410.3509	26.02	-.44	198336.580	5.0	222699.090	5.0
410.3543	25.00	-.94	35165.050	1.5	59527.360	.5
410.3559	28.00	-3.56	34163.294	2.0	58525.507	1.0
410.3604	26.00	-4.38	29469.010	2.0	53830.960	3.0
410.3613	26.00	-2.42	26224.961	3.0	50586.857	3.0
410.3620	76.00	.33	27665.529	0.0	52034.257	0.0
410.3626	26.02	-4.41	122944.150	4.0	147305.970	3.0
410.3650	90.01	-1.27	12098.628	0.0	36467.178	0.0
410.3706	25.01	-4.45	41204.340	5.0	65565.680	4.0
410.3725	28.01	-3.70	106369.300	1.5	130730.530	2.5
410.3819	24.00	-1.60	25177.390	4.0	49538.060	5.0
410.3831	18.01	-.05	158730.210	2.5	183090.810	1.5
410.3840	67.00	.80	0.000	0.0	24367.422	0.0
410.3853	26.02	-2.81	198338.620	4.0	222699.090	5.0
410.3860	24.00	-3.49	25106.340	3.0	49466.770	2.0
410.3860	24.00	-4.52	27703.840	4.0	52064.270	4.0
410.3875	22.00	-5.23	11639.804	3.0	36000.144	4.0
410.3899	8.02	-.53	350302.300	2.0	374662.500	2.0
410.3912	18.01	.15	157233.930	3.5	181594.050	2.5
410.4000	68.00	-1.59	5081.424	0.0	29447.896	0.0
410.4084	25.02	.11	192172.890	2.5	216531.990	1.5
410.4103	26.00	-.93	26339.682	2.0	50698.666	2.0
410.4130	62.01	-1.84	322.630	0.0	24688.330	0.0
410.4155	26.00	-3.17	22838.320	2.0	47197.000	2.0
410.4168	17.02	-4.14	179663.000	1.5	204021.600	.5
410.4181	26.01	-5.50	23031.300	1.5	47389.820	1.5
410.4208	25.02	-3.16	193756.790	4.5	218115.150	3.5
410.4210	28.01	-4.96	113177.610	3.5	137535.960	3.5
410.4218	29.00	-1.77	40086.787	0.0	64451.964	0.0
410.4230	72.00	-1.66	5565.369	0.0	29930.475	0.0
410.4232	28.01	-4.64	113172.960	4.5	137531.180	4.5
410.4254	24.00	-3.31	28679.430	1.0	53037.520	2.0
410.4291	26.02	-.91	199700.830	4.0	224058.700	4.0
410.4321	24.01	-2.98	42986.730	1.5	67344.420	2.5
410.4369	25.01	-4.16	44138.960	1.0	68496.370	1.0
410.4380	90.01	-1.28	8307.725	0.0	32671.941	0.0
410.4385	23.00	.01	17242.050	5.5	41599.360	4.5
410.4409	27.00	-2.17	16470.600	1.5	40827.770	1.5
410.4410	28.00	-1.42	33610.916	2.0	57968.080	3.0
410.4411	23.00	-1.98	17181.980	4.5	41539.140	4.5
410.4416	18.02	-2.86	243424.970	3.0	267782.100	3.0
410.4420	75.00	-.46	19357.805	0.0	43721.783	0.0
410.4430	58.01	-1.34	5404.054	0.0	29767.973	0.0
410.4450	26.00	-4.21	24118.815	4.0	48475.740	3.0
410.4717	24.00	-4.53	28682.180	2.0	53037.520	2.0
410.4736	27.00	-1.31	18775.010	.5	43130.240	.5
410.4736	27.01	-3.07	61240.800	3.0	85596.030	2.0
410.4738	26.01	-4.30	50142.930	2.5	74498.150	1.5
410.4748	25.00	-.68	35114.980	2.5	59470.140	3.5
410.4760	26.01	-3.08	62244.570	1.5	86599.660	2.5
410.4763	23.00	.30	15770.720	4.5	40125.790	3.5
410.4781	17.00	-2.47	71958.363	2.5	96313.330	1.5
410.4785	23.00	-4.75	8412.940	.5	32767.880	1.5
410.4864	24.00	-.89	23933.900	4.0	48288.370	4.0
410.4870	57.00	-.67	2581.041	0.0	26942.348	0.0
410.4933	26.00	-2.77	26874.534	5.0	51228.595	5.0
410.4970	25.00	-4.37	38934.940	2.5	63288.780	3.5
410.4977	24.00	-3.67	24282.340	4.0	48636.140	3.0
410.4990	64.00	-.31	7017.204	0.0	31377.799	0.0
410.5000	58.01	-.25	8469.040	0.0	32829.576	0.0
410.5020	73.00	-2.22	1935.780	0.0	26296.197	0.0
410.5029	25.01	-1.50	49427.320	4.0	73780.810	3.0
410.5049	26.00	-3.80	27666.334	1.0	52019.706	1.0
410.5050	66.01	-1.25	4678.136	0.0	29038.375	0.0
410.5080	42.00	.43	24358.571	0.0	48718.632	0.0
410.5166	23.00	-.10	2153.200	1.5	26505.880	2.5
410.5340	90.01	-1.17	6936.547	0.0	31295.065	0.0
410.5360	25.00	-.73	34938.700	4.5	59290.230	3.5
410.5454	21.00	-1.99	15041.980	3.5	39392.950	3.5
410.5483	26.02	.35	199700.830	4.0	224051.630	3.0
410.5508	26.01	-2.85	62065.570	3.5	86416.220	3.5
410.5530	42.00	-.32	21454.900	0.0	45812.291	0.0
410.5840	69.00	.08	0.000	0.0	24355.552	0.0
410.6004	24.00	-4.16	31393.400	5.0	55741.110	6.0
410.6022	24.00	-1.72	25106.340	3.0	49453.940	4.0
410.6088	25.02	-.62	192365.520	1.5	216712.730	2.5
410.6125	28.01	-3.85	70358.940	4.5	94705.930	3.5
410.6130	58.01	-1.14	5726.684	0.0	30080.516	0.0
410.6180	41.00	-.80	8952.985	0.0	33306.520	0.0
410.6262	26.00	-2.45	20874.482	3.0	45220.662	3.0
410.6295	27.00	-2.67	23855.620	4.5	48201.600	3.5
410.6297	24.00	-3.74	30858.820	2.0	55204.790	3.0
410.6339	28.01	-2.63	98467.250	3.5	122812.970	3.5
410.6357	22.00	-7.57	14105.680	3.0	38451.298	2.0
410.6390	39.00	.09	18389.915	0.0	42742.205	0.0
410.6405	28.01	-4.40	97799.660	1.5	122144.990	2.5
410.6412	26.00	-1.53	27394.676	3.0	51739.964	2.0
410.6435	27.00	-3.50	24733.280	2.5	49078.430	1.5
410.6451	25.01	-4.82	79458.380	2.0	103803.440	3.0
410.6469	25.01	-2.55	82605.290	4.0	106950.240	3.0
410.6545	25.01	-3.00	81812.900	2.0	106157.400	3.0
410.6572	28.01	-3.21	93528.440	3.5	117872.780	2.5
410.6580	72.00	-.98	10485.478	0.0	34836.641	0.0
410.6590	60.01	-1.27	4436.164	0.0	28787.268	0.0
410.6599	21.00	-1.95	16210.800	3.5	40554.980	2.5
410.6620	62.01	-1.77	4355.506	0.0	28706.432	0.0
410.6751	28.01	-3.12	105499.050	3.5	129842.330	2.5
410.6754	23.00	-4.65	9824.580	2.5	34167.840	2.5
410.6780	41.00	-2.07	1532.493	0.0	25882.470	0.0
410.6798	17.02	-1.11	179781.000	.5	204124.000	1.5
410.6847	28.01	-4.78	100309.290	5.5	124652.000	4.5
410.6880	63.00	-.19	12824.546	0.0	37173.930	0.0
410.6911	24.00	-2.61	25177.390	4.0	49519.720	3.0
410.6930	92.01	-1.76	0.000	0.0	24349.088	0.0
410.7014	18.01	-1.68	186171.260	.5	210514.980	1.5
410.7040	22.00	-3.83	24694.895	4.0	49036.460	4.0
410.7043	28.01	-2.90	106369.300	1.5	130710.850	.5
410.7082	8.01	-.16	231350.080	2.5	255691.400	3.5
410.7083	26.01	-4.73	54902.420	1.5	79243.730	1.5
410.7154	22.00	-1.35	17215.440	5.0	41556.330	5.0
410.7202	26.00	-3.49	20037.815	0.0	44378.420	1.0
410.7280	62.01	-1.24	806.575	0.0	25153.588	0.0
410.7370	90.01	-1.35	11050.080	0.0	35396.560	0.0
410.7385	8.01	-1.44	231350.080	2.5	255689.600	2.5
410.7411	25.01	-4.34	78340.720	6.0	102680.090	5.0
410.7420	58.01	-.51	3952.218	0.0	28298.401	0.0
410.7463	23.00	-1.47	9636.960	1.5	33976.020	1.5
410.7470	42.00	.22	16615.449	0.0	40961.336	0.0
410.7490	45.00	-.92	14679.669	0.0	39025.437	0.0
410.7492	26.00	-2.95	22838.320	2.0	47177.210	1.0
410.7500	40.00	-.22	11856.655	0.0	36202.364	0.0
410.7552	28.01	-3.85	103653.030	3.5	127991.560	3.5
410.7632	25.01	-2.73	59537.400	4.0	83875.460	4.0
410.7647	9.02	-.56	442370.280	.5	466708.250	1.5
410.7652	18.01	-3.41	147875.860	2.5	172213.800	1.5
410.7659	26.02	-3.22	199700.830	4.0	224038.730	5.0
410.7676	25.00	-1.52	37737.220	3.5	62075.020	2.5
410.7743	26.00	-3.82	29056.312	3.0	53393.715	4.0
410.7800	58.01	-.93	8711.012	0.0	33054.943	0.0
410.7800	62.01	-2.38	806.575	0.0	25150.506	0.0
410.7840	44.00	-.31	14599.011	0.0	38942.705	0.0
410.7860	90.00	-1.39	3629.588	0.0	27973.163	0.0
410.7865	25.00	-.74	37148.660	5.5	61485.340	4.5
410.7866	29.01	-4.39	114482.500	2.0	138819.170	3.0
410.7937	24.00	-3.72	24299.890	2.0	48636.140	3.0
410.7991	27.01	-2.09	61260.100	2.0	85596.030	2.0
410.8122	26.00	-4.20	26140.164	3.0	50475.320	4.0
410.8125	23.00	-2.31	15664.750	1.5	39999.890	2.5
410.8184	23.00	-3.43	26249.480	1.5	50584.270	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
410.8212	23.00	-.16	17054.870	2.5	41389.490	1.5
410.8260	58.01	-1.41	7178.519	0.0	31519.724	0.0
410.8277	25.00	-2.61	33825.490	2.5	58159.730	2.5
410.8320	62.01	-1.76	2984.328	0.0	27325.178	0.0
410.8322	27.00	-.53	29948.760	2.5	54282.730	2.5
410.8346	22.00	-1.64	18525.070	2.0	42858.900	3.0
410.8360	92.00	-1.35	0.000	0.0	24340.613	0.0
410.8400	40.00	-1.04	4355.506	0.0	28695.882	0.0
410.8400	64.01	-.52	12582.573	0.0	36922.949	0.0
410.8420	90.01	-.98	4436.164	0.0	28776.421	0.0
410.8471	27.00	-5.05	1406.840	2.5	25739.930	2.5
410.8478	26.01	-3.29	62083.170	4.5	86416.220	3.5
410.8526	20.00	-1.38	21849.634	2.0	46182.399	3.0
410.8530	18.01	-4.28	190732.970	.5	215065.710	.5
410.8530	74.00	-.74	17986.627	0.0	42326.233	0.0
410.8564	23.00	-4.68	10892.500	3.5	35225.040	2.5
410.8618	24.00	-3.58	28679.430	1.0	53011.650	1.0
410.8621	24.00	-4.44	24303.940	3.0	48636.140	3.0
410.8755	8.01	-.44	231427.990	3.5	255759.400	3.5
410.9033	23.00	-2.23	9636.960	1.5	33966.720	.5
410.9046	26.00	-1.05	26550.466	0.0	50880.152	1.0
410.9071	22.00	-2.08	24694.895	4.0	49024.430	3.0
410.9080	60.01	-.94	483.945	0.0	24820.293	0.0
410.9082	24.00	-4.18	28682.180	2.0	53011.650	1.0
410.9128	26.02	-.24	205092.530	4.0	229421.730	4.0
410.9159	9.01	.24	211866.130	3.0	236195.140	3.0
410.9207	25.01	-3.53	43536.900	4.0	67865.630	4.0
410.9262	15.01	-.15	107361.100	3.0	131689.500	4.0
410.9275	22.00	-2.33	21739.713	5.0	46068.040	4.0
410.9295	23.01	-3.80	48579.960	3.0	72908.170	3.0
410.9301	28.00	-2.66	27943.543	1.0	52271.716	2.0
410.9320	90.00	-.85	8065.752	0.0	32400.678	0.0
410.9351	24.00	-3.76	27703.840	4.0	52031.720	3.0
410.9362	8.01	-2.04	231427.990	3.5	255755.800	2.5
410.9400	62.01	-1.36	2177.753	0.0	26512.206	0.0
410.9460	60.01	-.41	2500.383	0.0	26834.480	0.0
410.9533	27.00	-3.53	16778.160	2.5	41104.960	2.5
410.9560	58.01	-1.65	3468.273	0.0	27801.778	0.0
410.9580	24.00	-3.97	21847.880	2.0	46174.400	3.0
410.9587	7.01	-4.92	164610.760	1.0	188937.240	0.0
410.9594	24.00	-3.27	28637.000	3.0	52963.440	4.0
410.9650	27.00	-5.17	0.000	4.5	24326.110	3.5
410.9650	44.00	-1.68	9033.642	0.0	33366.614	0.0
410.9732	27.00	-1.20	28470.510	1.5	52796.130	2.5
410.9760	74.00	-.90	13227.833	0.0	37560.154	0.0
410.9776	23.00	-.28	2112.320	.5	26437.680	1.5
410.9800	57.00	-1.21	1048.548	0.0	25380.632	0.0
410.9803	23.00	-.36	8412.940	.5	32738.140	1.5
410.9805	26.00	-1.16	22946.810	1.0	47271.999	1.0
410.9815	20.01	-.72	60611.280	1.5	84936.410	2.5
410.9856	26.01	-4.53	73969.710	5.5	98294.600	5.5
410.9880	41.00	-1.56	5242.739	0.0	29574.350	0.0
411.0025	28.01	-4.22	106007.890	2.5	130331.780	1.5
411.0040	25.00	-.48	37420.240	5.5	61744.040	5.5
411.0041	7.01	-.58	187091.370	2.0	211415.160	2.0
411.0060	27.00	-.70	30102.960	2.5	54426.640	1.5
411.0101	25.01	-4.04	79512.730	3.0	103836.170	2.0
411.0190	62.01	-1.16	5242.739	0.0	29572.515	0.0
411.0281	20.01	-1.68	60611.280	1.5	84933.650	1.5
411.0336	28.01	-3.81	106369.300	1.5	130691.350	1.5
411.0380	58.01	-.33	8711.012	0.0	33039.663	0.0
411.0480	60.01	-1.43	0.000	0.0	24328.059	0.0
411.0516	18.01	-3.66	190511.190	2.5	214832.170	3.5
411.0530	27.00	-1.55	8460.810	2.5	32781.710	2.5
411.0570	74.00	-.73	18147.942	0.0	42475.468	0.0
411.0589	25.00	-2.06	37148.660	5.5	61469.210	5.5
411.0593	25.02	.21	192392.200	3.5	216712.730	2.5
411.0662	25.01	-1.64	49465.130	3.0	73785.250	2.0
411.0740	23.00	-2.22	17116.920	3.5	41436.580	3.5
411.0773	24.01	-4.07	39742.360	2.5	64061.820	1.5
411.0779	23.00	-1.22	17181.980	4.5	41501.410	4.5
411.0792	25.00	-1.91	35041.370	3.5	59360.720	2.5
411.0810	39.00	-.19	15163.614	0.0	39489.720	0.0
411.0812	22.00	-3.03	16875.190	2.0	41194.420	3.0
411.0834	7.01	-1.27	187091.370	2.0	211410.470	3.0
411.0840	58.01	-1.54	2500.383	0.0	26826.312	0.0
411.0890	75.00	-.50	17099.394	0.0	41425.027	0.0
411.0895	25.00	.03	34938.700	4.5	59257.440	4.5
411.0936	24.00	-1.95	36552.130	3.0	60870.630	4.0
411.0968	24.00	-.50	23386.350	3.0	47704.660	4.0
411.0980	24.01	-4.82	65156.840	2.5	89475.080	2.5
411.0993	24.01	-2.21	30307.600	1.5	54625.760	2.5
411.1019	24.00	-4.11	23933.900	4.0	48251.910	3.0
411.1019	24.01	-2.92	25033.950	3.5	49351.960	2.5
411.1056	26.00	-3.24	26874.534	5.0	51192.320	4.0
411.1112	24.00	-1.79	21856.940	3.0	46174.400	3.0
411.1172	12.02	-1.98	584733.400	3.0	609050.500	2.0
411.1172	14.02	-.39	230267.700	2.0	254584.800	3.0
411.1328	14.02	-1.47	230268.620	3.0	254584.800	3.0
411.1328	14.02	-.90	230268.620	3.0	254584.800	4.0
411.1340	66.01	-.96	0.000	0.0	24322.970	0.0
411.1362	14.02	-.39	230268.620	3.0	254584.600	4.0
411.1367	24.00	-.61	23386.350	3.0	47702.300	3.0
411.1390	58.01	-.59	5726.684	0.0	30049.358	0.0
411.1400	29.00	-1.71	40974.020	0.0	65296.635	0.0
411.1401	25.00	-3.36	35165.050	1.5	59480.800	2.5
411.1412	25.01	-3.35	49465.130	3.0	73780.610	3.0
411.1512	14.02	-.15	230270.660	4.0	254585.750	5.0
411.1573	23.00	-.79	15724.220	3.5	40038.950	4.5
411.1578	30.02	-2.53	238205.500	1.0	262520.200	2.0
411.1595	24.00	-1.03	23386.350	3.0	47700.950	2.0
411.1673	14.02	-3.25	230270.660	4.0	254584.800	3.0
411.1673	14.02	-1.80	230270.660	4.0	254584.800	4.0
411.1681	25.00	-4.20	27201.540	2.5	51515.630	2.5
411.1707	14.02	-1.70	230270.660	4.0	254584.600	4.0
411.1781	27.01	-6.28	24074.600	2.0	48388.100	2.0
411.1795	23.00	.38	2424.890	4.5	26738.310	4.5
411.1810	74.00	-2.50	1613.150	0.0	25933.340	0.0
411.1818	28.01	-4.33	97799.660	1.5	122112.940	.5
411.1870	45.00	-1.74	403.288	0.0	24723.123	0.0
411.1876	26.01	-2.79	48039.230	2.5	72352.170	3.5
411.1884	23.01	-3.04	22273.540	1.0	46586.430	0.0
411.1930	58.01	-1.37	6291.287	0.0	30610.767	0.0
411.1934	12.02	-.65	584737.900	2.0	609050.500	2.0
411.1943	23.00	-1.55	8578.520	2.5	32891.060	3.5
411.1944	9.02	-3.21	466818.830	5.5	491131.370	4.5
411.1945	23.00	-.79	15571.900	2.5	39884.430	1.5
411.1971	23.00	-.93	15688.800	2.5	40001.180	3.5
411.1984	12.02	.65	584733.400	3.0	609045.700	4.0
411.2005	9.02	-4.67	466856.070	3.5	491168.250	2.5
411.2020	76.00	-.83	5726.684	0.0	30045.632	0.0
411.2033	23.00	-.25	17116.920	3.5	41428.930	2.5
411.2035	12.02	-.68	584733.400	3.0	609045.400	3.0
411.2040	28.01	-4.62	94067.140	1.5	118379.110	2.5
411.2040	63.01	-1.63	10001.532	0.0	34320.362	0.0
411.2048	23.00	-3.37	8412.940	.5	32724.860	.5
411.2069	12.02	-.77	584733.400	3.0	609045.200	3.0
411.2091	26.00	-3.27	28604.610	2.0	52916.278	2.0
411.2108	27.01	-5.48	22009.230	4.0	46320.800	4.0
411.2130	41.00	.40	16696.107	0.0	41014.404	0.0
411.2163	26.00	-3.14	21715.735	5.0	46026.980	6.0
411.2170	25.00	-4.97	33825.490	2.5	58136.690	3.5
411.2189	23.00	-.60	15688.800	2.5	39999.890	2.5
411.2304	29.01	-4.06	117231.690	1.0	141542.100	2.0
411.2310	26.00	-1.12	27394.676	3.0	51705.052	2.0
411.2321	23.00	-.05	17181.980	4.5	41492.290	3.5
411.2375	27.00	-1.91	29948.760	2.5	54258.750	2.5
411.2396	10.01	-1.00	279218.660	2.5	303528.530	3.5
411.2434	28.00	-1.10	33500.854	3.0	57810.494	4.0
411.2437	29.01	-2.35	110365.980	2.0	134675.600	2.0
411.2537	25.01	-4.72	43536.900	4.0	67845.930	5.0
411.2566	24.01	-3.56	25043.100	1.5	49351.960	2.5
411.2627	24.00	-4.41	31377.960	4.0	55686.460	5.0
411.2664	26.01	-4.85	60402.380	2.5	84710.660	3.5
411.2670	71.00	-2.63	0.000	0.0	24315.104	0.0
411.2708	22.00	-1.58	386.874	4.0	24694.895	4.0
411.2720	9.01	-.67	211887.190	2.0	236195.140	3.0
411.2740	44.00	.03	7985.094	0.0	32299.784	0.0
411.2750	90.00	-1.22	0.000	0.0	24314.631	0.0
411.2796	12.02	.50	584737.900	2.0	609045.400	3.0
411.2814	18.01	-2.29	135085.920	1.5	159393.310	1.5
411.2829	12.02	-3.90	584737.900	2.0	609045.200	3.0
411.2903	26.00	-.73	33507.102	3.0	57813.970	3.0
411.2940	64.00	-.43	7501.149	0.0	31814.657	0.0
411.2965	26.00	-.41	33695.378	5.0	58001.880	6.0
411.2968	9.01	-.67	211866.130	3.0	236172.610	2.0
411.3040	25.01	-2.54	81862.840	4.0	106168.900	5.0
411.3047	28.01	-3.65	103025.580	2.5	127331.600	2.5
411.3110	92.01	-2.04	0.000	0.0	24312.503	0.0
411.3185	23.03	-1.29	263822.400	4.0	288127.600	4.0
411.3226	25.00	-.38	37164.250	6.5	61469.210	5.5
411.3233	24.01	-3.11	25047.040	2.5	49351.960	2.5
411.3256	25.00	-1.50	27248.000	1.5	51552.780	.5
411.3259	22.00	-4.66	21588.496	4.0	45893.260	3.0
411.3329	26.00	-1.73	29356.780	2.0	53661.130	3.0
411.3350	41.00	-.52	12905.203	0.0	37216.288	0.0
411.3380	44.00	.03	16615.449	0.0	40926.356	0.0
411.3400	75.00	-1.55	14115.066	0.0	38425.855	0.0
411.3480	23.00	-.98	9824.580	2.5	34128.040	3.5
411.3530	72.01	-1.05	12017.970	0.0	36327.991	0.0
411.3583	22.01	-3.80	40581.800	2.5	64884.650	2.5
411.3700	11.01	-.96	308864.540	0.0	333166.700	1.0
411.3700	11.01	-.96	308864.540	0.0	333166.700	1.0
411.3705	23.00	-3.36	26352.590	2.5	50654.720	2.5
411.3730	58.01	-1.22	3952.218	0.0	28261.057	0.0
411.3830	60.01	-1.47	1451.835	0.0	25760.083	0.0
411.3867	25.00	-1.00	35114.980	2.5	59416.150	1.5
411.3900	62.01	-1.46	1451.835	0.0	25759.669	0.0
411.3940	41.00	-.20	10969.423	0.0	35277.021	0.0
411.3969	7.00	-4.55	86220.480	1.5	110521.050	1.5
411.4125	22.00	-2.92	17215.440	5.0	41515.090	4.0
411.4130	44.00	-1.73	7985.094	0.0	32291.569	0.0
411.4150	58.01	-1.12	7178.519	0.0	31484.876	0.0
411.4209	25.01	-3.52	44745.460	2.0	69044.610	2.0
411.4211	8.01	-2.53	231530.260	4.5	255829.400	3.5
411.4333	24.00	-3.53	21810.840	1.0	46109.260	2.0
411.4335	7.01	-2.27	164610.760	1.0	188909.170	1.0
411.4374	25.00	-1.91	35041.370	3.5	59339.550	3.5
411.4449	26.00	-3.48	22838.320	2.0	47136.058	2.0
411.4489	18.01	-2.91	172335.520	2.5	196633.020	2.5
411.4502	23.00	-1.03	15664.750	1.5	39962.170	2.5
411.4516	8.01	-.77	231530.260	4.5	255827.600	4.5
411.4523	24.01	-3.98	50687.630	2.5	74984.930	1.5
411.4558	23.00	-2.05	17242.050	5.5	41539.140	4.5
411.4568	26.01	-4.03	60887.660	5.5	85184.690	4.5
411.4604	25.00	-.51	37737.220	3.5	62034.040	3.5
411.4730	22.00	-4.28	12118.394	4.0	36414.470	3.0
411.4734	26.00	-3.35	33412.706	3.0	57708.760	2.0
411.4756	22.01	-4.93	40798.370	3.5	65094.290	4.5
411.4770	73.00	-2.09	9598.245	0.0	33900.940	0.0
411.4773	25.02	.23	192665.800	4.5	216981.620	3.5
411.4859	8.00	-4.89	105441.736	3.0	129737.052	3.0
411.4859	8.00	-3.83	105441.736	4.0	129737.052	3.0
411.4929	26.00	-.51	27166.804	4.0	51461.707	4.0
411.5034	25.00	-.76	37420.240	5.5	61714.520	4.5
411.5065	19.01	-.16	163237.000	1.0	187531.100	1.0
411.5128	26.00	-3.62	27166.804	4.0	51460.530	3.0
411.5158	22.00	-2.42	17075.310	4.0	41368.860	4.0
411.5183	23.00	.06	2311.370	3.5	26604.770	3.5
411.5188	8.02	-2.74	300440.850	2.0	324734.220	2.0
411.5241	23.00	-.56	15770.720	4.5	40063.780	5.5
411.5268	24.00	-2.78	36577.730	4.0	60870.630	4.0
411.5322	24.00	-1.76	38537.680	5.0	62830.260	5.0
411.5336	24.00	-3.40	31987.060	4.0	56279.560	4.0
411.5370	58.01	-.17	7420.492	0.0	31719.644	0.0
411.5380	64.01	-.52	12582.573	0.0	36881.666	0.0
411.5475	23.00	-3.07	8476.200	1.5	32767.880	1.5
411.5487	14.02	-.01	225526.330	3.0	249817.940	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
411.5502	14.02	-.67	225526.330	3.0	249817.850	4.0
411.5531	10.02	-2.42	412320.210	2.0	436611.560	3.0
411.5590	74.00	-1.12	15002.299	0.0	39300.152	0.0
411.5592	14.02	-2.18	225526.330	3.0	249817.320	3.0
411.5614	10.01	-3.19	279218.660	2.5	303509.520	2.5
411.5639	25.01	-3.96	79512.730	3.0	103803.440	3.0
411.5754	26.01	-4.68	47674.780	1.5	71964.810	2.5
411.5780	77.00	-.66	13873.093	0.0	38169.824	0.0
411.5790	10.01	-2.74	279218.660	2.5	303508.480	1.5
411.5883	26.00	-2.72	29371.860	3.0	53661.130	3.0
411.5900	72.00	-.63	18228.600	0.0	42524.623	0.0
411.5970	28.00	-1.05	33500.854	3.0	57789.611	4.0
411.6027	25.00	-2.77	34138.880	6.5	58427.300	5.5
411.6100	23.00	-4.03	26738.310	4.5	51026.300	5.5
411.6100	92.01	-1.17	0.000	0.0	24294.842	0.0
411.6104	14.03	-.11	193978.890	.5	218266.860	.5
411.6266	23.01	-3.08	44657.990	2.0	68945.000	3.0
411.6281	25.01	-3.28	82232.180	5.0	106519.100	5.0
411.6330	45.00	-.80	14276.381	0.0	38569.666	0.0
411.6377	18.01	-2.32	172335.520	2.5	196621.880	3.5
411.6460	62.01	-1.65	2661.698	0.0	26954.416	0.0
411.6480	23.00	-.46	2220.130	2.5	26505.880	2.5
411.6515	23.00	-3.10	553.020	4.5	24838.560	3.5
411.6536	9.01	-.02	211887.190	2.0	236172.610	2.0
411.6591	25.00	-.76	37789.930	2.5	62075.020	2.5
411.6600	23.00	-.82	2112.320	.5	26397.360	.5
411.6664	24.01	-2.64	45669.540	1.5	69954.200	2.5
411.6695	23.00	-1.80	2153.200	1.5	26437.680	1.5
411.6710	90.01	-.68	6129.972	0.0	30421.214	0.0
411.6849	25.01	-2.77	81886.330	5.0	106169.900	6.0
411.6863	23.01	-6.91	26839.820	3.0	51123.310	2.0
411.6900	41.00	-1.31	0.000	0.0	24290.121	0.0
411.6942	26.00	-.97	26140.164	3.0	50423.185	4.0
411.6978	10.01	-2.91	283894.410	.5	308177.220	1.5
411.6983	26.01	-2.49	60402.380	2.5	84685.160	3.5
411.6989	9.01	-.68	211887.190	2.0	236169.930	1.0
411.7010	58.01	.03	10808.108	0.0	35097.580	0.0
411.7019	25.01	-3.65	81886.330	5.0	106168.900	5.0
411.7024	25.02	.54	192989.050	5.5	217271.590	4.5
411.7139	15.01	-2.04	103668.740	3.0	127950.600	2.0
411.7290	58.01	-.68	5887.999	0.0	30175.819	0.0
411.7351	25.01	-1.80	82605.290	4.0	106885.900	4.0
411.7434	28.01	-4.26	106620.530	3.5	130900.650	2.5
411.7485	24.00	-4.44	24282.340	4.0	48562.160	4.0
411.7539	27.02	-3.74	83773.400	1.5	108052.900	2.5
411.7542	18.01	-3.70	159706.460	.5	183985.940	1.5
411.7556	25.01	-4.44	53805.800	4.0	78085.200	5.0
411.7590	58.01	-.11	10566.135	0.0	34852.186	0.0
411.7641	30.02	-1.52	237642.700	3.0	261921.600	2.0
411.7703	26.00	-4.59	29469.010	2.0	53747.547	3.0
411.7716	23.00	-4.38	11100.650	4.5	35379.110	3.5
411.7729	25.02	-.89	192392.200	3.5	216670.580	4.5
411.7805	9.02	-3.38	466890.320	3.5	491168.250	2.5
411.7843	26.00	-4.76	27559.568	2.0	51837.279	3.0
411.7858	26.00	-1.49	34547.192	2.0	58824.810	2.0
411.7895	26.02	-1.58	198333.760	6.0	222611.160	5.0
411.7936	26.01	-2.91	62322.500	3.5	86599.660	2.5
411.7970	23.00	-1.38	15724.220	3.5	40001.180	3.5
411.8040	24.00	-2.59	25177.390	4.0	49453.940	4.0
411.8050	74.00	-.19	18873.860	0.0	43157.198	0.0
411.8101	24.00	-1.39	35807.900	2.0	60084.090	1.0
411.8119	24.00	-3.22	23512.000	1.0	47788.080	0.0
411.8138	26.01	-4.72	36126.410	1.5	60402.380	2.5
411.8140	58.01	-.13	5565.369	0.0	29848.176	0.0
411.8180	74.00	-1.02	13711.778	0.0	37994.349	0.0
411.8189	23.00	.09	15724.220	3.5	39999.890	2.5
411.8199	29.01	-4.16	110084.290	1.0	134359.900	1.0
411.8199	10.01	-1.02	279324.890	1.5	303600.500	2.5
411.8245	23.00	-1.79	15571.900	2.5	39847.240	1.5
411.8328	25.01	-4.84	43536.900	4.0	67811.750	3.0
411.8348	24.00	-.81	33060.740	3.0	57335.470	4.0
411.8374	26.02	-.05	198336.580	5.0	222611.160	5.0
411.8455	24.00	-3.20	23512.000	1.0	47786.100	2.0
411.8472	28.01	-3.84	105861.190	2.5	130135.190	1.5
411.8480	45.00	-.68	403.288	0.0	24684.091	0.0
411.8500	44.00	-2.27	1129.205	0.0	25409.890	0.0
411.8532	25.00	-.97	41031.480	4.5	65305.130	3.5
411.8548	26.00	.37	28819.966	5.0	53093.517	6.0
411.8550	62.01	-.32	5242.739	0.0	29523.129	0.0
411.8579	23.00	-4.85	15688.800	2.5	39962.170	2.5
411.8600	72.00	-1.07	10485.478	0.0	34765.573	0.0
411.8625	23.00	-.74	8715.720	3.5	32988.820	3.5
411.8690	78.00	-.88	13389.148	0.0	37668.713	0.0
411.8693	8.02	-1.70	350302.300	2.0	374575.000	1.0
411.8703	25.00	-2.11	38120.180	4.5	62392.620	4.5
411.8720	26.02	.64	198338.620	4.0	222611.160	5.0
411.8752	9.01	-.68	211900.260	1.0	236172.610	2.0
411.8767	27.00	-.39	8460.810	2.5	32733.070	3.5
411.8803	28.01	-2.40	93390.060	2.5	117662.110	1.5
411.8866	26.02	.46	198333.560	2.0	222605.240	3.0
411.8880	17.01	-.55	158177.100	1.0	182448.700	2.0
411.8888	23.00	-3.46	26480.280	3.5	50751.830	3.5
411.8910	72.00	-.86	13953.751	0.0	38232.019	0.0
411.8942	23.00	-4.42	26604.770	3.5	50876.000	4.5
411.8960	42.00	-.68	16615.449	0.0	40893.422	0.0
411.8993	25.00	-2.23	27281.850	.5	51552.780	.5
411.8998	30.02	-2.63	260418.100	2.0	284689.000	1.0
411.8998	15.01	-1.50	107361.100	3.0	131632.000	3.0
411.9020	58.01	-.76	4436.164	0.0	28713.783	0.0
411.9066	17.01	-.70	161634.900	2.0	185905.400	1.0
411.9078	24.00	-2.05	21810.840	1.0	46081.270	0.0
411.9097	23.00	-.87	15664.750	1.5	39935.070	1.5
411.9207	9.01	-.21	211900.260	1.0	236169.930	1.0
411.9241	25.00	-1.62	35114.980	2.5	59384.450	1.5
411.9280	26.02	-1.41	198336.580	5.0	222605.820	4.0
411.9280	41.01	.65	20970.955	0.0	45247.042	0.0
411.9355	8.02	-.51	367952.200	1.0	392221.000	2.0
411.9361	26.02	.55	198337.060	3.0	222605.820	4.0
411.9365	26.02	-.16	198333.760	6.0	222602.500	6.0
411.9451	23.00	-1.18	15770.720	4.5	40038.950	4.5
411.9453	23.00	-2.05	8578.520	2.5	32846.740	2.5
411.9453	23.00	-.64	8578.520	2.5	32846.740	2.5
411.9460	26.02	-.29	198337.060	3.0	222605.240	3.0
411.9506	22.00	-4.52	21739.713	5.0	46007.620	4.0
411.9524	26.01	-5.01	20516.980	2.5	44784.780	2.5
411.9529	24.00	-2.84	33934.880	3.0	58202.650	3.0
411.9553	25.00	-4.65	27248.000	1.5	51515.630	2.5
411.9570	62.01	-1.82	2177.753	0.0	26452.131	0.0
411.9574	12.00	-2.13	35051.264	1.0	59318.775	2.0
411.9597	24.00	-.52	36552.130	3.0	60819.500	3.0
411.9626	26.02	-.11	198338.620	4.0	222605.820	4.0
411.9660	30.02	-2.18	237642.700	3.0	261909.700	4.0
411.9660	24.00	-.85	33935.650	2.0	58202.650	3.0
411.9663	26.00	-4.67	23110.925	3.0	47377.909	4.0
411.9680	45.00	-.38	15889.531	0.0	40163.261	0.0
411.9704	28.01	-4.97	111783.790	3.5	136050.530	2.5
411.9725	26.02	-1.60	198338.620	4.0	222605.240	3.0
411.9788	24.00	-4.54	21810.840	1.0	46077.090	1.0
411.9790	58.01	-.14	8711.012	0.0	32984.094	0.0
411.9830	40.00	-.33	12259.943	0.0	36532.789	0.0
411.9844	26.02	.73	198336.580	5.0	222602.500	6.0
411.9869	9.02	-1.58	442278.930	2.5	466544.700	1.5
411.9880	58.01	-.89	2581.041	0.0	26853.593	0.0
411.9883	22.00	-1.76	17215.440	5.0	41481.130	5.0
412.0000	8.04	-.33	653262.000	0.0	677533.845	0.0
412.0015	22.00	-.39	18593.990	3.0	42858.900	3.0
412.0066	26.01	-2.84	62151.610	2.5	86416.220	3.5
412.0085	24.00	-3.88	32097.360	6.0	56361.860	5.0
412.0108	24.00	-2.78	25106.340	3.0	49370.700	3.0
412.0124	25.01	-3.65	56883.380	1.0	81147.650	2.0
412.0209	26.00	-1.28	24118.815	4.0	48382.585	5.0
412.0344	26.00	-2.76	26351.049	5.0	50614.020	4.0
412.0519	23.00	-.76	8476.200	1.5	32738.140	1.5
412.0575	8.01	-2.90	231427.990	3.5	255689.600	2.5
412.0615	24.00	-2.65	21847.880	2.0	46109.260	2.0
412.0660	60.01	-1.48	5887.999	0.0	30155.956	0.0
412.0688	24.00	-1.43	36558.550	2.0	60819.500	3.0
412.0798	24.00	-3.36	23512.000	1.0	47772.300	1.0
412.0800	2.00	-1.48	169087.000	0.0	193354.133	0.0
412.0823	23.00	-1.39	2220.130	2.5	26480.280	3.5
412.0830	58.01	-.74	2500.383	0.0	26767.339	0.0
412.0850	15.01	-2.87	103340.010	2.0	127600.000	1.0
412.0860	74.00	-.81	15324.929	0.0	39591.708	0.0
412.0903	26.02	.20	166144.630	2.0	190404.310	3.0
412.0939	21.01	-4.99	39114.440	1.0	63373.910	2.0
412.0958	23.00	-1.94	17242.050	5.5	41501.410	4.5
412.0990	44.00	-1.03	7985.094	0.0	32251.108	0.0
412.1151	24.00	-3.21	24303.940	3.0	48562.160	4.0
412.1184	26.01	-2.63	62158.190	4.5	86416.220	3.5
412.1212	8.00	-4.50	105441.657	5.0	129699.521	4.0
412.1311	27.00	-.06	7442.410	3.5	31699.690	4.5
412.1342	26.02	.83	198333.760	6.0	222590.860	7.0
412.1360	62.01	-1.27	2984.328	0.0	27248.163	0.0
412.1460	40.00	-.75	4355.506	0.0	28618.753	0.0
412.1496	24.00	-1.30	33906.650	1.0	58162.840	2.0
412.1521	14.02	-3.58	230301.220	3.0	254557.260	3.0
412.1530	83.00	-.40	21535.558	0.0	45798.392	0.0
412.1532	14.02	-3.84	230301.660	4.0	254557.640	4.0
412.1540	62.01	-2.15	322.630	0.0	24585.406	0.0
412.1561	14.02	-2.52	230301.220	3.0	254557.030	2.0
412.1564	25.01	-4.02	49427.320	4.0	73683.110	4.0
412.1574	24.01	-4.86	66256.770	.5	90512.500	1.5
412.1591	14.02	-3.94	230302.010	4.0	254557.640	4.0
412.1596	14.02	-2.66	230301.660	4.0	254557.260	3.0
412.1634	22.00	-1.67	8602.340	2.0	32857.721	3.0
412.1640	75.00	-.21	20325.695	0.0	44587.882	0.0
412.1649	14.02	-2.29	230302.350	5.0	254557.640	4.0
412.1656	14.02	-2.76	230302.010	4.0	254557.260	3.0
412.1680	45.00	-.43	7743.122	0.0	32005.073	0.0
412.1681	22.00	-3.99	20126.055	3.0	44381.160	4.0
412.1700	8.04	-1.17	684124.000	0.0	708385.834	0.0
412.1740	29.00	-1.54	46620.047	0.0	70881.645	0.0
412.1766	23.00	-3.43	17181.980	4.5	41436.560	3.5
412.1802	25.01	-2.72	82712.550	3.0	106966.940	2.0
412.1805	26.00	-2.14	22838.320	2.0	47092.693	3.0
412.1821	24.00	-.83	24056.110	5.0	48310.390	5.0
412.1906	27.00	-6.02	1809.330	1.5	26063.110	1.5
412.1950	5.01	1.13	150649.000	0.0	174909.362	0.0
412.1980	28.00	-.37	29500.690	1.0	53754.036	2.0
412.1999	26.00	-2.20	28604.610	2.0	52857.840	1.0
412.2020	74.00	-.65	18873.860	0.0	43133.810	0.0
412.2025	26.02	.43	166144.630	2.0	190397.710	2.0
412.2050	6.02	.12	322403.000	0.0	346662.774	0.0
412.2143	22.00	.36	21469.494	3.0	45721.878	4.0
412.2154	24.00	-2.63	21856.940	3.0	46109.260	2.0
412.2251	28.01	-2.50	98561.220	2.5	122812.970	3.5
412.2271	27.00	-1.53	21780.470	5.5	46032.100	4.5
412.2319	23.00	-1.00	18302.270	3.5	42553.620	4.5
412.2361	25.00	-.49	35165.050	1.5	59416.150	1.5
412.2446	17.01	-1.03	161654.800	1.0	185905.400	1.0
412.2482	9.02	-.29	442294.310	1.5	466544.700	1.5
412.2510	62.01	-1.57	1935.780	0.0	26192.847	0.0
412.2516	26.00	-2.44	22946.810	1.0	47197.000	2.0
412.2652	26.01	-3.73	20830.520	2.5	45079.910	2.5
412.2742	25.00	-.12	35041.370	3.5	59290.230	3.5
412.2776	23.00	-3.42	8476.200	1.5	32724.860	.5
412.2780	26.02	.38	166144.630	2.0	190393.270	1.0
412.2810	41.00	-.36	11130.738	0.0	35386.040	0.0
412.2827	22.00	-4.08	20006.032	2.0	44254.390	3.0
412.2858	24.00	-1.60	26787.500	3.0	51035.680	2.0
412.2950	28.01	-4.12	111783.790	3.5	136031.430	2.5
412.2968	27.01	-1.95	61348.500	1.0	85596.030	2.0
412.2978	25.02	-1.38	191915.430	.5	216162.900	1.5
412.2992	24.00	-3.43	27816.880	5.0	52064.270	4.0
412.2995	26.02	.21	202200.510	3.0	226447.880	2.0
412.3000	8.04	-.69	653100.000	0.0	677354.184	0.0
412.3048	11.01	-1.16	308864.540	0.0	333111.600	1.0
412.3060	44.00	-.90	9114.300	0.0	33368.131	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
412.3060	74.00	-1.08	15324.929	0.0	39578.760	0.0
412.3110	17.01	-1.91	149798.300	2.0	174045.000	3.0
412.3125	7.01	-4.06	164610.760	1.0	188857.370	2.0
412.3147	16.01	-2.89	119242.130	1.5	143488.610	.5
412.3182	23.00	-.16	15688.800	2.5	39935.070	1.5
412.3230	57.01	-.41	2581.041	0.0	26833.872	0.0
412.3237	23.01	-5.91	26839.820	3.0	51085.770	3.0
412.3240	58.01	-.29	5726.684	0.0	29979.456	0.0
412.3273	25.00	-1.11	35114.980	2.5	59360.720	2.5
412.3287	29.00	-1.32	43716.376	0.0	67968.872	0.0
412.3302	22.00	-.63	22404.690	3.0	46650.260	3.0
412.3378	24.00	-.70	24200.230	6.0	48445.350	6.0
412.3402	18.01	-4.63	185093.230	4.5	209338.210	3.5
412.3460	18.01	-2.99	185093.230	4.5	209337.870	4.5
412.3490	58.01	-.06	7662.464	0.0	31913.766	0.0
412.3501	18.01	-2.63	186340.480	1.5	210584.880	1.5
412.3530	90.01	-1.36	8549.697	0.0	32800.763	0.0
412.3541	23.00	-.27	2153.200	1.5	26397.360	.5
412.3547	6.00	-4.10	64089.850	1.0	88333.980	0.0
412.3550	25.00	-1.60	27201.540	2.5	51445.650	1.5
412.3550	25.00	-1.98	37789.930	2.5	62034.040	3.5
412.3568	22.00	-1.36	21588.496	4.0	45832.500	5.0
412.3645	24.00	-2.42	30965.460	3.0	55209.010	4.0
412.3650	42.00	-.08	20164.380	0.0	44414.741	0.0
412.3715	9.02	-.64	442294.310	1.5	466537.450	.5
412.3721	26.00	-2.14	24118.815	4.0	48361.920	4.0
412.3768	26.00	-2.36	21038.987	2.0	45281.816	2.0
412.3783	28.00	-2.28	33500.854	3.0	57743.596	3.0
412.3810	41.00	-.05	80.658	0.0	24330.078	0.0
412.3810	44.00	-.44	16050.847	0.0	40300.267	0.0
412.3828	10.01	-3.75	283894.410	.5	308136.890	1.5
412.3868	28.01	-4.75	68131.210	3.5	92373.450	2.5
412.3870	58.01	.13	6855.889	0.0	31104.956	0.0
412.3880	60.01	-1.15	2984.328	0.0	27233.336	0.0
412.3892	27.00	-.93	29269.730	4.5	53511.630	5.5
412.3899	9.02	-4.06	466890.320	3.5	491132.380	3.5
412.3900	8.04	-.06	653605.000	0.0	677853.891	0.0
412.3948	24.00	-1.55	36577.730	4.0	60819.500	3.0
412.3960	17.01	-.82	146333.800	2.0	170575.500	3.0
412.3960	62.01	-.93	3871.561	0.0	28120.099	0.0
412.4013	27.01	-2.85	61240.800	3.0	85482.190	4.0
412.4018	27.00	-3.30	23152.570	3.5	47393.930	2.5
412.4021	23.02	-3.46	63303.120	4.5	87544.460	4.5
412.4036	22.00	-.97	18482.860	1.0	42724.110	2.0
412.4062	18.01	-3.94	155351.030	1.5	179592.130	2.5
412.4074	23.00	-1.57	9824.580	2.5	34065.610	2.5
412.4081	7.01	-.44	205597.970	1.0	229838.960	2.0
412.4110	9.02	-4.93	466890.550	4.5	491131.370	4.5
412.4147	17.02	-1.82	179781.000	.5	204021.600	.5
412.4213	24.01	-3.97	65029.670	.5	89269.880	.5
412.4351	24.00	-1.75	26796.280	2.0	51035.680	2.0
412.4363	24.00	-2.66	30965.460	3.0	55204.790	3.0
412.4377	28.00	-2.22	33590.159	4.0	57829.405	5.0
412.4419	30.02	-4.66	237047.800	2.0	261286.600	1.0
412.4504	9.02	-3.32	466893.880	4.5	491132.380	3.5
412.4540	42.00	.43	24681.201	0.0	48926.329	0.0
412.4566	24.00	-2.54	24093.160	2.0	48331.300	1.0
412.4591	23.00	-3.32	15103.770	4.5	39341.760	3.5
412.4598	23.00	-1.20	15724.220	3.5	39962.170	2.5
412.4600	76.00	-.98	11292.053	0.0	35536.828	0.0
412.4637	9.02	-2.42	466893.650	5.5	491131.370	4.5
412.4642	25.01	-1.90	82712.550	3.0	106950.240	3.0
412.4646	26.01	-2.74	60625.470	5.5	84863.140	5.5
412.4676	9.02	-4.07	466893.880	4.5	491131.370	4.5
412.4724	24.01	-3.85	65384.040	4.5	89621.250	3.5
412.4730	71.00	-.21	7420.492	0.0	31664.503	0.0
412.4730	92.01	-1.26	1693.808	0.0	25937.819	0.0
412.4766	26.02	-4.81	98661.880	1.0	122898.840	2.0
412.4787	26.01	-5.15	20516.980	2.5	44753.820	3.5
412.4790	58.01	-.33	5484.711	0.0	29728.369	0.0
412.4814	25.01	-4.02	83933.770	3.0	108170.450	2.0
412.4875	24.00	-1.31	33040.100	2.0	57276.420	3.0
412.4920	39.01	-1.62	3226.301	0.0	27469.195	0.0
412.4935	24.01	-4.06	66355.130	1.5	90591.100	2.5
412.5100	25.00	-2.17	34250.520	5.5	58485.520	4.5
412.5180	74.00	-.69	16292.819	0.0	40534.185	0.0
412.5202	17.01	-.87	161671.000	0.0	185905.400	1.0
412.5224	26.00	-4.38	19788.248	4.0	44022.518	4.0
412.5250	41.00	-.57	10808.108	0.0	35049.063	0.0
412.5267	29.01	-4.56	121981.680	2.0	146215.700	1.0
412.5313	24.00	-1.97	26801.930	1.0	51035.680	2.0
412.5360	16.02	-2.29	148397.800	1.0	172631.270	0.0
412.5439	24.00	-.53	33934.880	3.0	58167.890	4.0
412.5440	22.00	-2.87	16961.420	3.0	41194.420	3.0
412.5474	25.02	-4.39	115711.600	4.5	139944.400	3.5
412.5566	24.00	-1.98	24056.110	5.0	48288.370	4.0
412.5580	41.00	-1.85	2097.096	0.0	26336.112	0.0
412.5610	26.00	-.55	34039.495	4.0	58271.500	5.0
412.5665	23.00	-4.46	26352.590	2.5	50584.270	1.5
412.5670	25.01	-2.35	82735.290	2.0	106966.940	2.0
412.5780	58.01	-1.56	3629.588	0.0	27867.429	0.0
412.5780	64.00	-.40	8388.382	0.0	32626.223	0.0
412.5786	25.02	-2.64	192172.890	2.5	216403.860	2.5
412.5815	25.00	-.20	41031.480	4.5	65262.280	4.5
412.5854	29.01	-3.09	122867.530	1.0	147098.100	0.0
412.5873	23.00	-2.28	15770.720	4.5	40001.180	3.5
412.5883	26.00	-2.09	22946.810	1.0	47177.210	1.0
412.5900	17.01	.39	161634.900	2.0	185865.200	3.0
412.6086	24.00	-3.78	21847.880	2.0	46077.090	1.0
412.6098	8.01	-4.72	231530.260	4.5	255759.400	3.5
412.6172	26.00	-.25	26874.534	5.0	51103.237	5.0
412.6232	26.00	-2.36	33412.706	3.0	57641.060	3.0
412.6299	24.00	-2.90	33934.880	3.0	58162.840	2.0
412.6314	26.01	-3.12	60956.820	3.5	85184.690	4.5
412.6416	25.01	-2.67	82735.290	2.0	106962.560	1.0
412.6421	10.01	-3.00	281171.380	2.5	305398.620	1.5
412.6430	24.00	-2.03	33935.650	2.0	58162.840	2.0
412.6498	25.01	-3.50	83875.460	4.0	108102.250	3.0
412.6520	24.00	-1.40	20519.600	6.0	44746.260	6.0
412.6534	26.02	.46	205195.150	5.0	229421.730	4.0
412.6660	58.01	-1.41	4436.164	0.0	28668.836	0.0
412.6748	25.00	-3.49	23549.200	2.5	47774.520	3.5
412.6752	23.03	-3.29	263902.300	3.0	288127.600	4.0
412.6760	8.00	-4.24	105441.657	5.0	129666.907	4.0
412.6800	74.00	-.16	19115.832	0.0	43347.682	0.0
412.6852	26.00	-2.96	22946.810	1.0	47171.520	0.0
412.6861	9.01	-.01	246283.630	2.0	270508.290	2.0
412.6876	25.00	-4.26	35114.980	2.5	59339.550	3.5
412.6908	24.00	-1.79	38537.680	5.0	62762.060	4.0
412.6961	10.00	-3.69	148257.790	1.0	172481.860	1.0
412.6992	26.02	-1.02	202282.650	2.0	226506.540	1.0
412.7016	18.01	-4.21	155708.020	.5	179931.770	1.5
412.7084	26.02	-3.46	158257.370	1.0	182480.720	2.0
412.7086	22.00	-1.64	11776.806	4.0	36000.144	4.0
412.7178	19.02	-3.01	214232.300	.5	238455.100	.5
412.7203	18.02	-2.34	207532.150	1.0	231754.800	0.0
412.7259	24.00	-1.81	20523.940	5.0	44746.260	6.0
412.7280	24.00	-.65	33113.270	4.0	57335.470	4.0
412.7280	63.00	.28	15970.189	0.0	40199.221	0.0
412.7370	58.01	-.04	5484.711	0.0	29713.215	0.0
412.7439	28.00	-1.92	34408.574	1.0	58629.840	2.0
412.7440	44.00	-1.90	2016.438	0.0	26244.531	0.0
412.7450	41.00	.21	16776.764	0.0	41004.798	0.0
412.7531	22.00	.51	21739.713	5.0	45960.439	6.0
412.7560	15.01	-.11	103668.740	3.0	127889.300	3.0
412.7598	28.00	-2.47	33590.159	4.0	57810.494	4.0
412.7611	26.00	-.89	23051.744	0.0	47271.999	1.0
412.7614	23.01	-3.33	48730.760	4.0	72951.000	4.0
412.7709	23.00	-1.07	15664.750	1.5	39884.430	1.5
412.7720	64.01	-.76	12663.231	0.0	36889.680	0.0
412.7740	58.01	-.75	4436.164	0.0	28662.496	0.0
412.7757	25.00	-2.35	35165.050	1.5	59384.450	1.5
412.7774	26.00	-.83	26479.366	1.0	50698.666	2.0
412.7793	22.00	-7.60	13981.750	1.0	38200.940	0.0
412.7800	72.01	-.66	14276.381	0.0	38502.361	0.0
412.7801	28.01	-3.26	68154.310	1.5	92373.450	2.5
412.7805	26.00	-.44	27543.000	1.0	51762.120	2.0
412.7870	44.00	-.45	13873.093	0.0	38098.662	0.0
412.7880	73.00	-2.15	3871.561	0.0	28097.071	0.0
412.7920	77.00	-1.44	13873.093	0.0	38096.369	0.0
412.7960	40.00	-1.49	4113.534	0.0	28338.575	0.0
412.7987	24.01	-4.34	65257.030	3.5	89475.080	2.5
412.8053	14.01	.55	79338.760	1.5	103556.420	2.5
412.8070	58.01	-.97	3548.931	0.0	27773.326	0.0
412.8072	23.00	-.08	2220.130	2.5	26437.680	1.5
412.8075	10.00	-3.00	148257.790	1.0	172475.323	2.0
412.8097	8.02	-1.63	300440.850	2.0	324656.250	3.0
412.8149	25.01	-3.17	14325.860	4.0	38542.960	3.0
412.8217	23.01	-3.85	23391.090	5.0	47607.790	6.0
412.8280	42.00	-.48	16615.449	0.0	40838.612	0.0
412.8310	39.00	.06	483.945	0.0	24706.932	0.0
412.8325	25.00	-.50	35041.370	3.5	59257.440	4.5
412.8359	14.00	-4.64	33326.053	2.0	57541.918	1.0
412.8360	58.01	-.53	7420.492	0.0	31643.186	0.0
412.8374	25.01	-4.09	43528.300	5.0	67744.080	6.0
412.8391	24.00	-.72	33060.740	3.0	57276.420	3.0
412.8404	18.01	-4.94	195031.120	2.5	219246.720	3.5
412.8475	24.00	-3.52	24299.890	2.0	48515.080	3.0
412.8516	25.01	-2.52	82735.290	2.0	106950.240	3.0
412.8611	24.00	-4.24	33113.270	4.0	57327.660	5.0
412.8641	18.01	-1.36	149179.170	3.5	173393.380	2.5
412.8661	28.01	-.69	103653.030	3.5	127867.130	4.5
412.8730	26.01	-3.53	20830.520	2.5	45044.210	1.5
412.8830	42.00	-.22	21212.928	0.0	45432.864	0.0
412.8870	23.00	-2.86	15664.750	1.5	39877.620	.5
412.8870	45.00	-.27	7743.122	0.0	31962.824	0.0
412.8898	25.01	-8.41	14593.820	3.0	38806.530	4.0
412.8960	76.00	-1.87	4113.534	0.0	28332.708	0.0
412.9143	22.01	-1.41	15265.600	3.5	39476.870	2.5
412.9165	24.00	-4.17	24303.940	3.0	48515.080	3.0
412.9180	58.01	-1.05	5887.999	0.0	30105.882	0.0
412.9188	26.00	-2.61	27559.568	2.0	51770.577	3.0
412.9196	24.00	-.21	23498.840	4.0	47709.800	5.0
412.9230	62.01	-1.57	1935.780	0.0	26153.370	0.0
412.9380	73.00	-2.00	1935.780	0.0	26152.490	0.0
412.9411	27.00	-3.75	23184.230	2.5	47393.930	2.5
412.9430	41.00	-.89	645.260	0.0	24861.677	0.0
412.9450	26.00	-.75	27394.676	3.0	51664.146	3.0
412.9484	23.01	-3.88	48579.960	3.0	72789.230	3.0
412.9522	18.02	-4.07	226503.220	3.0	250712.270	2.0
412.9684	18.01	-1.28	159706.460	.5	183914.560	.5
412.9700	63.01	-.31	0.000	0.0	24214.834	0.0
412.9817	27.00	-3.97	30742.650	.5	54949.970	1.5
412.9904	23.00	-.76	18198.080	2.5	42404.890	3.5
413.0035	26.00	-3.49	25091.620	0.0	49297.660	1.0
413.0039	26.00	-4.75	12560.933	3.0	36766.950	3.0
413.0066	26.00	-3.65	29798.960	4.0	54004.820	3.0
413.0073	24.00	-.73	23498.840	4.0	47704.660	4.0
413.0134	23.00	-4.19	9824.580	2.5	34030.040	1.5
413.0196	17.01	-.89	146330.000	1.0	170535.100	2.0
413.0249	25.00	-3.47	23549.200	2.5	47753.990	2.5
413.0254	25.00	-2.28	38934.940	2.5	63139.700	2.5
413.0295	24.00	-3.14	25106.340	3.0	49310.860	3.0
413.0370	64.01	.10	5807.341	0.0	30016.247	0.0
413.0375	23.00	-.76	18302.270	3.5	42506.320	4.5
413.0476	24.00	-1.46	23498.840	4.0	47702.300	3.0
413.0518	28.00	-1.03	29500.690	1.0	53703.899	1.0
413.0520	27.00	-3.48	4142.660	3.5	28345.860	4.5
413.0645	56.01	.55	21952.422	0.0	46161.716	0.0
413.0679	28.01	-4.70	111783.790	3.5	135986.060	3.5
413.0689	18.01	-4.71	179931.770	1.5	204133.980	2.5
413.0710	58.01	-.43	4436.164	0.0	28645.077	0.0
413.0751	9.02	-4.33	443625.310	2.5	467827.160	1.5
413.0788	15.01	-1.47	103166.370	1.0	127368.000	2.0
413.0810	27.00	-3.72	29735.180	3.5	53936.680	2.5
413.0844	17.01	-.24	146333.800	2.0	170535.100	2.0
413.0851	24.00	-2.77	21856.940	3.0	46056.200	4.0
413.0872	14.01	-.60	79355.280	2.5	103556.420	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
413.0894	14.01	.70	79355.280	2.5	103556.290	3.5
413.0895	27.01	-5.39	25147.200	4.0	49348.200	4.0
413.1100	58.01	-.71	2581.041	0.0	26787.669	0.0
413.1102	25.00	.12	34138.880	6.5	58338.670	6.5
413.1160	28.00	-1.59	33590.159	4.0	57789.611	4.0
413.1169	26.01	-4.44	48039.230	2.5	72238.630	2.5
413.1170	23.00	-1.75	2153.200	1.5	26352.590	2.5
413.1230	22.00	-.29	18525.070	2.0	42724.110	2.0
413.1298	28.01	-3.20	106133.140	1.5	130331.780	1.5
413.1315	29.01	-.75	120684.550	3.0	144883.090	2.0
413.1324	18.01	-4.94	195123.540	5.5	219322.030	5.5
413.1339	24.00	-.31	31009.000	3.0	55207.400	4.0
413.1420	90.01	-1.39	8307.725	0.0	32512.478	0.0
413.1467	25.00	-1.77	27248.000	1.5	51445.650	1.5
413.1530	41.00	-.38	12017.970	0.0	36222.078	0.0
413.1726	18.01	-.16	148620.070	1.5	172816.210	.5
413.1750	17.02	-.85	217850.200	2.5	242046.200	3.5
413.1773	7.01	-1.42	187091.370	2.0	211287.230	3.0
413.1805	25.00	-.19	35165.050	1.5	59360.720	2.5
413.1812	23.00	-1.74	15688.800	2.5	39884.430	1.5
413.1855	28.01	-3.86	106620.530	3.5	130815.910	3.5
413.1884	26.01	-3.60	60989.480	4.5	85184.690	4.5
413.1885	17.01	-.83	158177.100	1.0	182372.300	1.0
413.1920	42.00	.60	25326.461	0.0	49528.285	0.0
413.1926	26.00	-1.30	27559.568	2.0	51754.534	1.0
413.1962	26.00	-.80	26339.682	2.0	50534.435	3.0
413.1981	28.01	-4.50	68131.210	3.5	92325.850	3.5
413.1998	23.00	-2.29	9824.580	2.5	34019.120	1.5
413.2004	23.00	-.06	2311.370	3.5	26505.880	2.5
413.2024	28.01	-1.62	103025.580	2.5	127219.970	3.5
413.2060	26.00	-.59	12968.552	2.0	37162.729	3.0
413.2138	24.00	-2.16	24833.860	3.0	49027.580	2.0
413.2144	27.00	-2.92	8460.810	2.5	32654.500	2.5
413.2173	28.01	-3.46	111783.790	3.5	135977.310	4.5
413.2202	27.00	-2.98	28777.270	3.5	52970.620	2.5
413.2208	24.00	-3.10	25177.390	4.0	49370.700	3.0
413.2210	74.00	-.54	19680.435	0.0	43880.560	0.0
413.2230	42.00	-.60	18147.942	0.0	42347.950	0.0
413.2230	59.01	-1.53	1613.150	0.0	25813.158	0.0
413.2280	64.01	-.33	4758.794	0.0	28958.509	0.0
413.2280	75.00	-1.60	13711.778	0.0	37911.493	0.0
413.2301	25.00	-1.80	44523.450	3.5	68716.220	4.5
413.2310	58.01	-1.02	5646.026	0.0	29845.566	0.0
413.2396	25.01	-2.48	82774.730	1.0	106966.940	2.0
413.2415	24.01	-2.53	30307.600	1.5	54499.700	1.5
413.2430	56.00	-2.00	0.000	0.0	24198.837	0.0
413.2500	17.01	.34	129065.400	2.0	153257.000	2.0
413.2525	20.00	-2.90	23652.304	1.0	47843.760	0.0
413.2527	26.00	-.67	34328.733	3.0	58520.180	4.0
413.2600	3.00	-.57	14904.000	0.0	39101.842	0.0
413.2612	28.01	-2.80	76402.030	2.5	100592.980	3.5
413.2640	58.01	-1.15	6533.259	0.0	30730.866	0.0
413.2653	29.01	-2.58	122745.770	2.0	146936.480	2.0
413.2691	26.00	-1.18	33507.102	3.0	57697.590	4.0
413.2695	25.02	-4.85	115711.600	4.5	139902.060	5.5
413.2757	9.02	.23	466978.150	1.5	491168.250	2.5
413.2883	23.00	-2.73	8578.520	2.5	32767.880	1.5
413.2902	26.00	-1.50	22946.810	1.0	47136.058	2.0
413.2946	26.00	-6.54	12968.552	2.0	37157.546	2.0
413.2996	21.00	.33	15672.550	1.5	39861.250	2.5
413.3056	23.00	-1.64	15078.250	.5	39266.600	1.5
413.3140	24.01	-2.89	64448.840	2.5	88636.700	1.5
413.3145	25.01	-2.94	82774.730	1.0	106962.560	1.0
413.3190	62.01	-2.01	1935.780	0.0	26130.167	0.0
413.3228	24.00	-3.55	30787.300	1.0	54974.640	2.0
413.3287	26.02	-2.39	199139.760	5.0	223326.760	4.0
413.3351	18.01	-2.05	186340.480	1.5	210527.100	2.5
413.3360	60.01	-1.15	2500.383	0.0	26693.775	0.0
413.3420	75.00	-.62	16212.162	0.0	40405.203	0.0
413.3422	28.01	-3.37	92325.850	3.5	116512.060	3.5
413.3428	27.00	-4.91	23207.760	1.5	47393.930	2.5
413.3480	74.00	-.32	19438.462	0.0	43631.152	0.0
413.3500	92.00	-.89	0.000	0.0	24192.573	0.0
413.3551	9.02	-.48	442636.270	3.5	466821.720	3.5
413.3562	9.02	-.93	466982.860	2.5	491168.250	2.5
413.3673	7.01	-.22	205654.220	2.0	229838.960	2.0
413.3680	17.01	-.48	146330.000	1.0	170514.700	1.0
413.3692	10.01	-.18	279324.890	1.5	303509.520	2.5
413.3789	23.00	-1.59	8476.200	1.5	32660.260	2.5
413.3799	30.02	-1.78	238336.200	2.0	262520.200	2.0
413.3800	58.01	.57	6936.547	0.0	31127.364	0.0
413.3850	26.00	-1.63	27166.804	4.0	51350.505	4.0
413.3869	10.01	-1.07	279324.890	1.5	303508.480	1.5
413.4057	23.00	-1.27	15664.750	1.5	39847.240	1.5
413.4060	90.00	-1.31	0.000	0.0	24189.296	0.0
413.4152	18.01	-3.61	179931.770	1.5	204113.710	1.5
413.4160	64.00	-.23	483.945	0.0	24672.656	0.0
413.4163	25.00	-4.03	38669.600	3.5	62851.470	3.5
413.4194	25.01	-2.84	82774.730	1.0	106956.420	0.0
413.4197	26.00	-3.77	21038.987	2.0	45220.662	3.0
413.4244	26.02	-3.91	202200.510	3.0	226381.910	3.0
413.4285	23.00	-2.65	18372.460	3.5	42553.620	4.5
413.4310	40.00	-.44	12663.231	0.0	36851.064	0.0
413.4329	17.01	-1.39	146333.800	2.0	170514.700	1.0
413.4336	24.01	-4.96	65156.840	2.5	89337.700	1.5
413.4338	26.00	-5.35	0.000	4.0	24180.848	3.0
413.4346	28.01	-4.13	106620.530	3.5	130801.330	4.5
413.4386	24.00	-.82	33040.100	2.0	57220.670	2.0
413.4415	26.00	-2.11	27559.568	2.0	51739.964	2.0
413.4417	26.00	-1.88	24335.764	2.0	48516.150	1.0
413.4504	23.00	-.23	2424.890	4.5	26604.770	3.5
413.4522	27.00	-2.60	30102.960	2.5	54282.730	2.5
413.4590	41.00	-.18	11211.395	0.0	35397.590	0.0
413.4620	22.01	-2.44	40798.370	3.5	64977.570	3.5
413.4625	25.00	-.15	38934.940	2.5	63114.110	1.5
413.4680	26.00	-1.46	22838.320	2.0	47017.170	3.0
413.4723	19.01	-.25	162507.000	2.0	186685.600	2.0
413.4926	23.01	-4.36	48730.760	4.0	72908.170	3.0
413.5034	25.00	.05	34250.520	5.5	58427.300	5.5
413.5090	70.01	-.41	34602.076	0.0	58785.346	0.0
413.5118	28.01	-4.84	111783.790	3.5	135960.080	4.5
413.5140	62.01	-1.21	5242.739	0.0	29425.717	0.0
413.5167	25.00	-2.06	34343.900	4.5	58519.900	3.5
413.5270	45.00	-.39	5646.026	0.0	29828.244	0.0
413.5280	23.00	-.95	8715.720	3.5	32891.060	3.5
413.5295	25.00	-.82	35114.980	2.5	59290.230	3.5
413.5330	25.01	-4.32	81993.850	4.0	106168.900	5.0
413.5352	25.01	-3.46	46903.260	2.0	71078.180	1.0
413.5420	41.00	-.36	12582.573	0.0	36763.914	0.0
413.5434	23.00	-4.49	26480.280	3.5	50654.720	2.5
413.5438	9.02	-.53	442370.280	.5	466544.700	1.5
413.5440	58.01	-.73	4436.164	0.0	28617.388	0.0
413.5500	62.00	-1.06	1451.835	0.0	25632.708	0.0
413.5586	28.01	-2.75	105668.780	2.5	129842.330	2.5
413.5604	6.00	-3.07	64086.920	3.0	88260.370	2.0
413.5621	25.01	-2.64	82712.550	3.0	106885.900	4.0
413.5680	40.00	-1.08	5000.766	0.0	29180.586	0.0
413.5728	24.01	-4.96	45730.740	2.5	69903.460	3.5
413.5748	26.00	-1.16	33801.555	2.0	57974.160	2.0
413.5760	92.01	-1.55	4516.821	0.0	28696.174	0.0
413.5765	18.01	-2.81	186340.480	1.5	210514.980	1.5
413.5780	76.00	-.73	4113.534	0.0	28292.770	0.0
413.5790	24.01	-2.68	42898.120	2.5	67070.480	1.5
413.5826	26.02	-.53	202334.390	1.0	226506.540	1.0
413.5829	24.00	-2.44	24286.540	1.0	48458.670	2.0
413.5890	58.01	-.66	10566.135	0.0	34744.728	0.0
413.5900	8.04	-.70	684124.000	0.0	708302.534	0.0
413.6082	23.00	-.97	15078.250	.5	39248.900	1.5
413.6125	25.02	-3.94	115774.000	3.5	139944.400	3.5
413.6200	73.00	-1.73	3871.561	0.0	28048.342	0.0
413.6246	20.02	.59	346732.190	1.0	370901.880	2.0
413.6255	10.01	-4.54	294086.490	1.5	318256.130	2.5
413.6260	26.02	-.79	199139.760	5.0	223309.370	5.0
413.6290	25.01	-4.19	43696.190	3.0	67865.630	4.0
413.6293	6.00	-4.22	64090.950	2.0	88260.370	2.0
413.6350	74.00	-.74	18147.942	0.0	42323.846	0.0
413.6380	23.00	-2.17	2311.370	3.5	26480.280	3.5
413.6445	28.00	-4.97	26665.903	3.0	50834.435	2.0
413.6450	75.00	-.30	11695.340	0.0	35870.659	0.0
413.6454	25.01	-4.48	83933.770	3.0	108102.250	3.0
413.6513	26.00	-2.67	27166.804	4.0	51334.940	4.0
413.6678	9.02	-.09	442370.280	.5	466537.450	.5
413.6707	23.03	-.56	234121.800	0.0	258286.800	1.0
413.6770	58.01	-1.32	5242.739	0.0	29416.188	0.0
413.6798	25.02	-.12	192365.520	1.5	216531.990	1.5
413.6810	92.01	-1.41	4355.506	0.0	28528.722	0.0
413.6861	17.01	-2.90	153257.000	2.0	177423.100	1.0
413.6894	22.00	-.06	18145.400	2.0	42311.310	3.0
413.6900	58.01	-1.06	5887.999	0.0	30060.689	0.0
413.6957	23.00	-1.12	18198.080	2.5	42363.620	3.5
413.6959	25.01	-1.43	49517.580	5.0	73683.110	4.0
413.6993	26.00	-1.61	27543.000	1.0	51708.330	2.0
413.7010	26.02	-1.27	202282.650	2.0	226447.880	2.0
413.7019	25.02	-.86	192392.200	3.5	216557.380	3.5
413.7040	57.00	-.88	1048.548	0.0	25220.420	0.0
413.7043	20.02	-.44	346896.260	2.0	371061.300	3.0
413.7070	63.00	-.02	15970.189	0.0	40141.885	0.0
413.7100	41.00	-.44	0.000	0.0	24171.521	0.0
413.7130	26.02	.82	198658.800	3.0	222823.330	4.0
413.7145	23.00	-3.42	18805.050	.5	42969.490	1.5
413.7192	25.02	-4.59	115780.230	2.5	139944.400	3.5
413.7230	44.00	-1.27	7985.094	0.0	32155.856	0.0
413.7255	25.00	-1.42	27281.850	.5	51445.650	1.5
413.7277	22.00	.31	18695.230	4.0	42856.900	3.0
413.7323	22.00	-4.42	22081.198	2.0	46244.600	2.0
413.7351	9.02	-4.65	444957.110	1.5	469120.350	1.5
413.7366	24.00	-1.54	33113.270	4.0	57276.420	3.0
413.7385	26.01	-4.70	73966.940	6.5	98129.980	6.5
413.7409	26.00	-.80	34547.192	2.0	58710.090	3.0
413.7460	74.00	-1.57	3306.958	0.0	27476.376	0.0
413.7470	58.01	-.66	5081.424	0.0	29250.784	0.0
413.7493	9.02	-3.94	444957.110	1.5	469119.520	2.5
413.7590	41.00	-.44	11937.313	0.0	36105.972	0.0
413.7600	75.00	-.63	21616.215	0.0	45784.815	0.0
413.7635	7.00	-2.08	83284.040	.5	107445.622	1.5
413.7650	58.01	.09	4113.534	0.0	28281.842	0.0
413.7668	22.00	-2.71	17423.853	2.0	41585.240	3.0
413.7711	8.01	-2.03	231530.260	4.5	255691.400	3.5
413.7764	26.02	.65	166252.740	3.0	190413.570	4.0
413.7769	17.01	-1.34	158177.100	1.0	182337.900	0.0
413.7801	28.01	-3.54	111783.790	3.5	135944.400	3.5
413.7840	76.00	-.61	15082.956	0.0	39250.154	0.0
413.7885	18.01	-2.43	190507.360	1.5	214667.480	2.5
413.7918	24.00	-1.47	33060.740	3.0	57220.670	2.0
413.7971	23.00	-1.91	8578.520	2.5	32738.140	1.5
413.7974	26.00	-4.13	22845.856	5.0	47005.455	5.0
413.8020	74.00	-.89	13227.833	0.0	37393.980	0.0
413.8030	64.00	-.69	6936.547	0.0	31102.636	0.0
413.8103	23.00	-1.09	15078.250	.5	39237.100	.5
413.8115	24.00	-4.00	24299.890	2.0	48458.670	2.0
413.8120	24.00	-3.12	24093.160	2.0	48251.910	3.0
413.8173	23.00	-2.33	15688.800	2.5	39847.240	1.5
413.8204	26.01	-3.40	38164.240	2.5	62322.500	3.5
413.8209	18.01	-4.14	185093.230	4.5	209251.460	3.5
413.8226	23.00	-2.49	13801.530	1.5	37959.660	2.5
413.8300	41.00	.09	17905.969	0.0	42070.481	0.0
413.8300	74.00	-.33	19680.435	0.0	43844.947	0.0
413.8303	22.00	-1.40	15108.121	3.0	39265.800	2.0
413.8340	69.00	-.87	0.000	0.0	24164.278	0.0
413.8350	58.01	-.06	10808.108	0.0	34972.328	0.0
413.8356	24.01	-4.40	66355.130	1.5	90514.500	1.5
413.8365	27.00	-4.14	20500.710	1.5	44658.030	1.5
413.8396	26.01	-4.62	22810.330	3.5	46967.470	2.5
413.8487	28.00	-1.28	33610.916	2.0	57767.520	1.0
413.8542	18.01	-1.88	190511.190	2.5	214667.480	2.5
413.8627	27.00	-1.85	30102.960	2.5	54258.750	2.5
413.8658	24.00	-3.93	21810.840	1.0	45966.450	2.0
413.8658	9.02	-1.10	442147.190	2.5	466302.800	3.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
413.8677	17.01	-3.87	147053.700	2.0	171209.200	2.0
413.8707	25.00	-2.05	37630.620	4.5	61785.940	3.5
413.8802	9.02	-.45	442147.190	2.5	466301.960	2.5
413.8809	24.00	-3.22	24303.940	3.0	48458.670	2.0
413.8841	26.00	-3.08	18378.187	2.0	42532.729	3.0
413.8920	25.01	-2.99	55759.270	3.0	79913.350	4.0
413.8970	62.01	-2.02	4355.506	0.0	28516.106	0.0
413.9019	28.00	-2.38	30619.440	2.0	54772.940	3.0
413.9030	28.00	-2.77	33590.159	4.0	57743.596	3.0
413.9140	92.01	-1.81	0.000	0.0	24159.608	0.0
413.9194	24.00	-3.11	21847.880	2.0	46000.360	3.0
413.9220	9.02	-2.10	442636.270	3.5	466788.600	2.5
413.9235	23.00	-.48	15270.420	1.5	39422.660	2.5
413.9251	8.02	-1.96	300310.310	1.0	324462.460	2.0
413.9268	24.00	-2.41	31055.350	5.0	55207.400	4.0
413.9320	74.00	-.96	16292.819	0.0	40451.376	0.0
413.9350	26.02	.54	166252.740	3.0	190404.310	3.0
413.9372	23.00	-2.55	9824.580	2.5	33976.020	1.5
413.9430	58.01	-1.55	3306.958	0.0	27464.873	0.0
413.9440	41.00	-1.11	322.630	0.0	24480.487	0.0
413.9444	27.00	-2.61	16470.600	1.5	40621.620	1.5
413.9481	9.02	-.18	442636.270	3.5	466787.080	4.5
413.9510	22.00	-.60	17995.750	0.0	42146.390	1.0
413.9594	25.02	-1.28	192012.750	1.5	216162.900	1.5
413.9701	9.02	-3.68	466982.860	2.5	491132.380	3.5
413.9710	41.00	-.24	967.890	0.0	25124.171	0.0
413.9719	26.01	-3.50	36252.960	2.5	60402.380	2.5
413.9833	22.00	-.71	18462.830	0.0	42611.580	1.0
413.9929	26.00	-3.93	7985.783	2.0	32133.977	2.0
413.9959	23.01	-3.82	49268.610	4.0	73416.630	5.0
413.9969	9.02	-1.39	442147.190	2.5	466295.150	1.5
414.0010	40.00	-.57	14034.408	0.0	38188.939	0.0
414.0123	23.00	-4.76	26604.770	3.5	50751.830	3.5
414.0219	24.00	-4.59	33040.100	2.0	57186.600	3.0
414.0243	26.00	-2.72	23783.617	5.0	47929.981	4.0
414.0247	25.00	-1.33	38934.940	2.5	63081.280	2.5
414.0264	25.02	-3.56	115711.600	4.5	139857.840	4.5
414.0305	23.00	-2.76	18258.890	2.5	42404.890	3.5
414.0393	26.00	-.95	27559.568	2.0	51705.052	2.0
414.0418	22.00	-.51	18061.540	1.0	42206.880	2.0
414.0450	64.01	-1.34	4436.164	0.0	28588.128	0.0
414.0460	26.00	-3.69	27394.676	3.0	51539.770	2.0
414.0482	26.02	.12	166252.740	3.0	190397.710	2.0
414.0503	22.00	-2.69	24694.895	4.0	48839.740	3.0
414.0512	25.01	-2.75	44899.820	3.0	69044.610	2.0
414.0523	28.01	-2.81	106620.530	3.5	130765.260	3.5
414.0682	12.02	.45	582747.300	2.0	606891.100	3.0
414.0711	24.00	-2.31	31009.000	3.0	55152.630	2.0
414.0747	24.00	-3.40	21856.940	3.0	46000.360	3.0
414.0750	58.01	-1.45	4113.534	0.0	28263.748	0.0
414.0857	24.00	-1.90	35862.820	4.0	60005.600	5.0
414.0959	14.00	-4.99	33326.053	2.0	57468.239	2.0
414.1020	64.01	-.77	12582.573	0.0	36731.213	0.0
414.1056	25.00	-.04	134343.900	4.5	58485.520	4.5
414.1089	25.00	-3.26	37586.030	1.5	61727.460	2.5
414.1168	27.00	-1.95	29563.170	1.5	53704.140	2.5
414.1230	92.01	-.39	8307.725	0.0	32455.140	0.0
414.1241	29.01	-.89	122745.770	2.0	146886.310	1.0
414.1241	27.00	-3.64	5075.830	1.5	29216.370	2.5
414.1260	59.01	-.26	4355.506	0.0	28502.746	0.0
414.1350	23.00	-.36	18438.070	4.5	42577.980	5.5
414.1384	23.01	-3.44	44657.990	2.0	68797.700	2.0
414.1552	18.01	-3.39	179592.130	2.5	203730.860	1.5
414.1630	90.01	-.41	15163.614	0.0	39308.697	0.0
414.1676	26.00	-4.10	21999.132	4.0	46137.140	3.0
414.1730	23.00	-4.59	26738.310	4.5	50876.000	4.5
414.1740	57.01	-1.24	3226.301	0.0	27370.743	0.0
414.1780	26.01	-3.92	61035.370	.5	85172.770	.5
414.1821	23.00	-2.16	2112.320	.5	26249.480	1.5
414.1852	28.01	-2.90	106620.530	3.5	130757.510	4.5
414.1853	26.00	-2.22	24338.766	3.0	48475.740	3.0
414.1860	92.00	-1.29	564.603	0.0	24708.345	0.0
414.1885	26.00	-2.74	21999.132	4.0	46135.920	5.0
414.1967	25.02	.07	192576.420	2.5	216712.730	2.5
414.2115	9.02	-.60	442636.270	3.5	466771.720	3.5
414.2151	28.00	-1.43	31441.665	2.0	55576.905	3.0
414.2161	26.02	-4.40	158257.370	1.0	182392.550	2.0
414.2180	24.00	-.26	35870.530	4.0	60005.600	5.0
414.2240	41.00	-.77	10969.423	0.0	35110.950	0.0
414.2260	74.00	-.46	17986.627	0.0	42128.038	0.0
414.2282	16.01	.25	127824.930	.5	151959.410	1.5
414.2294	26.00	-3.60	19788.248	4.0	43922.652	3.0
414.2343	13.02	-.29	189876.100	2.5	214010.220	3.5
414.2388	23.00	-2.32	18372.460	3.5	42506.320	4.5
414.2398	13.02	-.18	189876.420	3.5	214010.220	4.5
414.2398	13.02	-1.72	189876.420	3.5	214010.220	3.5
414.2400	58.01	-.14	5565.369	0.0	29705.964	0.0
414.2455	24.00	-2.20	25177.390	4.0	49310.860	3.0
414.2470	22.00	-1.42	21588.496	4.0	45721.878	4.0
414.2470	25.02	-4.59	86578.240	3.5	110711.620	3.5
414.2590	28.00	-2.38	33610.916	2.0	57743.596	3.0
414.2590	26.00	-.93	34692.130	1.0	58824.810	2.0
414.2628	23.00	-2.87	2220.130	2.5	26352.590	2.5
414.2656	26.02	.43	199139.760	5.0	223272.060	6.0
414.2700	90.01	-2.07	0.000	0.0	24138.847	0.0
414.2830	58.01	.04	12663.231	0.0	36801.320	0.0
414.2837	22.00	-2.17	14028.470	2.0	38159.710	3.0
414.2850	39.00	-.09	0.000	0.0	24137.973	0.0
414.2875	23.00	-1.51	8715.720	3.5	32846.740	2.5
414.2875	23.00	-2.04	8715.720	3.5	32846.740	2.5
414.2925	23.01	-1.45	32040.760	2.0	56171.490	1.0
414.2959	28.00	-1.01	32973.414	4.0	57103.946	3.0
414.2985	29.01	-1.87	120684.550	3.0	144814.930	3.0
414.3030	22.00	.04	18593.990	3.0	42724.110	2.0
414.3034	17.01	-.23	161634.900	2.0	185765.000	2.0
414.3100	66.01	-.47	4678.136	0.0	28814.652	0.0
414.3140	59.01	-.17	2984.328	0.0	27120.611	0.0
414.3155	28.00	-1.95	28068.091	4.0	52197.482	3.0
414.3210	41.00	-1.25	80.658	0.0	24216.533	0.0
414.3236	24.00	-4.48	33934.880	3.0	58063.800	2.0
414.3270	22.00	-.32	18482.860	1.0	42611.560	1.0
414.3282	28.01	-3.76	113407.310	2.5	137535.960	3.5
414.3295	10.01	-3.28	283894.410	.5	308022.990	.5
414.3336	22.00	-4.19	20126.055	3.0	44254.390	3.0
414.3394	24.00	-2.09	30858.820	2.0	54986.820	3.0
414.3417	26.00	-.40	24574.655	4.0	48702.518	4.0
414.3424	7.00	-1.78	83317.800	1.5	107445.622	1.5
414.3487	26.00	-1.58	27166.804	4.0	51294.262	3.0
414.3583	27.00	-2.63	29216.370	2.5	53343.270	1.5
414.3705	23.00	-2.93	15264.830	5.5	39391.020	4.5
414.3760	2.00	-1.20	171135.000	0.0	195267.672	0.0
414.3779	22.00	-4.63	22404.690	3.0	46530.450	4.0
414.3829	26.00	-1.35	23051.744	0.0	47177.210	1.0
414.3870	26.00	-.41	12560.933	3.0	36686.159	4.0
414.3892	23.03	-2.81	263608.300	3.0	287733.400	2.0
414.3966	24.00	-3.49	24093.160	2.0	48217.830	2.0
414.3979	24.01	-3.14	65384.040	4.5	89508.630	5.5
414.4029	24.00	-1.15	31028.330	2.0	55152.630	2.0
414.4041	24.00	-3.38	33113.270	4.0	57237.500	4.0
414.4041	18.01	-2.72	186340.480	1.5	210464.710	2.5
414.4160	44.00	.04	7985.094	0.0	32115.436	0.0
414.4170	25.02	-1.05	194545.780	.5	218669.260	1.5
414.4203	24.00	-4.71	31393.400	5.0	55516.690	6.0
414.4241	25.01	-2.73	82839.490	0.0	106962.560	1.0
414.4242	18.01	-3.79	190942.650	.5	215065.710	.5
414.4360	75.00	-.03	17180.052	0.0	41309.230	0.0
414.4490	58.01	-.65	3790.903	0.0	27919.324	0.0
414.4560	60.01	-1.72	1613.150	0.0	25741.164	0.0
414.4562	24.00	-.74	35884.400	5.0	60005.600	5.0
414.4564	22.00	-4.64	11531.760	2.0	35652.950	3.0
414.4700	92.01	-1.63	2258.411	0.0	26385.610	0.0
414.4717	27.01	-6.64	24267.800	1.0	48388.100	2.0
414.4837	10.01	-3.03	294333.220	.5	318452.820	1.5
414.4842	24.00	-1.55	36558.550	2.0	60678.120	1.0
414.4856	25.01	-2.57	82830.750	4.0	106950.240	3.0
414.4868	28.01	-3.68	113407.310	2.5	137526.730	2.5
414.5000	58.01	-.20	5565.369	0.0	29690.821	0.0
414.5014	24.00	-3.41	21847.880	2.0	45966.450	2.0
414.5038	22.00	-2.10	7255.369	2.0	31373.801	3.0
414.5083	28.01	-4.60	111783.790	3.5	135901.960	2.5
414.5089	16.01	.45	127976.210	1.5	152094.340	2.5
414.5114	26.02	-.71	199212.720	4.0	223330.710	3.0
414.5160	74.00	-.95	13227.833	0.0	37352.354	0.0
414.5162	22.00	-4.78	11639.804	3.0	35757.510	4.0
414.5163	27.01	-2.07	28111.900	2.0	52229.600	2.0
414.5197	26.00	-2.91	21715.735	5.0	45833.240	4.0
414.5295	28.00	-2.28	34408.574	1.0	58525.507	1.0
414.5390	92.01	-1.56	6371.944	0.0	30495.127	0.0
414.5421	28.01	-4.90	113407.310	2.5	137523.510	3.5
414.5487	24.00	-2.49	30858.820	2.0	54974.640	2.0
414.5531	25.01	-4.78	43696.190	3.0	67811.750	3.0
414.5533	23.00	-1.00	18438.070	4.5	42553.620	4.5
414.5555	26.02	-2.48	198658.800	3.0	222774.220	2.0
414.5648	26.02	.81	198717.600	4.0	222832.480	5.0
414.5696	18.01	-2.82	186470.280	1.5	210584.880	1.5
414.5740	44.00	-.32	8952.985	0.0	33074.131	0.0
414.5760	72.00	-1.60	5565.369	0.0	29686.399	0.0
414.5762	9.02	-4.53	445006.130	2.5	469120.350	1.5
414.5772	24.01	-1.66	42898.120	2.5	67012.280	2.5
414.5774	7.01	-.07	205724.810	3.0	229838.960	2.0
414.5793	26.02	-.18	199212.720	4.0	223326.760	4.0
414.5873	23.00	-3.09	8578.520	2.5	32692.090	3.5
414.5887	26.02	-.58	202334.390	1.0	226447.880	2.0
414.5899	25.00	-1.54	37630.620	4.5	61744.040	5.5
414.5904	9.02	-4.78	445006.130	2.5	469119.520	2.5
414.5950	74.00	-1.19	12098.628	0.0	36218.552	0.0
414.5974	28.00	-2.35	30619.440	2.0	54732.425	2.0
414.6000	41.00	-.77	10969.423	0.0	35089.056	0.0
414.6003	20.02	-2.62	361794.080	1.0	385906.900	2.0
414.6054	10.01	-2.38	283894.410	.5	308006.930	.5
414.6055	26.00	-1.64	24118.815	4.0	48231.330	5.0
414.6075	28.01	-1.30	106022.790	.5	130135.190	1.5
414.6142	27.00	-1.44	21920.090	4.5	46032.100	4.5
414.6230	58.01	-.48	4436.164	0.0	28554.459	0.0
414.6240	21.00	-1.73	15041.980	3.5	39153.420	4.5
414.6264	6.00	-2.02	64086.920	3.0	88198.220	2.0
414.6369	25.02	-.87	192172.890	2.5	216283.580	3.5
414.6405	24.01	-3.34	30307.600	1.5	54418.080	.5
414.6436	24.00	-2.64	27176.220	1.0	51286.520	2.0
414.6453	17.01	-.61	161654.800	1.0	185765.000	2.0
414.6460	24.00	-1.98	24200.230	6.0	48310.390	5.0
414.6487	28.01	-4.28	106620.530	3.5	130730.530	2.5
414.6504	30.02	-4.76	238336.200	2.0	262446.100	3.0
414.6572	24.00	-3.88	21856.940	3.0	45966.450	2.0
414.6710	18.02	-1.84	207233.090	2.0	231341.800	2.0
414.6750	62.01	-1.88	1451.835	0.0	25567.106	0.0
414.6759	25.02	-2.71	109841.120	3.5	133949.540	4.5
414.6768	6.00	-3.70	64089.850	1.0	88198.220	2.0
414.6770	44.00	-.65	9517.587	0.0	33632.742	0.0
414.6833	24.01	-4.69	65217.610	4.5	89325.600	4.5
414.6957	6.00	-2.61	64090.950	2.0	88198.220	2.0
414.6962	26.02	-.98	198658.800	3.0	222766.040	3.0
414.6974	26.02	-2.05	198658.800	3.0	222765.970	4.0
414.7016	16.01	.66	140229.780	2.5	164336.710	3.5
414.7072	28.02	-4.80	157375.700	4.0	181482.300	4.0
414.7090	17.01	.02	146469.000	3.0	170575.500	3.0
414.7190	41.00	-.18	11453.368	0.0	35566.080	0.0
414.7222	26.02	-.33	198717.600	4.0	222823.330	4.0
414.7256	17.00	-2.18	72488.568	1.5	96594.096	.5
414.7261	26.01	-3.53	37227.320	.5	61332.820	1.5
414.7331	26.00	-2.14	26874.534	5.0	50979.627	4.0
414.7350	20.00	-3.90	23652.304	1.0	47757.286	2.0
414.7365	30.02	-3.33	260584.100	1.0	284689.000	1.0
414.7370	40.00	-.54	12421.258	0.0	36532.924	0.0
414.7380	18.01	-2.60	135601.650	.5	159706.460	.5
414.7392	21.00	-.47	15756.510	2.5	39861.250	2.5
414.7394	23.00	-2.29	18258.890	2.5	42363.620	3.5
414.7467	12.02	-1.35	564664.600	2.0	588768.900	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
414.7482	26.00	-4.79	29056.312	3.0	53160.530	3.0
414.7542	25.00	-1.03	27201.540	2.5	51305.410	2.5
414.7557	24.00	-.99	31048.850	1.0	55152.630	2.0
414.7664	20.02	-1.07	323655.060	2.0	347758.220	2.0
414.7672	26.00	-1.84	11976.239	4.0	36079.353	3.0
414.7710	62.01	-1.72	322.630	0.0	24432.319	0.0
414.7753	24.00	-1.21	31106.370	4.0	55209.010	4.0
414.7757	23.00	-1.96	18302.270	3.5	42404.890	3.5
414.7786	6.00	-2.76	64089.850	1.0	88192.300	1.0
414.7850	29.01	-3.25	115639.020	2.0	139741.100	3.0
414.7890	73.00	-1.53	5565.369	0.0	29674.012	0.0
414.7975	6.00	-2.36	64090.950	2.0	88192.300	1.0
414.8160	58.01	-1.06	5887.999	0.0	29995.073	0.0
414.8180	90.01	-1.16	7743.122	0.0	31850.080	0.0
414.8278	24.01	-4.84	63849.110	5.5	87948.700	4.5
414.8289	21.01	-4.98	39344.900	2.0	63444.430	3.0
414.8297	26.02	-.44	198658.800	3.0	222758.280	2.0
414.8335	26.02	-.23	202282.650	2.0	226381.910	3.0
414.8380	44.00	-1.20	9033.642	0.0	33139.438	0.0
414.8418	9.02	-4.81	466041.220	3.5	490140.000	2.5
414.8460	59.01	-1.32	1693.808	0.0	25799.139	0.0
414.8471	10.01	-4.78	283322.350	1.5	307420.820	2.5
414.8480	24.00	-2.00	31106.370	4.0	55204.790	3.0
414.8559	23.01	-4.55	48853.040	5.0	72951.000	4.0
414.8720	28.00	-2.26	27943.543	1.0	52040.568	2.0
414.8740	41.00	-.79	8711.012	0.0	32814.716	0.0
414.8774	28.01	-4.34	110573.360	2.5	134670.070	1.5
414.8779	26.02	-4.78	117950.320	4.0	142047.000	4.0
414.8785	26.02	.16	199212.720	4.0	223309.370	5.0
414.8788	25.00	-.14	34423.270	3.5	58519.900	3.5
414.8822	24.00	-3.09	31355.210	2.0	55451.640	3.0
414.8848	23.00	-2.28	2153.200	1.5	26249.480	1.5
414.8860	64.00	-.52	1693.808	0.0	25796.815	0.0
414.8900	58.01	-.19	8711.012	0.0	32813.786	0.0
414.8940	42.00	-.29	16615.449	0.0	40717.991	0.0
414.9043	18.02	-2.27	207532.150	1.0	231627.300	1.0
414.9070	70.00	.09	19599.777	0.0	43701.564	0.0
414.9186	23.01	-4.54	48579.960	3.0	72674.280	2.0
414.9200	40.01	-.13	6371.944	0.0	30472.976	0.0
414.9206	19.01	-.36	165149.500	0.0	189243.700	1.0
414.9225	27.01	-3.27	61388.100	4.0	85482.190	4.0
414.9237	9.02	-3.75	442694.580	1.5	466788.600	2.5
414.9277	28.01	-4.07	70635.460	2.5	94729.250	2.5
414.9289	26.01	-3.78	62322.500	3.5	86416.220	3.5
414.9355	26.00	-2.12	26874.534	5.0	50967.873	6.0
414.9435	24.00	-.46	31009.000	3.0	55101.870	3.0
414.9440	74.00	-.57	19519.120	0.0	43618.758	0.0
414.9450	22.00	.02	21739.713	5.0	45832.500	5.0
414.9480	64.00	-.56	7178.519	0.0	31277.924	0.0
414.9485	26.00	-4.22	29798.960	4.0	53891.540	3.0
414.9501	24.00	-2.61	33040.100	2.0	57132.590	1.0
414.9603	28.01	-4.24	95573.390	3.5	119665.290	2.5
414.9632	25.00	-2.59	38669.600	3.5	62761.330	2.5
414.9683	26.02	-2.85	198658.800	3.0	222750.230	3.0
414.9732	25.01	-4.70	49820.160	2.0	73911.310	1.0
414.9763	26.00	-6.22	415.932	3.0	24506.902	2.0
414.9766	25.00	-2.36	23296.670	3.5	47387.620	3.5
414.9790	58.01	-.39	5646.026	0.0	29743.631	0.0
414.9830	62.01	-1.26	806.575	0.0	24903.948	0.0
414.9913	13.02	.62	165786.320	2.5	189876.420	3.5
414.9940	58.01	-.01	5726.684	0.0	29823.418	0.0
414.9960	75.00	-1.16	13711.778	0.0	37808.396	0.0
414.9968	13.02	-.68	165786.320	2.5	189876.100	2.5
414.9983	24.00	-2.17	35398.020	4.0	59487.710	4.0
414.9990	90.01	-.53	10485.478	0.0	34581.922	0.0
415.0080	23.01	-3.76	16340.970	3.0	40430.100	4.0
415.0157	24.01	-4.60	65419.950	5.5	89508.630	5.5
415.0173	13.02	.47	165787.510	1.5	189876.100	2.5
415.0238	28.00	-2.39	30163.140	2.0	54251.353	3.0
415.0240	26.00	-1.01	27666.334	1.0	51754.534	1.0
415.0249	25.00	-2.83	34250.520	5.5	58338.670	6.5
415.0262	26.01	-3.04	49101.090	.5	73189.160	1.5
415.0300	44.00	-1.35	9436.930	0.0	33531.574	0.0
415.0348	28.00	-.63	31786.210	3.0	55873.780	2.0
415.0351	15.01	-2.35	103668.740	3.0	127756.300	2.0
415.0362	28.00	-1.05	33590.159	4.0	57677.649	5.0
415.0378	12.02	-.26	582747.300	2.0	606834.700	2.0
415.0393	24.00	-3.24	31364.330	3.0	55451.640	3.0
415.0400	26.01	-3.58	75600.930	3.5	99688.200	3.5
415.0423	27.00	-1.23	28777.270	3.5	52864.410	4.5
415.0431	27.00	-3.35	4690.180	2.5	28777.270	3.5
415.0452	24.00	-3.21	24940.610	2.0	49027.580	2.0
415.0493	24.01	-4.95	67868.050	2.5	91954.780	2.5
415.0531	22.00	-.33	18525.070	2.0	42611.580	1.0
415.0555	26.01	-2.99	49101.090	.5	73187.460	.5
415.0571	22.01	-3.92	40798.370	3.5	64884.650	2.5
415.0594	9.02	-1.68	442636.270	3.5	466722.420	2.5
415.0646	28.00	-2.08	33500.854	3.0	57586.700	2.0
415.0690	10.01	-.03	279422.890	.5	303508.480	1.5
415.0771	28.00	-2.93	29668.918	3.0	53754.036	2.0
415.0817	22.00	-.67	18061.540	1.0	42146.390	1.0
415.0888	13.02	-.32	189928.490	3.5	214012.930	4.5
415.0921	13.02	-.23	189928.680	4.5	214012.930	5.5
415.0921	13.02	-1.96	189928.680	4.5	214012.930	4.5
415.0970	40.01	-1.02	6371.944	0.0	30462.699	0.0
415.0977	22.00	-.28	17540.205	3.0	41624.130	4.0
415.0981	25.00	-2.01	37630.620	4.5	61714.520	4.5
415.1000	8.04	-.81	653262.000	0.0	677352.581	0.0
415.1007	24.01	-1.82	42986.730	1.5	67070.480	1.5
415.1021	24.00	-2.75	27163.200	0.0	51246.870	1.0
415.1049	17.01	-.71	147125.700	3.0	171209.200	2.0
415.1067	25.00	-4.59	34343.900	4.5	58427.300	5.5
415.1067	12.02	-1.42	582747.300	2.0	606830.700	3.0
415.1112	25.02	-1.14	195112.810	3.5	219195.950	4.5
415.1160	28.01	-4.14	95573.390	3.5	119656.250	3.5
415.1243	21.00	-3.67	15672.550	1.5	39754.930	2.5
415.1353	23.00	-1.34	8578.520	2.5	32660.260	2.5
415.1402	25.02	.19	192880.160	3.5	216961.620	3.5
415.1475	7.00	-1.62	83364.590	2.5	107445.622	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
415.1520	63.01	-2.69	10243.505	0.0	34331.068	0.0
415.1567	24.00	-4.74	23933.900	4.0	48014.400	4.0
415.1582	28.00	-3.04	30619.440	2.0	54699.852	3.0
415.1591	25.00	-1.03	37630.620	4.5	61710.980	3.5
415.1608	23.00	-3.04	15000.840	5.5	39081.100	6.5
415.1636	22.01	-2.32	43740.770	3.5	67820.870	4.5
415.1660	18.01	-3.89	195123.540	5.5	219203.500	6.5
415.1662	18.01	-2.34	187589.230	2.5	211669.160	2.5
415.1755	27.00	-2.16	28777.270	3.5	52856.680	3.5
415.1786	26.01	-6.95	18360.650	1.5	42439.880	.5
415.1808	24.01	-4.34	67875.680	3.5	91954.780	2.5
415.1823	26.00	-2.99	28819.966	5.0	52898.980	5.0
415.1880	42.00	.21	25407.119	0.0	49492.594	0.0
415.1941	29.01	-2.38	115662.770	4.0	139741.100	3.0
415.1943	26.00	-1.84	28604.610	2.0	52682.930	2.0
415.1970	58.01	.10	5484.711	0.0	29569.663	0.0
415.1970	57.01	-1.11	1855.123	0.0	25940.075	0.0
415.2040	41.00	-1.66	645.260	0.0	24729.806	0.0
415.2043	24.00	-1.19	36552.130	3.0	60629.870	2.0
415.2152	25.00	-2.09	37148.660	5.5	61225.770	5.5
415.2170	26.00	-3.59	7728.058	3.0	31805.059	3.0
415.2190	25.00	-4.92	37148.660	5.5	61225.550	6.5
415.2210	62.01	-1.02	1451.835	0.0	25535.395	0.0
415.2215	26.02	-.84	206180.410	3.0	230257.150	2.0
415.2290	75.00	.33	33392.213	0.0	57475.309	0.0
415.2326	27.01	-5.81	24074.600	2.0	48150.700	3.0
415.2350	10.01	-3.34	281332.550	.5	305408.510	.5
415.2424	26.02	-3.96	198658.800	3.0	222734.330	4.0
415.2476	18.01	-4.03	195128.270	4.5	219203.500	5.5
415.2476	25.00	-1.74	35041.370	3.5	59116.600	2.5
415.2545	25.00	-.66	41230.300	3.5	65305.130	3.5
415.2580	41.00	-.08	645.260	0.0	24726.674	0.0
415.2630	75.00	-1.37	15647.559	0.0	39728.683	0.0
415.2640	40.00	-.25	10969.423	0.0	35050.490	0.0
415.2641	18.01	-1.56	187589.230	2.5	211663.500	3.5
415.2671	9.02	-2.50	443753.060	2.5	467827.160	1.5
415.2702	23.01	-3.17	30641.710	3.0	54715.630	2.0
415.2724	28.01	-3.62	76402.030	2.5	100475.820	3.5
415.2743	24.00	-2.29	31377.960	4.0	55451.640	3.0
415.2752	26.00	-3.29	27666.334	1.0	51739.964	2.0
415.2767	24.00	-.59	31028.330	2.0	55101.870	3.0
415.2780	57.01	-.31	14034.408	0.0	38114.663	0.0
415.2804	24.00	-4.38	33113.270	4.0	57186.600	3.0
415.2883	9.02	-3.38	442748.850	2.5	466821.720	3.5
415.2940	27.00	-2.82	23152.570	3.5	47225.110	3.5
415.2947	23.00	-3.09	8715.720	3.5	32788.220	4.5
415.2952	28.01	-4.47	89100.490	3.5	113172.960	4.5
415.2995	26.01	-5.42	23317.600	2.5	47389.820	1.5
415.3057	24.00	-1.16	20519.600	6.0	44591.460	5.0
415.3095	16.01	.63	128233.070	2.5	152304.710	3.5
415.3105	24.00	-.70	35934.020	6.0	60005.600	5.0
415.3130	58.01	-1.14	1855.123	0.0	25933.348	0.0
415.3150	24.00	-2.70	36558.550	2.0	60629.870	2.0
415.3266	24.00	-2.92	27176.220	1.0	51246.870	1.0
415.3330	23.00	-2.24	2112.320	.5	26182.600	.5
415.3330	62.01	-.90	5242.739	0.0	29319.805	0.0
415.3375	6.00	-2.65	64089.850	1.0	88159.870	0.0
415.3510	64.01	-.37	12663.231	0.0	36739.253	0.0
415.3537	25.01	-3.10	82099.820	4.0	106168.900	5.0
415.3559	29.01	-1.22	122867.530	1.0	146936.480	2.0
415.3566	20.02	.04	322663.280	0.0	346732.190	1.0
415.3597	28.01	-4.67	110573.360	2.5	134642.090	3.5
415.3625	24.01	-3.49	65257.030	3.5	89325.600	4.5
415.3677	26.02	-.59	199262.440	3.0	223330.710	3.0
415.3680	23.00	-.71	18438.070	4.5	42506.320	4.5
415.3699	23.01	-3.97	49210.780	3.0	73278.920	4.0
415.3750	40.00	-.44	12663.231	0.0	36737.862	0.0
415.3763	24.00	-2.61	20523.690	4.0	44591.460	5.0
415.3765	27.00	-4.25	20500.710	1.5	44568.470	2.5
415.3806	24.00	-1.16	20523.940	5.0	44591.460	5.0
415.3890	26.00	-.84	27394.676	3.0	51461.707	4.0
415.3898	13.02	-3.93	189928.490	3.5	213995.480	3.5
415.3898	13.02	-2.49	189928.490	3.5	213995.480	2.5
415.3930	58.01	-1.57	3710.246	0.0	27783.834	0.0
415.3931	13.02	-2.38	189928.680	4.5	213995.480	3.5
415.3970	92.00	-.26	0.000	0.0	24073.356	0.0
415.4051	17.01	-1.65	146469.000	3.0	170535.100	2.0
415.4057	10.01	-3.68	281332.550	.5	305398.620	1.5
415.4080	71.00	-1.05	7420.492	0.0	31493.211	0.0
415.4094	26.00	-2.81	27394.676	3.0	51460.530	3.0
415.4167	26.02	-2.04	199262.440	3.0	223327.870	2.0
415.4224	25.00	-1.65	37420.240	5.5	61485.340	4.5
415.4324	23.00	-2.36	18513.460	4.5	42577.980	5.5
415.4348	25.01	-4.44	82099.820	4.0	106164.200	4.0
415.4358	26.02	.19	199262.440	3.0	223326.760	4.0
415.4370	45.00	-.49	12663.231	0.0	36734.269	0.0
415.4464	24.00	-2.63	36552.130	3.0	60615.840	3.0
415.4502	26.00	-.49	22838.320	2.0	46901.808	1.0
415.4505	24.00	-1.88	27223.050	2.0	51286.520	2.0
415.4626	25.00	-1.16	37148.660	5.5	61211.430	4.5
415.4673	11.02	-4.84	442710.500	1.5	466773.000	1.5
415.4680	74.00	-.13	19277.147	0.0	43346.369	0.0
415.4716	25.00	-3.19	34423.270	3.5	58485.520	4.5
415.4740	23.00	-3.90	14548.830	2.5	38610.940	3.5
415.4795	26.00	-2.21	27166.804	4.0	51228.595	5.0
415.4842	25.00	-1.27	37164.250	6.5	61225.770	5.5
415.4849	22.00	-.81	18145.400	2.0	42206.880	2.0
415.4860	64.01	-.59	8791.670	0.0	32859.870	0.0
415.4871	23.00	-.78	18302.270	3.5	42363.620	3.5
415.4880	25.00	-2.57	37164.250	6.5	61225.550	6.5
415.4963	26.02	.97	198773.950	5.0	222834.770	6.0
415.5008	24.00	-4.41	33040.100	2.0	57100.660	2.0
415.5210	24.00	-4.47	33935.650	2.0	57995.040	1.0
415.5220	62.01	-.99	4355.506	0.0	28421.620	0.0
415.5225	23.00	-3.03	14949.300	4.5	39008.600	5.5
415.5280	42.00	-.25	16696.107	0.0	40761.874	0.0
415.5351	26.01	-2.89	62065.570	3.5	86124.140	4.5
415.5358	26.02	-.08	198773.950	5.0	222832.480	5.0
415.5369	23.01	-4.26	48730.760	4.0	72789.230	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
415.5372	28.01	-4.77	107737.810	1.5	131796.260	2.5
415.5410	92.01	-.89	6210.629	0.0	30275.643	0.0
415.5496	25.02	-.84	192365.520	1.5	216423.250	.5
415.5530	58.01	-.35	8952.985	0.0	33017.304	0.0
415.5552	25.00	-1.42	27248.000	1.5	51305.410	2.5
415.5580	42.00	-.42	16534.792	0.0	40598.822	0.0
415.5653	18.01	-2.29	186470.280	1.5	210527.100	2.5
415.5700	77.00	.18	28310.790	0.0	52374.125	0.0
415.5754	26.00	-3.72	31322.603	3.0	55378.842	2.0
415.5778	28.01	-3.22	68735.980	2.5	92792.080	3.5
415.5819	26.01	-3.20	60807.280	4.5	84863.140	5.5
415.5901	23.00	-2.08	2424.890	4.5	26480.280	3.5
415.5942	25.01	-3.34	82830.750	4.0	106885.900	4.0
415.5968	27.00	-3.15	20500.710	1.5	44555.710	1.5
415.6080	60.01	-.49	1451.835	0.0	25512.970	0.0
415.6085	18.01	-.52	158167.710	1.5	182222.030	1.5
415.6099	24.00	-2.78	24277.060	0.0	48331.300	1.0
415.6136	22.00	-2.61	14105.680	3.0	38159.710	3.0
415.6210	27.00	-2.63	29735.180	3.5	53788.780	4.5
415.6230	90.01	-1.07	10566.135	0.0	34626.401	0.0
415.6240	40.01	-.85	5646.026	0.0	29706.234	0.0
415.6250	62.01	-1.72	3468.273	0.0	27528.423	0.0
415.6251	18.01	-4.36	191012.350	1.5	215065.710	.5
415.6300	3.01	-.57	558779.000	0.0	582838.861	0.0
415.6358	7.01	-1.23	187437.560	1.0	211490.300	2.0
415.6359	25.01	-2.56	82117.160	5.0	106169.900	6.0
415.6442	26.00	-1.88	27166.804	4.0	51219.059	3.0
415.6469	12.02	.58	582839.700	3.0	606891.800	4.0
415.6511	24.00	-3.28	23933.900	4.0	47985.760	5.0
415.6520	90.01	-.78	9517.587	0.0	33576.174	0.0
415.6526	24.00	-4.74	33906.650	1.0	57958.420	0.0
415.6531	25.01	-3.39	82117.160	5.0	106168.900	5.0
415.6590	12.02	-1.34	582839.700	3.0	606891.100	3.0
415.6660	92.00	-.55	564.603	0.0	24622.380	0.0
415.6674	26.00	-3.71	23783.617	5.0	47834.529	5.0
415.6680	41.01	-.39	15970.189	0.0	40027.850	0.0
415.6790	42.00	-.28	22745.421	0.0	46802.446	0.0
415.6802	26.00	-1.08	22838.320	2.0	46888.494	2.0
415.6900	27.00	-3.25	16778.160	2.5	40827.770	1.5
415.6917	9.02	-.02	442147.190	2.5	466196.700	3.5
415.6939	26.02	-1.85	198773.950	5.0	222823.330	4.0
415.6939	25.02	-2.32	192012.750	1.5	216062.130	2.5
415.6977	25.01	-4.10	82917.780	2.0	106966.940	2.0
415.6977	21.00	-1.83	15672.550	1.5	39721.710	1.5
415.7002	7.01	-.76	187437.560	1.0	211486.580	1.0
415.7010	25.00	-.38	37420.240	5.5	61469.210	5.5
415.7024	6.00	-2.62	64086.920	3.0	88135.810	3.0
415.7050	23.01	-2.30	44098.460	3.0	68147.200	4.0
415.7053	25.00	-1.37	37737.220	3.5	61785.940	3.5
415.7102	26.02	-.41	198717.600	4.0	222766.040	3.0
415.7114	26.02	-1.34	198717.600	4.0	222765.970	4.0
415.7183	22.01	-4.69	44902.420	2.5	68950.390	3.5
415.7247	24.00	-3.79	33040.100	2.0	57087.700	2.0
415.7344	25.01	-4.76	82117.160	5.0	106164.200	4.0
415.7400	42.00	.65	25407.119	0.0	49460.614	0.0
415.7520	57.00	-1.45	0.000	0.0	24052.801	0.0
415.7630	39.00	-.05	15566.901	0.0	39619.065	0.0
415.7631	22.00	-3.65	11531.760	2.0	35577.140	2.0
415.7690	22.00	-2.95	17540.205	3.0	41585.240	3.0
415.7720	63.00	-.50	12985.861	0.0	37037.505	0.0
415.7721	6.00	-3.52	64090.950	2.0	88135.810	3.0
415.7731	29.01	-3.62	115665.400	1.0	139710.200	2.0
415.7735	25.01	-3.39	82917.780	2.0	106962.560	1.0
415.7738	24.00	-4.17	24286.540	1.0	48331.300	1.0
415.7747	23.01	-4.23	30673.140	2.0	54717.850	1.0
415.7755	27.00	-3.77	18389.570	1.5	42434.230	2.5
415.7769	26.00	-.93	27559.568	2.0	51604.146	3.0
415.7780	64.00	-.77	967.890	0.0	25019.187	0.0
415.7859	28.01	-3.95	97273.830	2.5	121317.890	3.5
415.7897	9.02	-1.29	442147.190	2.5	466191.030	2.5
415.7954	23.00	-1.83	8412.940	.5	32456.450	1.5
415.8010	41.00	-.09	12017.970	0.0	36067.936	0.0
415.8095	18.01	-1.71	186470.280	1.5	210512.980	1.5
415.8131	23.01	-4.05	30673.140	2.0	54715.630	2.0
415.8216	10.03	.15	648060.000	1.5	672102.000	1.5
415.8345	25.01	-2.80	55759.270	3.0	79800.520	4.0
415.8350	23.00	-2.86	2311.370	3.5	26352.590	2.5
415.8361	28.01	-5.05	29593.460	.5	53634.620	1.5
415.8409	27.00	-2.50	23184.230	2.5	47225.110	3.5
415.8444	26.01	-5.92	18360.650	1.5	42401.330	1.5
415.8491	28.00	-4.34	26665.903	3.0	50706.310	4.0
415.8511	25.00	-3.75	37164.250	6.5	61204.540	7.5
415.8524	28.00	-1.55	34408.574	1.0	58448.790	0.0
415.8534	23.00	-1.99	18513.460	4.5	42553.620	4.5
415.8540	90.00	-.36	9759.560	0.0	33806.461	0.0
415.8575	24.00	-4.71	33060.740	3.0	57100.660	2.0
415.8582	28.01	-3.51	105439.850	1.5	129479.730	1.5
415.8582	22.01	-.70	43780.990	4.5	67820.870	4.5
415.8586	18.00	-1.67	93143.800	2.0	117183.654	2.0
415.8600	69.00	-.75	8711.012	0.0	32757.566	0.0
415.8604	9.02	-4.37	442748.850	2.5	466788.600	2.5
415.8608	21.00	-4.22	21085.840	3.5	45125.570	4.5
415.8688	25.00	-1.01	38351.780	.5	62391.050	.5
415.8760	8.04	-.48	684124.000	0.0	708169.629	0.0
415.8780	76.00	-1.09	13953.751	0.0	37999.264	0.0
415.8783	26.00	-1.16	27666.334	1.0	51705.052	2.0
415.8835	25.00	-2.25	38351.780	.5	62390.200	1.5
415.8848	25.02	-4.66	192365.520	1.5	216403.860	2.5
415.8880	72.01	-.58	17260.709	0.0	41305.644	0.0
415.8888	24.00	-1.34	36577.730	4.0	60615.840	3.0
415.8890	27.01	-4.51	22414.500	3.0	46452.600	2.0
415.9028	12.02	-1.07	564731.600	1.0	588768.900	2.0
415.9030	58.01	-.05	8227.067	0.0	32271.135	0.0
415.9034	27.00	-4.56	25041.160	1.5	49078.430	1.5
415.9166	17.02	-3.01	222100.700	1.5	246137.200	2.5
415.9170	44.00	-.75	16131.504	0.0	40174.763	0.0
415.9400	62.01	-2.08	1451.835	0.0	25493.764	0.0
415.9409	13.01	-1.22	123415.900	2.0	147451.000	3.0
415.9510	62.01	-1.93	2661.698	0.0	26702.991	0.0
415.9518	25.00	-4.83	23719.520	1.5	47753.990	2.5
415.9629	9.01	-2.22	235150.580	2.0	259184.410	3.0
415.9640	22.00	-.53	17423.853	2.0	41457.620	3.0
415.9674	23.00	-2.39	2311.370	3.5	26344.940	4.5
415.9695	23.00	-2.59	13801.530	1.5	37834.980	1.5
415.9772	13.01	-2.28	123418.000	3.0	147451.000	3.0
415.9772	13.01	-1.30	123418.000	3.0	147451.000	4.0
415.9772	13.01	-1.53	123418.000	3.0	147451.000	4.0
415.9837	26.02	-1.29	198717.600	4.0	222750.230	3.0
415.9871	23.00	-1.66	18372.460	3.5	42404.890	3.5
415.9920	75.00	.13	27020.269	0.0	51059.193	0.0
415.9934	28.01	-4.79	92792.080	3.5	116824.150	2.5
415.9949	25.00	-1.25	41230.300	3.5	65262.280	4.5
415.9960	76.00	-1.25	12663.231	0.0	36701.924	0.0
416.0040	74.00	-.41	20890.298	0.0	44928.528	0.0
416.0048	24.00	-2.73	24299.890	2.0	48331.300	1.0
416.0075	24.00	-2.08	30787.300	1.0	54816.550	2.0
416.0110	58.01	-1.05	4194.191	0.0	28232.017	0.0
416.0139	9.01	-2.37	235150.580	2.0	259181.460	2.0
416.0195	26.02	.04	199300.150	2.0	223330.710	3.0
416.0205	13.01	-2.14	124792.000	2.0	148822.500	3.0
416.0257	13.01	-4.08	123420.800	4.0	147451.000	3.0
416.0257	13.01	-2.52	123420.800	4.0	147451.000	4.0
416.0257	13.01	-2.66	123420.800	4.0	147451.000	4.0
416.0257	13.01	-.99	123420.800	4.0	147451.000	5.0
416.0260	57.00	-.93	1048.548	0.0	25065.507	0.0
416.0281	23.00	-3.19	15270.420	1.5	39300.480	2.5
416.0332	23.01	-5.01	13490.840	2.0	37520.610	3.0
416.0350	74.00	-.30	22342.133	0.0	46378.572	0.0
416.0396	23.00	-3.23	2153.200	1.5	26182.600	.5
416.0404	23.00	-5.63	2220.130	2.5	26249.480	1.5
416.0456	9.01	-2.59	235150.580	2.0	259179.630	1.0
416.0463	23.01	-8.03	23391.090	5.0	47420.100	4.0
416.0508	21.00	-1.19	15672.550	1.5	39701.300	.5
416.0510	7.01	-.91	187461.560	2.0	211490.300	2.0
416.0554	26.00	-4.30	23783.617	5.0	47812.104	4.0
416.0617	26.01	-5.20	22939.350	2.5	46967.470	2.5
416.0630	24.00	-3.18	24282.340	4.0	48310.390	5.0
416.0640	15.01	-.41	103340.010	2.0	127368.000	2.0
416.0649	25.01	-3.93	82939.000	1.0	106966.940	2.0
416.0655	27.01	-1.86	27484.300	3.0	51512.200	3.0
416.0666	9.02	-3.75	442694.580	1.5	466722.420	2.5
416.0675	26.01	-4.29	61156.900	3.5	85184.690	4.5
416.0687	26.02	-.74	199300.150	2.0	223327.870	2.0
416.0735	25.01	-3.17	82142.460	6.0	106169.900	6.0
416.0744	26.02	-4.19	158417.310	2.0	182444.700	3.0
416.0770	26.00	-3.00	33946.920	2.0	57974.160	2.0
416.0778	26.02	-.31	198717.600	4.0	222744.790	5.0
416.0800	41.00	-1.79	2742.356	0.0	26776.196	0.0
416.0818	24.00	-1.98	33060.740	3.0	57087.700	2.0
416.0908	25.01	-4.48	82142.460	6.0	106166.900	5.0
416.0950	92.00	-1.37	0.000	0.0	24032.973	0.0
416.0979	25.02	.70	192665.800	4.5	216691.830	5.5
416.1062	26.01	-3.48	60837.590	6.5	84863.140	5.5
416.1062	24.01	-3.16	42986.730	1.5	67014.280	2.5
416.1068	26.00	-3.05	27166.804	4.0	51192.320	4.0
416.1106	29.01	-.58	120789.630	4.0	144814.930	3.0
416.1116	25.01	-2.24	82142.460	6.0	106167.700	7.0
416.1121	23.01	-4.26	49268.610	4.0	73293.820	5.0
416.1154	7.01	-1.16	187461.560	2.0	211486.580	1.0
416.1180	58.01	-.73	7662.464	0.0	31694.109	0.0
416.1210	40.01	-.71	5726.684	0.0	29758.156	0.0
416.1229	24.01	-4.99	39824.520	4.5	63849.110	5.5
416.1250	41.00	-.27	13389.148	0.0	37420.389	0.0
416.1317	23.00	-5.20	13810.900	.5	37834.980	1.5
416.1324	28.00	-2.50	25753.578	4.0	49777.619	3.0
416.1354	9.02	.25	442278.930	2.5	466302.800	3.5
416.1359	26.02	-.35	206233.310	2.0	230257.150	2.0
416.1362	24.00	-2.19	27223.050	2.0	51246.870	1.0
416.1374	22.00	-2.89	18287.560	4.0	42311.310	3.0
416.1407	25.01	-3.66	82939.000	1.0	106962.560	1.0
416.1416	28.01	-4.37	113753.040	4.5	137776.550	3.5
416.1428	24.00	-.64	35934.020	6.0	59957.460	7.0
416.1477	26.00	-2.18	24338.766	3.0	48361.920	4.0
416.1499	9.02	-2.34	442278.930	2.5	466301.960	2.5
416.1527	9.02	-3.95	442748.850	2.5	466771.720	3.5
416.1547	22.01	-2.15	8744.270	2.5	32767.020	3.5
416.1594	28.01	-2.77	70706.770	1.5	94729.250	2.5
416.1660	44.00	-.46	13550.463	0.0	37579.336	0.0
416.1736	27.00	-4.16	18775.010	.5	42796.670	1.5
416.1745	8.02	-2.82	300440.850	2.0	324462.460	2.0
416.1788	24.00	-1.06	30965.460	3.0	54986.820	3.0
416.1792	38.01	-.50	23715.190	0.0	47743.301	0.0
416.2076	23.01	-2.92	25191.080	2.0	49210.780	3.0
416.2164	27.00	-.33	28845.220	5.5	52664.410	4.5
416.2199	24.00	-3.22	35398.020	4.0	59417.010	3.0
416.2235	29.01	-1.64	122867.530	1.0	146886.310	1.0
416.2343	23.00	-1.70	15062.940	6.5	39061.100	6.5
416.2360	72.01	-.31	17260.709	0.0	41285.541	0.0
416.2386	16.01	-1.20	140318.800	3.5	164336.710	3.5
416.2430	92.00	-.35	3710.246	0.0	27734.674	0.0
416.2471	25.01	-4.23	82939.000	1.0	106956.420	0.0
416.2476	24.00	-2.80	30787.300	1.0	54804.690	1.0
416.2499	24.01	-3.98	65156.840	2.5	89174.100	3.5
416.2502	18.01	-1.24	187589.230	2.5	211606.470	3.5
416.2591	26.02	-.22	198717.600	4.0	222734.330	4.0
416.2630	58.01	-.67	7017.204	0.0	31040.478	0.0
416.2656	23.00	-4.92	20828.480	2.5	44844.630	1.5
416.2679	9.02	-3.46	442278.930	2.5	466295.150	1.5
416.2680	42.00	.60	25407.119	0.0	49430.104	0.0
416.2680	90.01	-.58	14195.724	0.0	38218.709	0.0
416.2690	72.00	-1.81	4516.821	0.0	28539.748	0.0
416.2692	16.01	.76	140318.800	3.5	164334.940	4.5
416.2692	16.01	.77	128599.110	3.5	152615.250	4.5
416.2730	64.01	-.75	3952.218	0.0	27974.915	0.0
416.2810	41.00	-.88	10162.848	0.0	34185.083	0.0
416.2899	26.02	-.87	206233.310	2.0	230248.260	1.0
416.2915	26.00	-2.12	24335.764	2.0	48350.620	1.0
416.2944	20.02	-.87	341349.190	1.0	365363.880	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
416.2977	23.03	-2.16	264113.100	4.0	288127.600	4.0
416.3012	27.01	-4.43	40694.900	4.0	64709.200	5.0
416.3024	25.01	-3.69	82936.010	3.0	106950.240	3.0
416.3090	64.01	-.87	5242.739	0.0	29263.358	0.0
416.3144	24.00	-2.81	20520.920	3.0	44534.460	4.0
416.3171	26.02	-.08	198821.390	6.0	222834.770	6.0
416.3204	26.01	-3.49	61035.370	.5	85048.560	1.5
416.3212	22.00	-3.40	11639.804	3.0	35652.950	3.0
416.3253	29.01	-4.11	117231.690	1.0	141244.600	1.0
416.3333	26.02	.19	206180.410	3.0	230192.860	3.0
416.3339	26.00	-1.04	33801.555	2.0	57813.970	3.0
416.3421	23.01	-3.11	49210.780	3.0	73222.720	4.0
416.3470	25.02	-.09	192392.200	3.5	216403.860	2.5
416.3470	41.00	-.61	2097.096	0.0	26115.523	0.0
416.3520	58.01	.12	10969.423	0.0	34987.561	0.0
416.3568	26.02	-1.75	198821.390	6.0	222832.480	5.0
416.3624	24.00	-1.28	20523.690	4.0	44534.460	4.0
416.3638	14.01	-4.03	101023.310	1.5	125034.000	1.5
416.3640	90.01	-1.06	9678.902	0.0	33696.348	0.0
416.3657	23.01	-2.47	25191.080	2.0	49201.660	2.0
416.3660	41.00	-.15	80.658	0.0	24097.989	0.0
416.3664	22.01	-.15	20891.880	3.5	44902.420	2.5
416.3667	24.00	-1.94	20523.940	5.0	44534.460	4.0
416.3680	92.01	-1.55	0.000	0.0	24017.216	0.0
416.3693	26.00	-2.50	21715.735	5.0	45726.104	5.0
416.3704	23.01	-4.44	49768.610	4.0	73278.920	4.0
416.3718	28.01	-4.52	94283.940	4.5	118294.170	3.5
416.3720	62.01	-2.16	806.575	0.0	24823.560	0.0
416.3863	14.01	-3.07	101024.610	2.5	125034.000	1.5
416.3900	24.00	-1.99	30965.460	3.0	54974.640	2.0
416.3912	6.00	-2.95	64086.920	3.0	88096.030	2.0
416.3967	26.00	-4.63	22996.661	4.0	47005.455	5.0
416.4002	23.01	-2.14	16421.510	4.0	40430.100	4.0
416.4080	42.00	-.86	18147.942	0.0	42162.850	0.0
416.4133	22.00	-.90	15108.121	3.0	39115.958	4.0
416.4146	23.00	-2.23	15000.840	5.5	39008.600	5.5
416.4165	9.02	-.52	442294.310	1.5	466301.960	2.5
416.4176	18.00	-2.51	93143.800	2.0	117151.387	1.0
416.4190	59.01	-.55	1613.150	0.0	25627.424	0.0
416.4227	26.00	-4.06	27559.568	2.0	51566.860	1.0
416.4236	29.01	-.95	120875.850	2.0	144883.090	2.0
416.4250	90.01	-1.30	9114.300	0.0	33128.228	0.0
416.4302	20.02	.73	346896.260	2.0	370903.120	3.0
416.4316	26.01	-4.56	61041.780	2.5	85048.560	1.5
416.4418	25.02	-1.19	194971.150	2.5	218977.340	3.5
416.4420	6.00	-3.81	64089.850	1.0	88096.030	2.0
416.4446	24.00	-2.82	24282.340	4.0	48288.370	4.0
416.4517	20.02	-.16	346896.260	2.0	370901.880	2.0
416.4560	78.00	-1.45	10001.532	0.0	34013.673	0.0
416.4611	6.00	-3.29	64090.950	2.0	88096.030	2.0
416.4630	28.00	-6.00	3409.925	2.0	27414.893	2.0
416.4660	41.00	-.16	322.630	0.0	24334.194	0.0
416.4663	25.02	.42	192665.800	4.5	216670.580	4.5
416.4731	26.02	.94	166421.330	4.0	190425.720	5.0
416.4734	28.01	-2.98	114836.630	3.5	138841.000	3.5
416.4751	28.01	-2.67	105838.060	3.5	129842.330	2.5
416.4765	28.01	-2.33	105499.050	3.5	129503.240	4.5
416.4781	26.00	-2.84	24118.815	4.0	48122.913	3.0
416.4802	26.01	-3.64	48039.230	2.5	72043.210	1.5
416.4805	25.01	-2.43	65567.070	2.0	89571.030	3.0
416.4807	10.00	-3.20	148257.790	1.0	172261.740	1.0
416.4831	25.01	-1.92	81051.620	3.0	105055.430	2.0
416.4916	26.02	1.05	198821.390	6.0	222824.710	7.0
416.4975	25.00	-1.09	38351.780	.5	62354.760	1.5
416.5101	12.00	-2.68	35051.264	1.0	59053.520	0.0
416.5108	26.00	-1.81	33695.378	5.0	57697.590	4.0
416.5118	6.00	-4.85	64089.850	1.0	88092.010	1.0
416.5145	16.01	-.19	140229.780	2.5	164231.780	2.5
416.5149	27.00	-3.64	30443.630	1.5	54445.610	2.5
416.5165	14.01	-3.39	101023.310	1.5	125025.200	.5
416.5190	28.01	-4.49	113753.040	4.5	137754.780	5.5
416.5194	9.02	.58	442636.270	3.5	466637.990	4.5
416.5196	21.00	.70	16026.520	4.5	40028.230	5.5
416.5211	25.00	-2.57	35114.980	2.5	59116.600	2.5
416.5282	25.00	-3.76	38669.600	3.5	62670.810	4.5
416.5305	25.01	-3.00	81054.350	2.0	105055.430	2.0
416.5309	6.00	-3.01	64090.950	2.0	88092.010	1.0
416.5321	22.00	-1.74	18145.400	2.0	42146.390	1.0
416.5347	9.02	-.74	442294.310	1.5	466295.150	1.5
416.5348	28.01	-3.33	113753.040	4.5	137753.870	4.5
416.5378	24.00	-3.53	27176.220	1.0	51176.880	0.0
416.5441	28.00	-.65	32973.414	4.0	56973.707	5.0
416.5506	26.02	-.11	199327.950	1.0	223327.870	2.0
416.5515	24.00	-.48	35884.400	5.0	59884.270	6.0
416.5610	58.01	.28	7259.177	0.0	31265.265	0.0
416.5680	92.01	-1.63	241.973	0.0	24247.658	0.0
416.5683	24.01	-2.52	64924.300	3.5	88923.200	2.5
416.5767	21.00	-1.86	15756.510	2.5	39754.930	2.5
416.5770	7.01	-1.30	187491.900	3.0	211490.300	2.0
416.5780	24.01	-3.71	66727.160	2.5	90725.500	3.5
416.5789	24.01	-2.78	44307.440	.5	68305.730	1.5
416.5805	27.00	-1.53	28777.270	3.5	52775.470	4.5
416.5850	41.00	-.40	11937.313	0.0	35942.018	0.0
416.5904	17.00	-3.50	72488.568	1.5	96486.198	1.5
416.6000	56.01	-.38	21952.422	0.0	45956.263	0.0
416.6034	18.01	-2.87	187589.230	2.5	211586.110	2.5
416.6040	77.00	-2.15	9759.560	0.0	33763.170	0.0
416.6093	10.00	-3.49	148257.790	1.0	172254.330	0.0
416.6135	25.02	-1.08	191915.430	.5	215911.730	1.5
416.6155	28.01	-4.15	111120.540	1.5	135116.720	2.5
416.6155	23.00	-1.67	15270.420	1.5	39266.600	1.5
416.6185	25.00	-1.02	37789.930	2.5	61785.940	3.5
416.6187	22.00	-3.44	11531.760	2.0	35527.760	1.0
416.6280	42.00	-.09	24681.201	0.0	48683.428	0.0
416.6313	22.00	-.79	15156.787	4.0	39152.057	5.0
416.6355	27.00	-3.33	28777.270	3.5	52772.300	2.5
416.6355	22.00	-2.61	13981.750	1.0	37976.780	2.0
416.6360	12.02	-1.63	582839.700	3.0	606834.700	2.0
416.6360	40.00	-.62	5484.711	0.0	29486.478	0.0
416.6388	24.00	-2.04	20519.600	6.0	44514.440	7.0
416.6459	18.01	-1.61	186470.280	1.5	210464.710	2.5
416.6541	22.00	-3.46	24921.110	1.0	48915.070	2.0
416.6548	29.01	-3.14	110365.980	2.0	134359.900	1.0
416.6650	58.01	-.95	4678.136	0.0	28678.232	0.0
416.6732	23.00	-1.26	18513.460	4.5	42506.320	4.5
416.6840	26.02	.43	166421.330	4.0	190413.570	4.0
416.6846	15.01	-1.65	107361.100	3.0	131353.300	2.0
416.6878	26.02	-.28	198773.950	5.0	222765.970	4.0
416.6880	44.00	-1.42	6452.602	0.0	30451.373	0.0
416.6906	29.01	-3.35	122223.840	0.0	146215.700	1.0
416.6926	28.01	-4.03	99442.860	4.5	123434.600	4.5
416.6951	26.02	-3.64	158417.310	2.0	182408.910	3.0
416.6955	28.00	-1.08	33112.368	3.0	57103.946	3.0
416.7027	23.00	-1.52	18372.460	3.5	42363.620	3.5
416.7055	12.02	-.12	582839.700	3.0	606830.700	3.0
416.7055	16.05	.41	522030.000	.5	546021.000	1.5
416.7160	64.01	-1.11	3387.616	0.0	27384.775	0.0
416.7175	28.01	-4.87	98122.630	.5	122112.940	.5
416.7187	25.00	-.91	37737.220	3.5	61727.460	2.5
416.7227	25.02	-.64	192172.890	2.5	216162.900	1.5
416.7244	28.01	-3.24	113753.040	4.5	137742.950	5.5
416.7271	12.00	-1.83	35051.264	1.0	59041.019	2.0
416.7505	23.01	-3.71	13542.680	3.0	37531.090	4.0
416.7510	44.00	-.19	9114.300	0.0	33109.443	0.0
416.7520	39.00	-.53	483.945	0.0	24479.031	0.0
416.7590	27.00	-.90	29948.760	2.5	53936.680	2.5
416.7665	28.01	-2.30	76402.030	2.5	100389.520	2.5
416.7668	22.01	-4.98	8710.470	1.5	32697.940	2.5
416.7731	10.01	-2.30	283322.350	1.5	307309.460	.5
416.7800	58.01	-.21	8952.985	0.0	32946.459	0.0
416.7845	29.01	-2.50	117747.450	3.0	141733.900	2.0
416.7845	24.00	-2.77	35501.260	3.0	59487.710	4.0
416.7852	27.00	-1.27	28777.270	3.5	52763.680	3.5
416.7853	26.00	-2.19	26627.612	4.0	50614.020	4.0
416.7856	26.02	-1.99	198848.380	7.0	222834.770	6.0
416.8030	82.00	-.78	21293.585	0.0	45285.735	0.0
416.8047	27.00	-3.32	24733.280	2.5	48718.570	2.5
416.8080	59.01	-1.13	3387.616	0.0	27379.478	0.0
416.8130	41.00	-.28	0.000	0.0	23991.574	0.0
416.8197	24.00	-3.36	24303.940	3.0	48288.370	4.0
416.8278	23.01	-2.53	48853.040	5.0	72837.000	6.0
416.8283	24.00	-2.33	31009.000	3.0	54992.930	2.0
416.8410	16.01	-.22	127976.210	1.5	151959.410	1.5
416.8438	18.01	-3.94	187589.230	2.5	211572.270	1.5
416.8443	27.00	-1.84	30443.630	1.5	54426.640	1.5
416.8449	26.02	-.31	166421.330	4.0	190404.310	3.0
416.8461	28.01	-4.65	95332.530	2.5	119315.440	2.5
416.8463	13.01	-1.51	123468.100	3.0	147451.000	4.0
416.8463	13.01	-1.29	123468.100	3.0	147451.000	4.0
416.8463	13.01	-4.92	123468.100	3.0	147451.000	3.0
416.8607	26.00	-3.18	27166.804	4.0	51148.870	3.0
416.8660	74.00	-.53	18147.942	0.0	42136.466	0.0
416.8661	26.01	-5.53	21308.080	1.5	45269.840	1.5
416.8708	26.02	-1.02	198717.600	4.0	222699.090	5.0
416.8768	28.01	-1.39	105861.190	2.5	129842.330	2.5
416.8800	25.02	-2.64	192576.420	2.5	216557.380	3.5
416.8844	22.00	-2.32	11776.806	4.0	35757.510	4.0
416.8923	23.00	-1.71	8476.200	1.5	32456.450	1.5
416.8931	26.00	-3.14	27559.568	2.0	51539.770	2.0
416.8939	28.01	-3.30	106007.890	2.5	129988.050	2.5
416.8969	18.01	-2.31	172335.520	2.5	196315.510	2.5
416.8970	2.00	-2.34	171135.000	0.0	195121.740	0.0
416.9055	21.00	-1.90	15881.760	3.5	39861.250	2.5
416.9060	92.00	0.00	8065.752	0.0	32051.974	0.0
416.9066	27.00	-4.60	20500.710	1.5	44480.140	2.5
416.9095	26.00	-5.17	8154.713	1.0	32133.977	2.0
416.9106	30.02	-3.21	214357.000	1.0	238336.200	2.0
416.9231	23.00	-4.18	15270.420	1.5	39248.900	1.5
416.9326	23.01	-4.05	13542.680	3.0	37520.610	3.0
416.9326	22.00	-.64	15220.390	5.0	39198.320	6.0
416.9360	40.00	-.26	14276.381	0.0	38260.877	0.0
416.9384	7.01	-2.30	187437.560	1.0	211415.160	2.0
416.9436	25.00	-3.52	37737.220	3.5	61714.520	4.5
416.9460	59.01	-1.21	3387.616	0.0	27371.537	0.0
416.9480	62.01	-1.12	1935.780	0.0	25919.586	0.0
416.9570	41.00	-.06	12259.943	0.0	36243.231	0.0
416.9587	25.02	.59	192172.890	2.5	216149.320	3.5
416.9594	27.00	-1.48	23152.570	3.5	47128.960	2.5
416.9598	23.00	-3.74	8715.720	3.5	32692.090	3.5
416.9605	26.02	-.25	198848.380	7.0	222824.710	7.0
416.9700	28.00	-2.44	33610.916	2.0	57586.700	2.0
416.9748	26.00	-1.93	27394.676	3.0	51370.184	2.0
416.9753	26.01	-4.08	60887.660	5.5	84863.140	5.5
416.9770	58.01	-.20	5726.684	0.0	29706.822	0.0
416.9798	28.01	-2.19	105499.050	3.5	129474.270	3.5
416.9820	42.00	.08	23390.681	0.0	47372.532	0.0
416.9839	24.00	-.32	33113.270	4.0	57088.250	5.0
416.9840	46.00	-2.08	10001.532	0.0	33983.268	0.0
416.9973	26.01	-5.66	18360.650	1.5	42334.860	2.5
417.0015	28.01	-2.90	98467.250	3.5	122441.220	4.5
417.0050	44.00	-.55	13550.463	0.0	37530.991	0.0
417.0052	25.00	-1.67	37737.220	3.5	61710.980	3.5
417.0084	9.02	-4.46	442748.850	2.5	466722.420	2.5
417.0110	64.01	-1.44	3387.616	0.0	27367.799	0.0
417.0208	24.00	-.54	33060.740	3.0	57033.600	4.0
417.0327	26.01	-3.88	75600.930	3.5	99573.110	4.5
417.0340	12.02	-3.09	582747.300	2.0	606719.400	2.0
417.0400	75.00	.40	27342.899	0.0	51321.414	0.0
417.0457	6.00	-3.40	64089.850	1.0	88061.280	1.0
417.0470	90.01	-1.00	9194.957	0.0	33173.070	0.0
417.0514	25.02	-2.62	109780.400	2.5	133751.500	3.5
417.0540	74.00	-.27	18147.942	0.0	42125.652	0.0
417.0560	26.02	-.59	198773.950	5.0	222744.790	5.0
417.0575	23.01	-2.76	48579.960	3.0	72550.710	4.0
417.0617	24.01	-3.62	25035.640	.5	49006.150	1.5
417.0624	24.01	-4.32	64030.850	6.5	88001.320	5.5
417.0648	6.00	-4.14	64090.950	2.0	88061.280	1.0
417.0664	18.02	-2.21	180679.000	1.0	204649.240	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
417.0781	24.00	-3.56	24282.340	4.0	48251.910	3.0
417.0789	18.01	-3.53	172335.520	2.5	196305.040	3.5
417.0793	17.01	-1.92	121499.000	2.0	145468.500	1.0
417.0840	24.01	-4.87	45669.540	1.5	69638.770	1.5
417.0887	27.00	-.86	29735.180	3.5	53704.140	2.5
417.0904	26.00	-1.01	24335.764	2.0	48304.623	2.0
417.1073	22.01	-2.02	39476.870	2.5	63444.760	3.5
417.1076	25.02	-.77	194849.100	1.5	218816.970	2.5
417.1082	22.00	-.68	17369.590	1.0	41337.430	2.0
417.1089	25.01	-3.24	49427.320	4.0	73395.120	3.0
417.1180	74.00	-1.48	4758.794	0.0	28732.825	0.0
417.1216	28.01	-4.04	97273.830	2.5	121240.900	3.5
417.1237	27.00	-3.52	29735.180	3.5	53702.130	3.5
417.1259	23.00	-1.14	18438.070	4.5	42404.890	3.5
417.1284	23.00	-.45	15270.420	1.5	39237.100	.5
417.1287	23.00	-1.48	18198.080	2.5	42164.740	3.5
417.1346	25.01	-2.55	81054.350	2.0	105020.670	1.0
417.1381	28.01	-3.78	114874.880	2.5	138841.000	3.5
417.1390	58.01	-1.25	5887.999	0.0	29860.823	0.0
417.1397	24.00	-2.56	36552.130	3.0	60518.160	3.0
417.1397	24.00	-2.74	36552.130	3.0	60518.160	3.0
417.1411	26.01	-2.45	62158.190	4.5	86124.140	4.5
417.1427	26.00	-3.79	24338.766	3.0	48304.623	2.0
417.1437	12.02	-1.53	582747.300	2.0	606713.100	1.0
417.1437	23.03	-3.56	264161.800	5.0	288127.600	4.0
417.1480	40.00	-.49	10808.108	0.0	34780.415	0.0
417.1541	21.00	-.97	15756.510	2.5	39721.710	1.5
417.1560	25.01	-2.19	49820.160	2.0	73785.250	2.0
417.1570	62.01	-1.24	3468.273	0.0	27440.063	0.0
417.1590	92.01	-.75	1693.808	0.0	25665.483	0.0
417.1595	7.01	.28	187091.370	2.0	211056.260	3.0
417.1646	24.00	-.78	31028.330	2.0	54992.930	2.0
417.1687	25.01	-4.88	82193.040	2.0	106157.400	3.0
417.1694	26.00	-2.63	29798.960	4.0	53763.280	3.0
417.1710	64.00	.33	11775.998	0.0	35746.984	0.0
417.1792	28.01	-3.78	109846.000	3.5	133809.760	3.5
417.1806	29.01	-1.09	120919.410	1.0	144883.090	2.0
417.1820	59.01	-.82	2984.328	0.0	26954.681	0.0
417.1901	26.00	-1.49	26623.726	2.0	50586.857	3.0
417.1915	24.01	-3.08	25043.100	1.5	49006.150	1.5
417.1919	22.01	-.33	20951.770	2.5	44914.800	1.5
417.1947	27.01	-4.12	22009.230	4.0	45972.100	3.0
417.2013	28.01	-4.35	114052.040	3.5	138014.530	2.5
417.2060	31.00	-.27	806.575	0.0	24775.550	0.0
417.2070	28.01	-3.68	98122.630	.5	122084.790	1.5
417.2124	26.00	-1.33	26224.961	3.0	50186.814	2.0
417.2124	9.02	-3.38	443865.310	1.5	467827.160	1.5
417.2160	58.01	-1.32	2823.013	0.0	26791.413	0.0
417.2199	26.01	-4.85	38164.240	2.5	62125.660	1.5
417.2213	26.02	-.63	206295.810	1.0	230257.150	2.0
417.2215	25.01	-3.86	43850.420	2.0	67811.750	3.0
417.2270	59.01	-.91	1613.150	0.0	25580.918	0.0
417.2320	57.00	-.93	3468.273	0.0	27435.754	0.0
417.2333	25.01	-3.14	49820.160	2.0	73780.810	3.0
417.2380	26.02	-1.65	198773.950	5.0	222734.330	4.0
417.2494	24.00	-1.07	30858.820	2.0	54818.550	2.0
417.2514	24.00	-1.66	36558.550	2.0	60518.160	3.0
417.2514	24.00	-2.12	36558.550	2.0	60518.160	3.0
417.2525	26.02	-.64	206233.310	2.0	230192.860	3.0
417.2534	30.02	-1.20	237047.800	2.0	261007.300	2.0
417.2534	30.02	-2.36	237047.800	2.0	261007.300	2.0
417.2553	27.00	-1.67	29735.180	3.5	53694.570	3.5
417.2560	77.00	-.54	16454.134	0.0	40420.236	0.0
417.2570	76.00	-1.15	10082.190	0.0	34048.235	0.0
417.2578	26.00	-3.02	26627.612	4.0	50586.857	3.0
417.2591	22.00	-1.70	15156.787	4.0	39115.958	4.0
417.2602	24.01	-3.30	25047.040	2.5	49006.150	1.5
417.2629	26.00	-2.78	26874.534	5.0	50833.485	5.0
417.2711	9.02	-3.46	443868.680	2.5	467827.160	1.5
417.2744	24.00	-3.38	24056.110	5.0	48014.400	4.0
417.2745	26.00	-3.44	7728.058	3.0	31686.342	2.0
417.2770	24.00	.09	37233.500	5.0	61191.640	6.0
417.2791	24.00	-.86	31987.060	4.0	55945.080	5.0
417.2956	26.00	-1.07	34017.084	1.0	57974.160	2.0
417.2970	92.01	-1.20	6210.629	0.0	30174.377	0.0
417.3014	25.00	-2.38	41031.480	4.5	64988.220	3.5
417.3047	22.01	-4.07	16625.250	1.5	40581.800	2.5
417.3058	24.01	-3.44	65217.610	4.5	89174.100	3.5
417.3173	26.00	-3.07	27394.676	3.0	51350.505	4.0
417.3194	23.00	-4.76	13801.530	1.5	37757.240	.5
417.3218	25.02	-.49	192576.420	2.5	216531.990	1.5
417.3230	76.00	-.93	5081.424	0.0	29043.679	0.0
417.3279	26.00	-3.77	29320.050	1.0	53275.270	2.0
417.3283	28.00	-3.93	30619.440	2.0	54574.640	1.0
417.3297	26.01	-3.30	61093.440	2.5	85048.560	1.5
417.3318	26.00	-1.65	22946.810	1.0	46901.808	1.0
417.3380	60.01	-2.09	483.945	0.0	24445.338	0.0
417.3446	26.01	-2.60	20830.520	2.5	44784.780	2.5
417.3453	28.01	-3.78	113753.040	4.5	137707.260	3.5
417.3468	18.02	-3.19	207673.160	0.0	231627.300	1.0
417.3473	23.01	-4.30	49268.610	4.0	73222.720	4.0
417.3476	26.00	-1.78	24335.764	2.0	48289.652	1.0
417.3497	28.01	-4.01	97273.830	2.5	121227.800	2.5
417.3527	27.00	-3.10	20500.710	1.5	44454.510	.5
417.3549	22.01	-1.90	8744.270	2.5	32697.940	2.5
417.3560	64.01	-.32	12824.546	0.0	36784.906	0.0
417.3562	7.01	-.57	187461.560	2.0	211415.160	2.0
417.3570	26.01	-4.46	61726.090	3.5	85679.640	2.5
417.3649	28.01	-2.48	106283.160	2.5	130236.260	2.5
417.3762	26.02	-.30	206295.810	1.0	230248.260	1.0
417.3778	18.01	-3.15	160239.350	1.5	184191.710	.5
417.3809	25.01	-2.52	65567.070	2.0	89519.250	2.0
417.3837	24.00	-1.12	24299.890	2.0	48251.910	3.0
417.3873	24.00	-1.42	36552.130	3.0	60503.940	4.0
417.3919	25.00	-4.27	35165.050	1.5	59116.600	2.5
417.3923	26.00	-3.75	7985.783	2.0	31937.308	1.0
417.3950	41.00	.45	17905.969	0.0	41864.090	0.0
417.4013	23.00	-.54	13801.530	1.5	37752.540	2.5
417.4040	16.01	-3.54	140229.780	2.5	164180.630	3.5
417.4075	22.01	-1.51	20951.770	2.5	44902.420	2.5
417.4081	22.00	-3.19	7255.369	2.0	31205.985	3.0
417.4140	39.00	-.62	483.945	0.0	24440.976	0.0
417.4145	24.00	-1.73	35934.020	6.0	59884.270	6.0
417.4170	26.01	-3.40	61512.670	4.5	85462.780	3.5
417.4190	92.01	-1.09	5484.711	0.0	29441.455	0.0
417.4208	25.01	-3.79	82936.010	3.0	106885.900	4.0
417.4224	28.01	-4.62	107082.210	2.5	131032.010	2.5
417.4260	26.02	1.13	198848.380	7.0	222797.970	8.0
417.4286	23.01	-2.48	48730.760	4.0	72680.200	5.0
417.4339	25.01	-3.92	14593.820	3.0	38542.960	3.0
417.4340	41.00	-.81	8630.355	0.0	32586.238	0.0
417.4340	72.00	-1.09	2339.068	0.0	26294.951	0.0
417.4363	11.05	-.82	1016274.000	1.0	1040223.000	1.0
417.4363	11.05	-1.30	1016274.000	1.0	1040223.000	2.0
417.4363	11.05	-1.30	1016274.000	2.0	1040223.000	1.0
417.4363	11.05	-.63	1016274.000	2.0	1040223.000	2.0
417.4363	11.05	-1.28	1016274.000	2.0	1040223.000	3.0
417.4363	11.05	-1.28	1016274.000	3.0	1040223.000	2.0
417.4363	11.05	-.38	1016274.000	3.0	1040223.000	3.0
417.4378	7.01	-1.66	187461.560	2.0	211410.470	3.0
417.4395	26.00	-2.18	28819.966	5.0	52768.780	4.0
417.4430	62.01	-1.62	2984.328	0.0	26939.694	0.0
417.4480	58.01	-1.10	4678.136	0.0	28633.215	0.0
417.4483	22.00	-3.66	14028.470	2.0	37976.780	2.0
417.4502	22.00	-.73	17995.750	0.0	41943.950	1.0
417.4534	23.00	-3.27	18085.820	.5	42033.840	1.5
417.4539	26.01	-5.69	20805.830	4.5	44753.820	3.5
417.4543	24.00	-1.62	24303.940	3.0	48251.910	3.0
417.4708	26.02	-.48	198658.800	3.0	222605.820	4.0
417.4809	26.02	.28	198658.800	3.0	222605.240	3.0
417.4827	23.00	-3.18	13810.900	.5	37757.240	.5
417.4909	24.00	-2.32	30858.820	2.0	54804.690	1.0
417.4914	26.00	-3.35	7376.762	4.0	31322.603	3.0
417.4945	23.00	-3.22	15062.940	6.5	39008.600	5.5
417.4961	24.00	-.79	33040.100	2.0	56985.670	3.0
417.5107	27.00	-4.26	23184.230	2.5	47128.960	2.5
417.5141	23.00	-1.65	8715.720	3.5	32660.260	2.5
417.5210	73.00	-1.13	9194.957	0.0	33145.848	0.0
417.5221	24.00	-.40	31048.850	1.0	54992.930	2.0
417.5231	23.01	-4.21	49201.660	2.0	73145.680	3.0
417.5240	58.01	-1.15	5887.999	0.0	29836.718	0.0
417.5273	23.00	-2.21	18126.270	1.5	42070.050	2.5
417.5327	26.00	-2.34	33765.291	2.0	57708.760	2.0
417.5331	24.00	-3.47	35862.820	4.0	59806.270	5.0
417.5430	44.00	-.06	19922.407	0.0	43872.036	0.0
417.5458	22.01	-4.70	44902.420	2.5	66845.140	2.5
417.5474	23.00	-4.61	26171.960	4.5	50114.590	5.5
417.5540	64.00	.39	1693.808	0.0	25642.806	0.0
417.5610	60.01	-.63	5000.766	0.0	28949.363	0.0
417.5630	76.00	-.79	8630.355	0.0	32578.837	0.0
417.5639	26.00	-.42	22946.810	1.0	46886.494	2.0
417.5650	20.02	-.09	324110.240	4.0	348051.860	4.0
417.5660	24.01	-3.42	65384.040	4.5	89325.600	4.5
417.5660	7.01	-1.18	187091.370	2.0	211032.930	2.0
417.5690	24.01	-4.25	66649.710	1.5	90591.100	2.5
417.5741	24.01	-4.85	65680.150	4.5	89621.250	3.5
417.5857	24.00	-1.99	36577.730	4.0	60518.160	3.0
417.5857	24.00	-2.61	36577.730	4.0	60518.160	3.0
417.5871	26.02	-1.86	198773.950	5.0	222714.300	6.0
417.5886	26.00	-2.48	27394.676	3.0	51334.940	4.0
417.5941	24.00	-.97	24200.230	6.0	48140.180	7.0
417.5964	24.00	-2.67	24286.540	1.0	48226.360	0.0
417.5999	24.00	-3.44	33762.740	6.0	57702.360	5.0
417.6002	13.01	-2.27	124792.000	2.0	148731.600	3.0
417.6011	26.01	-4.07	54902.420	1.5	78841.970	.5
417.6025	28.01	-4.54	109269.830	1.5	133209.300	2.5
417.6080	58.01	-1.14	3952.218	0.0	27898.119	0.0
417.6086	26.02	-2.56	114325.350	5.0	138264.470	6.0
417.6093	29.01	-2.36	120875.850	2.0	144814.930	3.0
417.6159	7.01	.33	187091.370	2.0	211030.070	3.0
417.6212	22.00	-3.60	24921.110	1.0	48859.510	1.0
417.6330	25.01	-4.02	82232.180	5.0	106169.900	6.0
417.6330	90.01	-.98	14679.669	0.0	38624.137	0.0
417.6363	25.00	-2.06	37789.930	2.5	61727.460	2.5
417.6397	22.00	-2.93	11639.804	3.0	35577.140	2.0
417.6437	26.01	-4.57	38214.500	1.5	62151.610	2.5
417.6505	25.01	-4.88	82232.180	5.0	106168.900	5.0
417.6555	26.00	-.92	27166.804	4.0	51103.237	5.0
417.6558	26.00	-3.35	27394.676	3.0	51331.090	2.0
417.6590	24.01	-4.66	53051.550	1.5	76987.780	2.5
417.6599	25.00	-.05	34138.880	6.5	58075.060	5.5
417.6601	26.01	-6.34	23031.300	1.5	46967.470	2.5
417.6639	23.00	-1.90	8412.940	.5	32348.890	.5
417.6676	24.00	-.28	35870.530	4.0	59806.270	5.0
417.6683	12.02	-.74	582839.700	3.0	606775.400	4.0
417.6686	26.02	-4.35	182392.550	2.0	206328.220	3.0
417.6691	23.01	-3.41	26839.820	3.0	50775.470	2.0
417.6700	58.01	-.09	8952.985	0.0	32895.332	0.0
417.6759	22.00	-4.58	7255.369	2.0	31190.631	2.0
417.6779	23.00	-3.81	0.000	1.5	23935.150	2.5
417.6822	23.01	-4.07	49210.780	3.0	73145.680	3.0
417.6841	22.01	-2.32	39233.440	1.5	63168.230	2.5
417.6900	73.01	0.00	14518.354	0.0	38459.554	0.0
417.7063	26.00	-3.48	26874.534	5.0	50808.053	4.0
417.7157	24.00	-1.78	24277.060	0.0	48210.040	1.0
417.7182	24.01	-4.23	81432.360	3.5	105365.200	4.5
417.7207	14.01	-1.69	131677.400	2.5	155610.100	3.5
417.7227	24.00	-2.88	23933.900	4.0	47866.480	4.0
417.7260	42.00	.26	22745.421	0.0	46684.558	0.0
417.7269	26.02	-4.22	182392.550	2.0	206324.890	2.0
417.7283	26.02	-.59	206324.890	2.0	230257.150	2.0
417.7320	60.01	-.72	483.945	0.0	24422.738	0.0
417.7386	22.00	-1.61	15220.390	5.0	39152.057	5.0
417.7410	26.02	.36	206261.330	4.0	230192.860	3.0
417.7440	41.00	-.88	10162.848	0.0	34100.954	0.0
417.7452	24.00	-3.66	38730.670	2.0	62661.960	3.0
417.7452	24.00	-1.45	24286.540	1.0	48217.830	2.0
417.7480	57.00	-1.09	1048.548	0.0	24986.424	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
417.7511	26.00	-4.03	19390.165	6.0	43321.120	6.0
417.7531	25.01	-2.96	49465.130	3.0	73395.970	2.0
417.7540	39.01	-.24	3226.301	0.0	27163.834	0.0
417.7573	27.00	-4.98	1809.330	1.5	25739.930	2.5
417.7585	21.00	-3.71	21085.840	3.5	45016.370	3.5
417.7595	26.00	-3.53	7376.762	4.0	31307.235	4.0
417.7618	22.01	-4.82	44914.800	1.5	68845.140	2.5
417.7679	25.01	-4.08	49465.130	3.0	73395.120	3.0
417.7693	26.01	-4.02	20516.980	2.5	44446.890	3.5
417.7739	24.00	-2.61	24056.110	5.0	47985.760	5.0
417.7758	29.00	-1.18	39038.240	0.0	62974.524	0.0
417.7760	25.01	-4.25	48317.850	4.0	72247.380	3.0
417.7864	26.02	.21	206328.220	3.0	230257.150	2.0
417.7911	24.00	-.33	31280.350	5.0	55209.010	4.0
417.7913	22.00	-4.68	7255.369	2.0	31184.021	1.0
417.7920	73.00	-1.12	11695.340	0.0	35630.695	0.0
417.7950	24.00	-3.49	31987.060	4.0	55915.500	4.0
417.7981	24.00	-1.74	31028.330	2.0	54956.590	1.0
417.8018	14.02	-1.06	201598.280	2.0	225526.330	3.0
417.8020	62.01	-1.10	4355.506	0.0	28290.289	0.0
417.8034	25.00	-3.05	34938.700	4.5	58866.660	4.5
417.8053	24.00	-2.10	37233.500	5.0	61161.350	5.0
417.8060	90.01	-.80	7259.177	0.0	31193.730	0.0
417.8227	14.02	-1.96	201599.480	3.0	225526.330	3.0
417.8270	42.00	.65	25487.776	0.0	49421.126	0.0
417.8275	27.01	-2.09	61240.800	3.0	85167.380	3.0
417.8339	24.00	-2.21	36577.730	4.0	60503.940	4.0
417.8365	18.01	-1.70	134241.650	2.5	158167.710	1.5
417.8397	23.01	-1.83	13594.730	2.0	37520.610	3.0
417.8449	26.01	-3.97	48039.230	2.5	71964.810	2.5
417.8455	23.00	-1.39	18438.070	4.5	42363.620	3.5
417.8465	15.01	.39	77711.000	2.0	101636.490	1.0
417.8526	26.02	-2.36	198773.950	5.0	222699.090	5.0
417.8528	24.00	-2.79	23163.270	0.0	47088.400	1.0
417.8551	28.01	-4.75	70358.940	4.5	94283.940	4.5
417.8563	24.00	-1.23	33060.740	3.0	56985.670	3.0
417.8573	9.02	-1.03	442370.280	.5	466295.150	1.5
417.8633	26.01	-4.57	60402.380	2.5	84326.910	1.5
417.8813	24.00	-1.76	24286.540	1.0	48210.040	1.0
417.8816	24.00	-2.35	21810.840	1.0	45734.320	2.0
417.8816	26.00	-2.70	29798.960	4.0	53722.440	5.0
417.8830	26.02	-.17	198821.390	6.0	222744.790	5.0
417.8835	26.02	.01	206324.890	2.0	230248.260	1.0
417.8848	26.01	-2.95	20830.520	2.5	44753.820	3.5
417.8854	7.01	-1.30	187491.900	3.0	211415.160	2.0
417.9000	8.04	-.82	653605.000	0.0	677534.170	0.0
417.9000	92.01	-1.41	4516.821	0.0	28445.991	0.0
417.9034	24.00	-1.37	31048.000	7.0	54970.230	7.0
417.9041	25.02	-2.21	194894.780	1.5	218816.970	2.5
417.9059	23.01	-2.69	13609.000	4.0	37531.090	4.0
417.9097	24.00	-1.38	35884.400	5.0	59806.270	5.0
417.9153	22.00	-2.85	25102.880	2.0	49024.430	3.0
417.9207	24.00	-2.15	25106.340	3.0	49027.580	2.0
417.9210	28.00	-3.17	29832.810	3.0	53754.036	2.0
417.9214	27.00	-2.69	23207.760	1.5	47128.960	2.5
417.9267	24.00	-.27	31049.330	6.0	54970.230	7.0
417.9290	58.01	-1.44	3548.931	0.0	27476.440	0.0
417.9296	18.01	-.71	157673.320	2.5	181594.050	2.5
417.9331	28.01	-3.47	105499.050	3.5	129419.580	4.5
417.9354	17.01	-2.05	126032.000	2.0	149952.400	1.0
417.9361	28.01	-4.25	109269.830	1.5	133190.190	1.5
417.9366	24.00	-.91	33113.270	4.0	57033.600	4.0
417.9407	11.02	-4.42	440472.000	2.5	464392.100	2.5
417.9414	24.01	-1.96	30864.610	2.5	54784.670	3.5
417.9415	23.00	-2.27	2424.890	4.5	26344.940	4.5
417.9420	59.01	-.07	1613.150	0.0	25539.915	0.0
417.9450	29.01	-.71	123016.630	3.0	146936.480	2.0
417.9590	60.01	-1.17	1451.835	0.0	25377.627	0.0
417.9635	28.01	-4.37	116087.380	4.5	140006.170	4.5
417.9674	7.01	-.09	187491.900	3.0	211410.470	3.0
417.9688	26.00	-3.05	29356.780	2.0	53275.270	2.0
417.9710	90.01	-1.90	1451.835	0.0	25376.940	0.0
417.9758	21.00	-2.17	15881.760	3.5	39799.650	3.5
417.9760	41.00	-.37	12259.943	0.0	36184.762	0.0
417.9770	28.01	-4.76	107737.810	1.5	131655.830	.5
417.9784	24.00	-1.57	24299.890	2.0	48217.830	2.0
417.9793	20.02	-1.57	324110.240	4.0	348028.130	3.0
417.9810	40.01	-.48	13308.491	0.0	37233.023	0.0
417.9814	9.02	-.11	442278.930	2.5	466196.700	3.5
417.9868	25.00	-3.22	23549.200	2.5	47466.660	1.5
417.9876	22.00	-1.05	17540.205	3.0	41457.620	3.0
417.9892	24.00	-1.26	37205.880	3.0	61123.200	4.0
417.9899	27.00	-5.67	816.000	3.5	24733.280	2.5
417.9917	24.00	-.52	37244.170	4.0	61161.350	5.0
417.9936	24.01	-3.79	65257.030	3.5	89174.100	3.5
417.9946	22.00	-3.68	25107.417	2.0	49024.430	3.0
417.9960	90.01	-1.11	9678.902	0.0	33602.576	0.0
418.0030	25.00	-4.69	38934.940	2.5	62851.470	3.5
418.0107	23.00	-2.17	18198.080	2.5	42114.170	3.5
418.0107	25.01	-3.30	43850.420	2.0	67766.510	2.0
418.0135	24.00	-3.87	38730.670	2.0	62646.600	2.0
418.0158	23.02	-4.39	63303.120	4.5	87218.920	3.5
418.0167	24.00	-2.73	35501.260	3.0	59417.010	3.0
418.0177	24.00	-4.73	36577.730	4.0	60493.420	3.0
418.0198	26.02	-4.00	182412.650	4.0	206328.220	3.0
418.0240	74.00	-.56	19680.435	0.0	43602.506	0.0
418.0282	25.02	.65	192392.200	3.5	216307.290	4.5
418.0411	28.01	-4.10	105588.890	4.5	129503.240	4.5
418.0412	26.00	-3.03	21999.132	4.0	45913.480	3.0
418.0469	26.01	-3.37	60956.820	3.5	84870.840	2.5
418.0492	24.00	-3.20	24303.940	3.0	48217.830	2.0
418.0497	25.00	-2.56	38120.180	4.5	62034.040	3.5
418.0506	25.01	-3.30	82605.290	4.0	106519.100	5.0
418.0522	23.00	-1.11	18120.120	.5	42033.840	1.5
418.0547	22.00	-1.15	17423.853	2.0	41337.430	2.0
418.0651	16.01	-.74	140318.800	3.5	164231.780	2.5
418.0680	59.01	-1.94	1693.808	0.0	25613.362	0.0
418.0684	25.00	-3.88	34938.700	4.5	58851.490	5.5
418.0695	22.00	-4.76	20062.980	1.0	43975.710	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
418.0702	27.00	-2.36	23611.780	5.5	47524.470	4.5
418.0805	9.02	-1.56	442278.930	2.5	466191.030	2.5
418.0820	70.01	.13	30246.570	0.0	54165.323	0.0
418.0866	24.00	-3.24	21810.840	1.0	45722.590	0.0
418.0891	23.01	-3.70	13609.000	4.0	37520.610	3.0
418.0969	26.01	-4.00	38214.500	1.5	62125.660	1.5
418.1050	42.00	-.33	20003.065	0.0	43920.502	0.0
418.1080	58.01	-.58	5081.424	0.0	28998.689	0.0
418.1081	28.01	-1.04	104081.040	4.5	127991.560	3.5
418.1100	62.01	-1.23	2661.698	0.0	26578.849	0.0
418.1106	25.02	-3.57	109841.120	3.5	133751.500	3.5
418.1134	26.00	-2.82	20641.110	4.0	44551.325	3.0
418.1146	24.00	-2.80	24299.890	2.0	48210.040	1.0
418.1150	7.01	-1.31	187491.900	3.0	211402.030	4.0
418.1150	73.00	-1.28	9598.245	0.0	33515.110	0.0
418.1170	22.01	-5.71	16515.790	.5	40425.800	1.5
418.1191	26.00	-2.17	29320.050	1.0	53229.940	1.0
418.1225	26.01	-4.87	62689.960	2.5	86599.660	2.5
418.1227	26.00	-3.00	32873.623	4.0	56783.306	3.0
418.1230	18.01	-3.96	179592.130	2.5	203501.600	2.5
418.1256	26.02	-4.94	182418.700	4.0	206328.220	3.0
418.1340	41.00	-.50	11130.738	0.0	35046.516	0.0
418.1373	26.02	-3.58	181828.660	2.0	205737.510	2.0
418.1377	26.01	-4.03	75915.210	2.5	99824.040	2.5
418.1548	26.00	-1.57	28604.610	2.0	52512.460	1.0
418.1548	26.02	-4.96	89697.520	3.0	113605.370	3.0
418.1560	25.01	-2.80	81147.650	2.0	105055.430	2.0
418.1567	24.00	-1.03	31048.850	1.0	54956.590	1.0
418.1597	23.00	-3.25	18126.270	1.5	42033.640	1.5
418.1611	26.02	-2.89	181830.020	3.0	205737.510	2.0
418.1615	22.00	-5.69	11531.760	2.0	35439.228	1.0
418.1648	27.01	-1.74	61260.100	2.0	85167.380	3.0
418.1749	26.02	-2.53	181825.670	4.0	205736.370	3.0
418.1757	26.00	-.13	22838.320	2.0	46744.975	3.0
418.1819	27.01	-7.29	22414.500	3.0	46320.800	4.0
418.1873	23.01	-4.06	23391.090	5.0	47297.080	5.0
418.1879	18.00	-2.27	94553.707	0.0	118459.662	1.0
418.1898	23.00	-3.71	18258.890	2.5	42164.740	3.5
418.1933	24.01	-3.19	65419.950	5.5	89325.600	4.5
418.1956	23.01	-3.23	49593.410	5.0	73498.930	6.0
418.2076	23.00	-.67	15103.770	4.5	39006.600	5.5
418.2138	25.01	-2.97	84268.060	1.0	108172.540	1.0
418.2160	90.01	-.69	14195.724	0.0	38106.813	0.0
418.2220	63.00	.06	13147.176	0.0	37057.922	0.0
418.2244	23.02	-4.25	63315.050	3.5	87218.920	3.5
418.2256	9.02	-2.92	443865.310	1.5	467769.110	.5
418.2272	26.02	-4.50	181828.660	2.0	205732.370	3.0
418.2330	26.01	-4.57	60807.280	4.5	84710.660	3.5
418.2385	26.00	-1.58	24335.764	2.0	48238.832	2.0
418.2460	44.00	-.14	16938.079	0.0	40847.453	0.0
418.2470	77.00	.50	32343.666	0.0	56252.983	0.0
418.2498	26.01	-4.80	60625.470	5.5	84527.890	4.5
418.2503	25.01	-3.05	84268.060	1.0	108170.450	2.0
418.2510	26.02	-3.18	181830.020	3.0	205732.370	3.0
418.2587	23.00	-1.06	2220.130	2.5	26124.040	3.5
418.2640	44.00	-1.53	7420.492	0.0	31328.837	0.0
418.2689	26.01	-3.93	38164.240	2.5	62065.570	3.5
418.2732	26.00	-4.30	24574.655	4.0	48475.740	3.0
418.2753	26.00	-2.89	27559.568	2.0	51460.530	3.0
418.2770	64.00	-.32	7178.519	0.0	31086.121	0.0
418.2829	26.00	-3.77	27666.334	1.0	51566.860	1.0
418.2900	75.00	-.74	15647.559	0.0	39554.418	0.0
418.2910	26.00	-3.47	24338.766	3.0	48238.832	2.0
418.2992	30.02	-2.39	238336.200	2.0	262235.800	3.0
418.2994	26.00	-2.38	27394.676	3.0	51294.262	3.0
418.3034	28.01	-3.45	97799.660	1.5	121699.020	1.5
418.3046	24.00	-2.01	24940.610	2.0	48839.900	1.0
418.3051	24.01	-4.13	65156.840	2.5	89056.100	2.5
418.3060	75.00	-.88	14518.354	0.0	38424.298	0.0
418.3065	23.02	-3.22	160576.620	3.5	184475.800	4.5
418.3100	25.02	-.38	192012.750	1.5	215911.730	1.5
418.3105	18.01	-3.83	191012.350	1.5	214911.300	2.5
418.3156	25.01	-4.69	49882.150	4.0	73780.810	3.0
418.3200	26.01	-5.16	21308.080	1.5	45206.490	.5
418.3210	77.00	.26	37989.692	0.0	61894.779	0.0
418.3286	22.00	-.57	18061.540	1.0	41959.460	0.0
418.3296	23.00	-.95	18680.120	5.5	42577.980	5.5
418.3320	40.00	-.99	5000.766	0.0	28905.225	0.0
418.3330	62.00	-.41	1451.835	0.0	25356.237	0.0
418.3429	23.01	-1.07	16533.000	5.0	40430.100	4.0
418.3472	22.00	.42	21588.496	4.0	45485.350	5.0
418.3496	9.02	-1.18	442294.310	1.5	466191.030	2.5
418.3560	90.01	-1.63	8952.985	0.0	32856.072	0.0
418.3589	18.01	-2.99	191169.520	1.5	215065.710	.5
418.3623	23.00	-.94	18174.060	1.5	42070.050	2.5
418.3627	25.01	-3.05	83070.970	2.0	106966.940	2.0
418.3670	74.00	-.78	17986.627	0.0	41889.086	0.0
418.3697	22.00	-3.10	15220.390	5.0	39115.958	4.0
418.3760	62.01	-1.52	322.630	0.0	24224.575	0.0
418.3830	74.00	-.34	19680.435	0.0	43581.980	0.0
418.3885	14.01	-.39	131677.400	2.5	155571.900	2.5
418.3967	9.02	-4.19	442147.190	2.5	466041.220	3.5
418.4049	26.02	-.27	198717.600	4.0	222611.160	5.0
418.4130	76.00	-.31	18309.257	0.0	42209.088	0.0
418.4163	26.02	-.61	198821.390	6.0	222714.300	6.0
418.4200	20.02	.29	323003.560	1.0	346896.260	2.0
418.4216	26.00	-3.80	21715.735	5.0	45608.341	6.0
418.4250	71.01	-.09	17180.052	0.0	41079.198	0.0
418.4250	64.01	-.12	3952.218	0.0	27851.364	0.0
418.4296	26.01	-5.22	20340.360	5.5	44232.510	4.5
418.4315	22.01	-2.55	8710.470	1.5	32602.510	1.5
418.4390	42.00	-.03	25407.119	0.0	49305.465	0.0
418.4394	25.01	-4.72	83070.970	2.0	106962.560	1.0
418.4396	25.02	.06	192665.800	4.5	216557.380	3.5
418.4422	23.00	-3.31	18513.460	4.5	42404.690	3.5
418.4431	25.02	.25	192392.200	3.5	216283.580	3.5
418.4440	41.00	-1.29	322.630	0.0	24220.690	0.0
418.4464	28.00	-1.61	27414.893	2.0	51306.085	3.0
418.4496	27.00	-1.28	32654.500	2.5	56545.510	2.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
418.4501	9.02	-2.21	442147.190	2.5	466038.170	2.5
418.4506	25.01	-2.06	49889.860	3.0	73780.810	3.0
418.4553	23.00	-2.87	9636.960	1.5	33527.640	2.5
418.4634	24.01	-3.17	65618.410	6.5	89508.630	5.5
418.4651	24.00	-1.22	36577.730	4.0	60467.850	5.0
418.4657	25.01	-3.17	79913.350	4.0	103803.440	3.0
418.4708	28.01	-3.58	107142.210	1.5	131032.010	2.5
418.4710	90.01	-1.05	14195.724	0.0	38092.243	0.0
418.4725	24.00	-1.52	37233.500	5.0	61123.200	4.0
418.4760	17.01	-1.91	107878.500	2.0	131768.000	2.0
418.4806	25.02	.17	192172.890	2.5	216062.130	2.5
418.4874	25.00	-2.81	41031.480	4.5	64920.330	3.5
418.4876	24.00	-3.62	24897.550	4.0	48786.390	5.0
418.4894	26.00	-.29	22838.320	2.0	46727.055	2.0
418.4925	23.00	-4.99	21032.520	3.5	44921.080	2.5
418.4984	26.02	.22	198717.600	4.0	222605.820	4.0
418.5037	24.00	-2.41	31987.060	4.0	55874.980	5.0
418.5086	26.02	-.77	198717.600	4.0	222605.240	3.0
418.5170	25.02	.46	195308.790	4.5	219195.950	4.5
418.5296	24.00	-2.97	21847.880	2.0	45734.320	2.0
418.5330	58.01	-.79	3306.958	0.0	27199.937	0.0
418.5342	24.00	-1.23	24056.110	5.0	47942.290	6.0
418.5482	28.01	-4.63	105588.890	4.5	129474.270	3.5
418.5513	25.00	-3.79	37586.030	1.5	61471.230	2.5
418.5601	17.01	-.39	137770.100	0.0	161654.800	1.0
418.5617	27.00	-3.90	28470.510	1.5	52355.120	.5
418.5619	24.00	-1.21	30787.300	1.0	54671.900	1.0
418.5630	18.02	-2.83	180679.000	1.0	204563.530	1.0
418.5633	28.00	-.47	32973.414	4.0	56857.933	4.0
418.5660	77.00	-1.74	12421.258	0.0	36312.353	0.0
418.5820	42.00	1.03	25407.119	0.0	49297.301	0.0
418.5832	27.00	-2.59	23207.760	1.5	47091.140	.5
418.6002	22.00	-1.17	18061.540	1.0	41943.950	1.0
418.6020	74.80	-.91	17583.339	0.0	41472.379	0.0
418.6040	60.01	-1.85	1451.835	0.0	25340.761	0.0
418.6057	24.01	-4.90	39824.520	4.5	63706.620	4.5
418.6100	41.00	-.29	13308.491	0.0	37197.075	0.0
418.6118	22.00	-.14	12118.394	4.0	36000.144	4.0
418.6130	26.01	-3.95	62829.160	.5	86710.640	1.5
418.6162	19.01	.39	162507.000	2.0	186388.500	3.0
418.6167	26.02	-3.86	182379.860	5.0	206261.330	4.0
418.6185	24.00	-2.39	24093.160	2.0	47974.530	3.0
418.6280	42.00	-.75	18228.600	0.0	42116.156	0.0
418.6346	24.00	-.50	31106.370	4.0	54986.820	3.0
418.6372	10.01	-2.62	283894.410	.5	307774.710	1.5
418.6392	26.02	-4.66	182444.700	3.0	206324.890	2.0
418.6437	21.00	-4.42	16022.720	2.5	39902.650	3.5
418.6477	12.02	-1.34	582839.700	3.0	606719.400	2.0
418.6553	25.01	-3.17	83070.970	2.0	106950.240	3.0
418.6595	24.00	-3.22	37244.170	4.0	61123.200	4.0
418.6600	58.01	.67	6936.547	0.0	30822.278	0.0
418.6661	10.01	-3.98	252798.480	.5	276677.130	.5
418.6690	40.01	-.29	14034.408	0.0	37919.625	0.0
418.6691	26.00	-4.20	19621.004	5.0	43499.485	4.0
418.6746	23.01	-4.61	13490.840	2.0	37369.010	2.0
418.6788	23.00	-1.67	8578.520	2.5	32456.450	1.5
418.6797	26.01	-3.28	60807.280	4.5	84685.160	3.5
418.6828	26.02	-1.48	198821.390	6.0	222699.090	5.0
418.6858	25.01	-4.91	43131.400	2.0	67008.930	3.0
418.6884	24.00	-2.88	21856.940	3.0	45734.320	2.0
418.6939	23.01	-4.85	49268.610	4.0	73145.680	3.0
418.6960	92.00	-.41	4194.191	0.0	28077.868	0.0
418.7000	21.00	-4.11	21032.780	2.5	44909.500	2.5
418.7044	26.00	-.63	19757.020	3.0	43633.491	2.0
418.7074	17.01	-2.47	107878.500	2.0	131754.800	1.0
418.7079	26.02	-.20	205694.090	1.0	229570.360	2.0
418.7101	22.00	-2.76	11776.806	4.0	35652.950	3.0
418.7128	14.01	-2.59	103556.290	3.5	127432.280	3.5
418.7128	14.01	-1.05	103556.290	3.5	127432.280	4.5
418.7151	14.01	-1.16	103556.420	2.5	127432.280	3.5
418.7167	26.00	-4.89	33765.291	2.0	57641.060	3.0
418.7216	27.00	-2.62	24326.110	3.5	48201.600	3.5
418.7240	27.00	-2.28	16470.600	1.5	40345.950	2.5
418.7284	13.01	-2.95	123468.100	3.0	147343.200	2.0
418.7295	23.00	-2.13	18302.270	3.5	42177.310	4.5
418.7320	58.01	-.46	4436.164	0.0	28317.788	0.0
418.7320	57.00	-.62	0.000	0.0	23881.624	0.0
418.7338	28.01	-4.23	71457.740	3.5	95332.530	2.5
418.7537	26.01	-3.70	60989.480	4.5	84863.140	5.5
418.7560	40.00	.34	11534.025	0.0	35414.280	0.0
418.7565	23.00	-2.36	18680.120	5.5	42553.620	4.5
418.7565	24.00	-3.22	20519.600	6.0	44393.100	6.0
418.7576	26.00	-3.55	27666.334	1.0	51539.770	2.0
418.7620	69.00	.02	0.000	0.0	23879.913	0.0
418.7623	21.00	-.81	15881.760	3.5	39754.930	2.5
418.7624	26.00	-4.81	29356.780	2.0	53229.940	1.0
418.7649	25.01	-3.06	81147.650	2.0	105020.670	1.0
418.7660	72.01	-.40	18793.202	0.0	42672.887	0.0
418.7707	23.00	-1.89	8476.200	1.5	32348.890	.5
418.7758	24.00	-3.36	37205.880	3.0	61078.280	3.0
418.7758	24.00	-1.79	33113.270	4.0	56985.670	3.0
418.7784	23.01	-1.73	32299.240	1.0	56171.490	1.0
418.7784	24.00	-2.94	35934.020	6.0	59806.270	5.0
418.7802	26.00	-.63	19562.435	4.0	43434.585	3.0
418.7849	28.01	-2.66	32499.530	4.5	56371.410	3.5
418.7947	24.00	-2.79	21847.880	2.0	45719.200	1.0
418.7986	22.00	-2.99	14105.680	3.0	37976.780	2.0
418.7995	18.01	-4.07	195281.380	.5	219152.430	1.5
418.8021	17.02	-1.97	182076.000	1.5	205946.900	2.5
418.8070	92.01	-1.79	241.973	0.0	24119.320	0.0
418.8100	64.01	-1.63	3387.616	0.0	27264.792	0.0
418.8130	62.01	-.74	4355.506	0.0	28232.511	0.0
418.8131	22.00	-3.35	13981.750	1.0	37852.021	1.0
418.8326	24.00	-2.05	20523.940	5.0	44393.100	6.0
418.8331	28.01	-4.42	109846.000	3.5	133715.130	4.5
418.8530	23.01	-3.89	48579.960	3.0	72447.960	3.0
418.8535	26.02	-1.92	206324.890	2.0	230192.860	3.0
418.8696	26.00	-2.47	33946.920	2.0	57813.970	3.0
418.8707	22.00	-.64	18061.540	1.0	41928.528	2.0
418.8712	28.01	-2.57	106369.300	1.5	130236.260	2.5
418.8723	13.01	-3.74	123415.900	2.0	147282.800	2.0
418.8723	13.01	-3.01	123415.900	2.0	147282.800	1.0
418.8761	25.01	-4.56	47073.560	3.0	70940.240	2.0
418.8770	28.01	-4.11	113321.950	4.5	137188.560	4.5
418.8776	17.01	-.43	137804.400	1.0	161671.000	0.0
418.8860	26.00	-2.02	36940.600	2.0	60806.720	3.0
418.8895	26.02	0.00	198848.380	7.0	222714.300	6.0
418.8963	28.00	-1.13	29888.505	2.0	53754.036	2.0
418.8981	26.02	-3.49	181828.660	2.0	205694.090	1.0
418.9091	13.01	-2.84	123418.000	3.0	147282.800	2.0
418.9091	13.01	-3.75	123418.000	3.0	147282.800	3.0
418.9119	26.02	-.77	206328.220	3.0	230192.860	3.0
418.9139	25.02	-.12	195112.810	3.5	218977.340	3.5
418.9144	28.01	-4.44	115592.250	1.5	139456.750	1.5
418.9180	58.01	-1.31	5887.999	0.0	29759.019	0.0
418.9242	24.01	-4.25	66727.160	2.5	90591.100	2.5
418.9280	92.01	-1.60	241.973	0.0	24112.423	0.0
418.9299	23.00	-1.99	17116.920	3.5	40980.540	4.5
418.9332	22.01	-.81	43740.770	3.5	67604.200	3.5
418.9353	26.02	-2.04	181808.700	5.0	205672.010	4.0
418.9411	25.02	.48	192012.750	1.5	215875.730	2.5
418.9444	24.01	-3.39	66649.710	1.5	90512.500	1.5
418.9460	44.00	-1.83	7420.492	0.0	31289.917	0.0
418.9500	23.00	-1.24	18302.270	3.5	42164.740	3.5
418.9511	27.00	-4.41	1406.840	2.5	25269.250	3.5
418.9520	59.01	-.22	2984.328	0.0	26853.411	0.0
418.9553	26.00	-.76	29798.960	4.0	53661.130	3.0
418.9583	13.01	-2.68	123420.800	4.0	147282.800	3.0
418.9612	16.01	.15	140318.800	3.5	164180.630	3.5
418.9629	25.01	-2.26	62587.500	3.0	86449.240	4.0
418.9640	58.01	-1.09	7259.177	0.0	31127.576	0.0
418.9698	13.02	-2.92	189876.100	2.5	213737.440	2.5
418.9698	13.02	-1.77	189876.100	2.5	213737.440	1.5
418.9711	16.01	-.15	128233.070	2.5	152094.340	2.5
418.9755	13.02	-1.62	189876.420	3.5	213737.440	2.5
418.9831	23.00	-.81	2311.370	3.5	26171.960	4.5
418.9908	28.01	-3.48	107082.210	2.5	130942.360	1.5
418.9910	76.00	-.59	12663.231	0.0	36530.092	0.0
418.9918	28.01	-4.16	107082.210	2.5	130942.300	1.5
418.9948	24.00	-1.38	23933.900	4.0	47793.820	5.0
418.9973	23.00	-1.47	18174.060	1.5	42033.840	1.5
418.9983	25.00	-.17	34250.520	5.5	58110.240	4.5
418.9990	41.00	.15	17905.969	0.0	41772.374	0.0
419.0000	42.00	.32	25407.119	0.0	49273.467	0.0
419.0127	24.00	-3.71	29420.900	1.0	53279.800	2.0
419.0127	24.00	-1.19	30787.300	1.0	54646.200	0.0
419.0138	24.01	-4.32	39742.360	2.5	63601.200	3.5
419.0201	24.00	-3.24	23163.270	0.0	47021.750	1.0
419.0230	14.00	-4.43	39760.285	1.0	63618.600	0.0
419.0243	22.01	-3.17	8744.270	2.5	32602.510	1.5
419.0285	17.02	-2.22	216710.400	3.5	240568.400	4.5
419.0408	23.01	-2.15	13511.710	1.0	37369.010	2.0
419.0443	28.01	-2.23	108368.050	2.5	132225.150	1.5
419.0524	24.00	-3.58	35501.260	3.0	59357.900	2.0
419.0545	25.00	-2.36	41031.480	4.5	64888.000	4.5
419.0610	25.02	-1.27	194849.100	1.5	218705.250	2.5
419.0630	58.01	-.62	7178.519	0.0	31041.279	0.0
419.0637	26.02	-3.30	158562.700	4.0	182418.700	4.0
419.0647	24.00	-3.38	20517.400	2.0	44373.340	3.0
419.0650	41.00	-.78	8952.985	0.0	32815.632	0.0
419.0703	27.00	-2.97	0.000	4.5	23855.620	4.5
419.0709	18.00	-2.12	93143.600	2.0	116999.389	2.0
419.0763	23.00	-.77	18258.890	2.5	42114.170	3.5
419.0780	64.00	.26	967.890	0.0	24829.796	0.0
419.0828	28.01	-3.68	106133.140	1.5	129988.050	2.5
419.0844	18.01	-4.77	195297.610	1.5	219152.430	1.5
419.0862	25.00	-2.36	37630.620	4.5	61485.340	4.5
419.0872	28.01	-1.12	105439.850	1.5	129294.510	2.5
419.0880	41.00	-.63	967.890	0.0	24829.227	0.0
419.0890	23.00	-5.24	10892.500	3.5	34747.060	3.5
419.0891	23.01	-2.20	16340.970	3.0	40195.520	3.0
419.0950	72.00	-.58	14357.039	0.0	38217.977	0.0
419.1025	18.00	-1.94	94553.707	0.0	118407.494	1.0
419.1039	18.01	-1.19	160239.350	1.5	184093.060	.5
419.1070	64.01	-.68	3387.616	0.0	27247.871	0.0
419.1148	24.00	-.69	30965.460	3.0	54818.550	2.0
419.1188	22.01	-4.74	44914.800	1.5	68767.660	1.5
419.1218	25.00	-2.10	38934.940	2.5	62787.630	1.5
419.1266	24.00	-1.54	20520.920	3.0	44373.340	3.0
419.1266	26.02	-4.58	182408.910	3.0	206261.330	4.0
419.1334	28.01	-.82	106283.160	2.5	130135.190	1.5
419.1383	26.02	-4.25	89783.590	4.0	113635.340	4.0
419.1436	26.00	-.78	19912.486	2.0	43763.938	1.0
419.1449	22.00	-2.53	15108.121	3.0	38959.499	4.0
419.1512	23.00	-1.52	2153.200	1.5	26004.220	2.5
419.1557	23.00	-.24	15571.900	2.5	39422.660	2.5
419.1620	59.01	-1.03	1613.150	0.0	25470.274	0.0
419.1621	17.01	-.56	137804.400	1.0	161654.800	1.0
419.1630	64.00	-.20	967.890	0.0	24824.958	0.0
419.1663	23.00	-1.53	18513.460	4.5	42363.620	3.5
419.1670	9.02	-4.56	442694.580	1.5	466544.700	1.5
419.1680	26.00	-2.46	23051.744	0.0	46901.808	1.0
419.1694	25.00	-1.13	37630.620	4.5	61480.600	3.5
419.1700	26.02	-3.50	158562.700	4.0	182412.650	4.0
419.1709	24.00	-4.23	36577.730	4.0	60427.630	5.0
419.1752	24.00	-2.92	20523.690	4.0	44373.340	3.0
419.1790	40.00	-.36	11856.655	0.0	35712.812	0.0
419.1820	90.01	-1.32	11453.368	0.0	35309.354	0.0
419.1923	26.02	-3.62	182412.650	4.0	206261.330	4.0
419.1940	92.00	-1.48	0.000	0.0	23855.303	0.0
419.1955	30.02	-4.99	214357.000	1.0	238205.500	1.0
419.2018	28.00	-3.46	32973.414	4.0	56821.553	3.0
419.2046	26.02	-4.42	114339.950	4.0	138187.930	3.0
419.2065	28.01	-2.84	32523.540	3.5	56371.410	3.5
419.2070	41.00	-.80	645.260	0.0	24499.823	0.0
419.2085	26.00	-3.77	24118.815	4.0	47966.571	3.0
419.2092	24.00	-.03	32097.360	6.0	55945.080	5.0
419.2100	40.00	-.76	12663.231	0.0	36517.624	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
419.2130	26.02	-4.29	182480.720	2.0	206328.220	3.0
419.2160	62.01	-1.97	806.575	0.0	24660.626	0.0
419.2299	27.00	-2.45	21920.090	4.5	45766.630	3.5
419.2334	26.02	-2.69	181825.670	4.0	205672.010	4.0
419.2345	9.01	-4.56	246662.010	1.0	270508.290	2.0
419.2357	26.02	-4.52	158562.700	4.0	182408.910	3.0
419.2360	57.01	-.19	14276.381	0.0	38129.294	0.0
419.2360	90.00	-1.40	6291.287	0.0	30144.200	0.0
419.2426	25.02	-.53	194971.150	2.5	218816.970	2.5
419.2430	78.00	-1.34	13389.148	0.0	37241.663	0.0
419.2457	27.00	-2.76	25232.790	.5	49078.430	1.5
419.2631	28.01	-4.26	105439.850	1.5	129284.500	2.5
419.2716	26.02	-3.97	182480.720	2.0	206324.890	2.0
419.2733	24.00	-2.85	35572.940	2.0	59417.010	3.0
419.2841	27.00	-2.73	16778.160	2.5	40621.620	1.5
419.2909	24.00	-2.48	31364.330	3.0	55207.400	4.0
419.2987	26.02	-4.01	182418.700	4.0	206261.330	4.0
419.2992	25.02	-4.89	121117.140	3.5	144959.740	4.5
419.3020	90.00	-.53	8065.752	0.0	31914.911	0.0
419.3090	58.01	-.10	7178.519	0.0	31027.280	0.0
419.3100	73.00	-1.50	10888.765	0.0	34737.469	0.0
419.3129	25.01	-4.79	46903.260	2.0	70745.080	3.0
419.3140	28.01	-3.64	97273.830	2.5	121115.590	1.5
419.3280	58.01	-.13	8469.040	0.0	32316.720	0.0
419.3316	26.02	-3.26	182392.550	2.0	206233.310	2.0
419.3386	27.00	-3.78	29948.760	2.5	53789.120	3.5
419.3426	15.01	-1.64	107923.570	2.0	131763.700	1.0
419.3458	26.01	-4.16	61332.820	1.5	85172.770	.5
419.3465	22.00	-3.53	22404.690	3.0	46244.600	2.0
419.3482	12.01	-2.87	93799.700	3.5	117639.510	3.5
419.3482	12.01	-1.33	93799.700	3.5	117639.510	4.5
419.3482	12.01	-1.44	93799.700	2.5	117639.510	3.5
419.3502	11.02	-2.91	440552.400	3.5	464392.100	2.5
419.3542	21.00	-2.28	16021.780	1.5	39861.250	2.5
419.3569	16.01	-4.76	109560.500	.5	133399.820	1.5
419.3608	27.00	-.93	30443.630	1.5	54282.730	2.5
419.3657	24.00	.11	31048.000	7.0	54886.820	6.0
419.3697	25.00	-3.03	37630.620	4.5	61469.210	5.5
419.3708	21.00	-2.83	16022.720	2.5	39861.250	2.5
419.3715	26.02	-4.96	182486.400	1.0	206324.890	2.0
419.3794	9.02	-4.79	466301.960	2.5	490140.000	2.5
419.3803	26.02	-.95	205732.370	3.0	229570.360	2.0
419.3830	41.00	-1.03	8307.725	0.0	32152.278	0.0
419.3870	58.01	-.63	4436.164	0.0	28280.489	0.0
419.3880	26.02	-.40	205672.010	4.0	229509.560	3.0
419.3891	24.00	-3.28	31049.330	6.0	54886.820	6.0
419.3940	26.02	.40	198773.950	5.0	222611.160	5.0
419.4010	40.00	-.76	12663.231	0.0	36506.760	0.0
419.4051	26.02	-2.32	205694.090	1.0	229530.670	1.0
419.4151	26.02	-3.00	114351.920	3.0	138187.930	3.0
419.4195	23.00	-4.21	18198.080	2.5	42033.840	1.5
419.4208	25.00	-2.79	38669.600	3.5	62505.290	3.5
419.4304	28.01	-3.08	105588.890	4.5	129424.030	5.5
419.4311	12.02	-2.82	536152.000	1.0	559987.100	1.0
419.4346	17.02	-2.48	217850.200	2.5	241685.100	2.5
419.4355	25.01	-3.52	81220.580	3.0	105055.430	2.0
419.4480	28.01	-3.71	94729.250	2.5	118563.390	3.5
419.4486	24.00	-1.61	37244.170	4.0	61078.280	3.0
419.4486	26.00	-2.49	21999.132	4.0	45833.240	4.0
419.4554	27.00	-3.78	30102.960	2.5	53936.680	2.5
419.4560	42.00	.74	25407.119	0.0	49247.522	0.0
419.4670	75.00	-.94	17180.052	0.0	41019.830	0.0
419.4707	26.02	-.71	205737.510	2.0	229570.360	2.0
419.4757	25.02	-.21	192880.160	3.5	216712.730	2.5
419.4760	40.00	.07	11130.738	0.0	34970.004	0.0
419.4880	26.02	-.51	198773.950	5.0	222605.820	4.0
419.4897	26.02	-4.29	89907.850	5.0	113739.620	6.0
419.4910	58.01	-.36	8952.985	0.0	32791.399	0.0
419.4950	24.00	-2.10	31055.350	5.0	54886.820	6.0
419.5015	23.03	-2.91	263902.300	3.0	287733.400	2.0
419.5019	26.00	-1.05	36975.640	3.0	60806.720	3.0
419.5088	28.01	-3.22	105588.890	4.5	129419.580	4.5
419.5090	41.00	-.87	80.658	0.0	23918.049	0.0
419.5121	17.01	-.29	137804.400	1.0	161634.900	2.0
419.5140	76.00	-1.18	13953.751	0.0	37790.858	0.0
419.5292	29.01	-2.02	122745.770	2.0	146575.300	2.0
419.5308	24.00	-1.69	31377.960	4.0	55207.400	4.0
419.5318	26.00	-.73	26874.534	5.0	50703.912	5.0
419.5325	24.01	-4.55	39877.280	3.5	63706.620	4.5
419.5374	26.01	-3.67	61041.780	2.5	84870.840	2.5
419.5378	24.01	-2.66	42898.120	2.5	66727.160	2.5
419.5436	24.01	-3.90	40202.140	6.5	64030.850	6.5
419.5464	26.02	-.17	198773.950	5.0	222602.500	6.0
419.5477	24.01	-4.11	65680.150	4.5	89508.630	5.5
419.5519	28.00	-.77	32973.414	4.0	56801.654	5.0
419.5620	26.00	-.69	24335.764	2.0	48163.427	2.0
419.5660	41.00	.38	8711.012	0.0	32545.164	0.0
419.5698	25.02	-.60	194545.780	.5	218373.000	1.5
419.5709	23.01	-3.76	48853.040	5.0	72680.200	5.0
419.5808	29.01	-2.04	115569.200	5.0	139395.800	4.0
419.5820	58.01	-1.34	4436.164	0.0	28269.408	0.0
419.5845	25.00	-3.29	38934.940	2.5	62761.330	2.5
419.5855	23.01	-3.84	13542.680	3.0	37369.010	2.0
419.5878	23.00	-1.60	18680.120	5.5	42506.320	4.5
419.5972	7.01	-.29	187461.560	2.0	211287.230	3.0
419.5989	23.01	-3.31	30318.630	4.0	54144.200	4.0
419.6038	25.00	-3.40	35041.370	3.5	58866.660	4.5
419.6061	22.00	-2.72	19322.988	2.0	43148.150	3.0
419.6072	23.01	-3.47	49201.660	2.0	73026.760	2.0
419.6130	24.00	-3.46	24093.160	2.0	47917.930	2.0
419.6130	40.00	-.46	12663.231	0.0	36494.714	0.0
419.6132	17.00	-1.75	72488.568	1.5	96313.330	1.5
419.6149	26.00	-3.90	24338.766	3.0	48163.427	2.0
419.6170	25.00	-2.74	34250.520	5.5	58075.060	5.5
419.6195	26.02	-2.91	182408.910	3.0	206233.310	2.0
419.6198	26.00	-.59	27394.676	3.0	51219.059	3.0
419.6325	21.00	-4.42	21085.840	3.5	44909.500	2.5
419.6340	58.01	-.52	3306.958	0.0	27137.248	0.0
419.6345	22.00	-4.93	14028.470	2.0	37852.021	1.0
419.6405	22.01	-2.27	43780.990	4.5	67604.200	3.5
419.6410	20.02	-1.11	339198.090	1.0	363021.270	2.0
419.6420	10.00	-3.51	148257.790	1.0	172080.916	1.0
419.6475	24.00	-4.92	36552.130	3.0	60374.940	2.0
419.6500	45.00	-.79	9114.300	0.0	32943.682	0.0
419.6534	26.00	-2.04	23783.617	5.0	47606.092	5.0
419.6550	57.01	-.91	2581.041	0.0	26410.139	0.0
419.6634	22.01	-6.21	8710.470	1.5	32532.380	.5
419.6870	44.00	-.37	13873.093	0.0	37700.374	0.0
419.6907	26.01	-4.30	54870.620	2.5	78690.980	2.5
419.6942	25.02	-.54	194849.100	1.5	218669.260	1.5
419.6950	41.00	-.73	11453.368	0.0	35280.195	0.0
419.6979	23.01	-3.58	48730.760	4.0	72550.710	4.0
419.7005	13.01	-2.61	121365.200	0.0	145185.000	1.0
419.7043	28.00	-2.95	30912.838	1.0	54732.425	2.0
419.7070	64.01	-.37	12824.546	0.0	36650.691	0.0
419.7098	26.00	-8.02	7985.783	2.0	31805.059	3.0
419.7102	23.00	-2.30	18438.070	4.5	42257.320	5.5
419.7228	25.01	-4.69	81236.890	1.0	105055.430	2.0
419.7245	28.01	-3.78	107082.210	2.5	130900.650	2.5
419.7289	23.00	-2.42	2112.320	.5	25930.510	1.5
419.7365	25.00	-2.00	38669.600	3.5	62487.360	2.5
419.7369	26.00	-3.20	31307.235	4.0	55124.974	3.0
419.7471	26.02	-4.24	158562.700	4.0	182379.860	5.0
419.7510	58.01	-1.10	3952.218	0.0	27775.866	0.0
419.7513	24.01	-4.51	50667.330	3.5	74484.250	2.5
419.7520	92.01	-.83	8307.725	0.0	32131.316	0.0
419.7540	77.00	-1.73	11775.998	0.0	35599.476	0.0
419.7580	44.00	-.48	8469.040	0.0	32292.291	0.0
419.7610	41.00	-.07	16776.764	0.0	40599.844	0.0
419.7628	23.00	-.58	15264.830	5.5	39081.100	6.5
419.7647	27.00	-3.12	28345.860	4.5	52162.020	3.5
419.7670	58.01	-.99	3952.218	0.0	27774.958	0.0
419.7679	23.01	-3.09	49210.780	3.0	73026.760	2.0
419.7782	28.00	-1.69	29888.505	2.0	53703.899	1.0
419.7830	27.00	-1.53	30443.630	1.5	54258.750	2.5
419.7836	26.02	-2.59	182480.720	2.0	206295.810	1.0
419.7900	62.01	-2.46	1451.835	0.0	25273.270	0.0
419.7947	22.01	-3.42	16515.790	.5	40330.250	.5
419.7984	22.00	-5.66	11639.804	3.0	35454.051	4.0
419.8000	58.01	-.69	4839.451	0.0	28660.318	0.0
419.8028	24.00	-3.75	31393.400	5.0	55207.400	4.0
419.8097	10.00	-2.82	148257.790	1.0	172071.396	2.0
419.8098	25.02	-2.56	124754.800	3.5	148568.400	2.5
419.8132	25.00	-3.51	27201.540	2.5	51014.950	3.5
419.8190	24.00	-.91	30858.820	2.0	54671.900	1.0
419.8220	92.00	-1.01	564.603	0.0	24384.222	0.0
419.8235	26.00	-.58	27166.804	4.0	50979.627	4.0
419.8303	27.00	-4.59	32733.070	3.5	56545.510	2.5
419.8310	26.00	-.80	19350.882	5.0	43163.282	4.0
419.8313	18.00	-2.28	93750.639	1.0	117563.020	0.0
419.8347	22.00	-3.96	25102.880	2.0	48915.070	2.0
419.8398	23.00	-3.29	18302.270	3.5	42114.170	3.5
419.8417	27.00	-4.03	816.000	3.5	24627.790	4.5
419.8430	58.01	-.92	4436.164	0.0	28254.591	0.0
419.8510	41.00	-1.25	645.260	0.0	24463.234	0.0
419.8527	26.00	-2.50	24118.815	4.0	47929.981	4.0
419.8528	23.00	-1.34	18258.890	2.5	42070.050	2.5
419.8587	29.01	-1.99	122745.770	2.0	146556.600	3.0
419.8599	24.00	-1.06	32097.360	6.0	55908.120	6.0
419.8615	23.00	-1.05	2311.370	3.5	26122.040	3.5
419.8624	26.00	-.76	27559.568	2.0	51370.184	2.0
419.8627	27.00	-1.74	28345.860	4.5	52156.460	4.5
419.8650	25.02	-1.33	194894.780	1.5	218705.250	2.5
419.8660	22.00	-2.01	19421.576	3.0	43231.990	4.0
419.8668	24.00	-3.54	24056.110	5.0	47866.480	4.0
419.8670	58.01	.21	7259.177	0.0	31076.243	0.0
419.8754	28.01	-3.69	98276.700	4.5	122086.580	3.5
419.8795	18.02	-2.51	207532.150	1.0	231341.800	2.0
419.8837	26.02	-4.10	182486.400	1.0	206295.810	1.0
419.8850	41.00	-.59	10969.423	0.0	34785.468	0.0
419.8866	22.00	-4.19	25227.217	3.0	49036.460	4.0
419.8880	44.00	-.55	7985.094	0.0	31800.969	0.0
419.8994	24.01	-3.80	45669.540	1.5	69478.060	2.5
419.9077	26.01	-3.97	37227.320	.5	61035.370	.5
419.9090	40.00	-.51	5000.766	0.0	28815.450	0.0
419.9098	26.00	.17	24574.655	4.0	48382.585	5.0
419.9110	60.01	-2.03	483.945	0.0	24298.515	0.0
419.9147	22.00	-2.61	25107.417	2.0	48915.070	2.0
419.9223	25.00	-2.32	37148.660	5.5	60955.880	4.5
419.9236	28.01	-3.32	105588.890	4.5	129396.040	5.5
419.9267	25.00	-3.81	30411.740	.5	54218.710	1.5
419.9280	39.01	-2.38	806.575	0.0	24620.181	0.0
419.9326	23.01	-3.22	44098.460	3.0	67905.100	3.0
419.9359	26.00	-2.56	23783.617	5.0	47590.070	4.0
419.9450	62.01	-1.33	4355.506	0.0	28168.148	0.0
419.9491	25.02	-1.50	124754.800	3.5	148560.500	4.5
419.9502	28.01	-4.45	94067.140	1.5	117872.780	2.5
419.9521	25.00	-1.46	37420.240	5.5	61225.770	5.5
419.9528	28.01	-4.09	105668.780	2.5	129474.270	3.5
419.9541	29.01	-4.36	117928.480	1.0	141733.900	2.0
419.9560	25.00	-3.61	37420.240	5.5	61225.550	6.5
419.9630	74.00	-.98	17018.737	0.0	40830.358	0.0
419.9641	23.00	-.62	18372.460	3.5	42177.310	4.5
419.9653	28.00	-2.55	34163.294	2.0	57968.080	3.0
419.9768	29.01	-3.49	121078.960	3.0	144883.090	2.0
419.9837	2.01	-.58	411477.918	0.0	435288.366	0.0
419.9841	22.00	-3.99	24921.110	1.0	48724.830	1.0
419.9890	18.01	-1.80	172829.580	1.5	196633.020	2.5
419.9900	44.00	.42	6452.602	0.0	30262.693	0.0
419.9920	69.01	-2.05	0.000	0.0	23809.977	0.0
419.9927	22.00	-3.30	24921.110	1.0	48724.340	2.0
419.9962	26.01	-4.93	61041.780	2.5	84844.810	2.5
419.9977	7.01	.03	187491.900	3.0	211294.850	4.0
419.9986	26.00	-4.87	704.003	2.0	24506.902	2.0
420.0019	22.00	-1.55	15156.787	4.0	38959.499	4.0
420.0030	74.00	-.99	16292.819	0.0	40102.173	0.0
420.0051	28.01	-3.71	98122.630	.5	121925.160	.5
420.0072	24.01	-4.99	40228.440	5.5	64030.850	6.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
420.0095	24.00	-1.15	24833.860	3.0	48636.140	3.0
420.0100	92.01	-1.61	6210.629	0.0	30019.586	0.0
420.0187	23.00	-3.54	2220.130	2.5	26021.690	3.5
420.0208	26.01	-4.47	62322.500	3.5	86124.140	4.5
420.0328	25.01	-1.87	49882.150	4.0	73683.110	4.0
420.0400	22.01	-3.48	16625.250	1.5	40425.800	1.5
420.0450	28.00	-1.32	26665.903	3.0	50466.172	4.0
420.0460	24.00	-2.32	31352.420	1.0	55152.630	2.0
420.0471	28.01	-2.27	107142.210	1.5	130942.360	1.5
420.0480	24.00	-3.54	29584.620	2.0	53384.720	3.0
420.0481	28.01	-2.23	107142.210	1.5	130942.300	1.5
420.0501	25.02	.11	191915.430	.5	215715.410	1.5
420.0570	42.00	-.76	18228.600	0.0	42034.893	0.0
420.0656	25.00	-3.82	30419.610	2.5	54218.710	1.5
420.0656	24.01	-3.18	65709.530	5.5	89508.630	5.5
420.0657	18.01	-4.15	179931.770	1.5	203730.860	1.5
420.0657	14.01	-.82	101023.310	1.5	124822.400	2.5
420.0661	24.01	-3.69	65257.030	3.5	89056.100	2.5
420.0671	18.00	-1.40	93143.800	2.0	116942.815	3.0
420.0698	28.01	-3.31	105499.050	3.5	129297.910	3.5
420.0701	18.02	-3.89	242923.960	1.0	266722.800	2.0
420.0751	23.00	-2.83	17181.980	4.5	40980.540	4.5
420.0753	22.00	-.36	18145.400	2.0	41943.950	1.0
420.0780	26.00	-3.78	12968.552	2.0	36766.950	3.0
420.0887	14.01	-1.97	101024.610	2.5	124822.400	2.5
420.0891	23.00	-3.74	137.380	2.5	23935.150	2.5
420.0897	14.01	-.67	101024.610	2.5	124822.340	3.5
420.0905	10.01	-2.46	279137.620	3.5	302935.310	4.5
420.0913	26.00	-3.24	27394.676	3.0	51192.320	4.0
420.0953	24.00	-2.90	31355.210	2.0	55152.630	2.0
420.0960	25.02	-2.34	192365.520	1.5	216162.900	1.5
420.0987	22.00	-2.12	17540.205	3.0	41337.430	2.0
420.0989	22.00	-2.23	25227.217	3.0	49024.430	3.0
420.0990	41.00	-1.57	5887.999	0.0	29691.912	0.0
420.1065	20.00	-.09	23652.304	1.0	47449.083	2.0
420.1220	62.01	-2.54	2661.698	0.0	26464.308	0.0
420.1240	58.01	-.32	7259.177	0.0	31061.673	0.0
420.1299	28.01	-.70	105499.050	3.5	129294.510	2.5
420.1320	42.00	-.96	16615.449	0.0	40417.492	0.0
420.1321	7.01	-1.11	187491.900	3.0	211287.230	3.0
420.1371	25.01	-3.70	84307.200	4.0	108102.250	3.0
420.1442	29.01	-4.91	117747.450	3.0	141542.100	2.0
420.1450	76.00	-1.90	4113.534	0.0	27914.841	0.0
420.1460	40.00	-.52	5000.766	0.0	28802.016	0.0
420.1468	24.00	-3.49	29420.900	1.0	53215.400	1.0
420.1500	23.02	-.30	160681.480	3.5	184475.800	4.5
420.1520	41.00	.06	10969.423	0.0	34770.333	0.0
420.1556	18.01	-1.42	158428.030	.5	182222.030	1.5
420.1650	29.01	-2.67	123304.630	1.0	147098.100	0.0
420.1689	25.01	-3.04	49889.860	3.0	73683.110	4.0
420.1705	26.02	-.89	205737.510	2.0	229530.670	1.0
420.1714	28.00	-1.59	32973.414	4.0	56766.523	4.0
420.1714	26.00	-3.30	28819.966	5.0	52613.072	5.0
420.1733	25.00	-3.64	30425.710	1.5	54218.710	1.5
420.1770	25.00	-.31	34343.900	4.5	58136.690	3.5
420.1805	37.00	-1.41	0.000	0.0	23799.296	0.0
420.1850	90.01	-1.29	7904.437	0.0	31703.478	0.0
420.1860	23.00	-2.76	18372.460	3.5	42164.740	3.5
420.1874	25.01	-2.85	78913.170	2.0	102705.370	3.0
420.1970	18.01	-1.61	135601.650	.5	159393.310	1.5
420.2032	26.00	-.43	11976.239	4.0	35767.546	4.0
420.2053	25.00	-2.06	37420.240	5.5	61211.430	4.5
420.2060	76.00	-.51	14276.381	0.0	38074.233	0.0
420.2140	28.00	-1.39	31786.210	3.0	55576.905	3.0
420.2189	25.02	-3.18	192880.160	3.5	216670.580	4.5
420.2206	25.02	-.72	192741.670	.5	216531.990	1.5
420.2208	25.00	-2.63	37148.660	5.5	60938.970	4.5
420.2213	21.00	-4.61	21032.780	2.5	44823.060	1.5
420.2252	24.01	-3.45	65384.040	4.5	89174.100	3.5
420.2303	26.02	-.50	198821.390	6.0	222611.160	5.0
420.2337	26.00	-2.25	20874.482	3.0	44664.061	2.0
420.2348	24.01	-3.36	59130.510	1.5	82920.030	1.5
420.2355	23.01	-1.40	13741.610	3.0	37531.090	4.0
420.2399	26.00	-1.97	31937.308	1.0	55726.540	0.0
420.2508	26.02	-2.18	182444.700	3.0	206233.310	2.0
420.2515	24.01	-3.98	50667.330	3.5	74455.900	4.5
420.2517	26.01	-2.56	54902.420	1.5	78690.980	2.5
420.2563	24.00	-3.68	31364.330	3.0	55152.630	2.0
420.2607	25.00	-1.40	41031.480	4.5	64819.530	5.5
420.2641	26.02	-4.24	182392.550	2.0	206180.410	3.0
420.2742	28.01	-2.77	78955.450	1.5	102742.740	1.5
420.2746	26.00	-2.42	24574.655	4.0	48361.920	4.0
420.2767	26.00	-3.91	24335.764	2.0	48122.913	3.0
420.2885	26.01	-2.80	54904.500	3.5	78690.980	2.5
420.2920	62.01	-1.00	3871.561	0.0	27664.543	0.0
420.2940	58.01	-.34	3548.931	0.0	27341.800	0.0
420.2954	28.01	-.79	104081.040	4.5	127867.130	4.5
420.3050	62.01	-.82	3468.273	0.0	27260.519	0.0
420.3053	24.00	-2.62	24200.230	6.0	47985.760	5.0
420.3067	28.01	-4.87	105499.050	3.5	129284.500	2.5
420.3117	20.00	-2.73	23652.304	1.0	47437.471	0.0
420.3134	25.00	-4.76	37148.660	5.5	60933.730	5.5
420.3153	24.00	-3.65	35572.940	2.0	59357.900	2.0
420.3254	24.00	-4.79	24093.160	2.0	47877.550	1.0
420.3275	24.00	-2.25	20523.690	4.0	44307.960	5.0
420.3297	26.00	-3.10	24338.766	3.0	48122.913	3.0
420.3307	23.00	-2.14	2220.130	2.5	26004.220	2.5
420.3319	24.00	-3.13	20523.940	5.0	44307.960	5.0
420.3323	16.05	.66	522248.000	1.5	546032.000	2.5
420.3362	25.01	-3.93	81236.890	1.0	105020.670	1.0
420.3410	41.00	-.36	13308.491	0.0	37098.699	0.0
420.3412	18.01	-1.66	172335.520	2.5	196119.020	3.5
420.3477	22.00	-.30	18145.400	2.0	41928.528	2.0
420.3531	22.00	-4.56	11776.806	4.0	35559.627	5.0
420.3571	26.00	-4.46	8154.713	1.0	31937.308	1.0
420.3574	24.00	-1.92	20517.400	2.0	44299.980	2.0
420.3669	26.00	-1.45	36975.640	3.0	60757.680	4.0
420.3730	69.00	-.16	0.000	0.0	23788.397	0.0
420.3755	28.00	-3.92	30979.789	4.0	54761.346	4.0
420.3820	74.00	-1.29	12098.628	0.0	35880.516	0.0
420.3834	26.02	.51	198821.390	6.0	222602.500	6.0
420.3940	26.00	-.97	29313.008	6.0	53093.517	6.0
420.3987	26.00	-1.12	22946.810	1.0	46727.055	2.0
420.3993	23.00	-2.43	19189.280	1.5	42969.490	1.5
420.4012	27.00	-2.35	29563.170	1.5	53343.270	1.5
420.4030	30.02	-2.25	237506.800	1.0	261280.800	1.0
420.4040	57.01	-1.33	5646.026	0.0	29432.669	0.0
420.4157	27.01	-3.39	61388.100	4.0	85167.380	3.0
420.4194	26.00	-2.13	36975.640	3.0	60754.710	4.0
420.4196	24.00	-4.95	20520.920	3.0	44299.980	2.0
420.4207	23.01	-2.67	13741.610	3.0	37520.610	3.0
420.4320	41.00	-.92	8711.012	0.0	32496.071	0.0
420.4370	92.01	-1.87	0.000	0.0	23784.776	0.0
420.4410	74.00	-.17	19115.832	0.0	42900.382	0.0
420.4451	24.00	-1.60	32097.360	6.0	55874.980	5.0
420.4490	26.01	-2.91	61093.440	2.5	84870.840	2.5
420.4506	23.00	-4.99	2153.200	1.5	25930.510	1.5
420.4520	75.00	-.36	22019.503	0.0	45803.431	0.0
420.4525	17.01	-.39	137877.600	2.0	161654.800	1.0
420.4527	26.02	-.08	205732.370	3.0	229509.560	3.0
420.4537	21.00	-.58	16022.720	2.5	39799.850	3.5
420.4615	20.02	-.05	347344.370	5.0	371121.060	5.0
420.4619	25.01	-3.84	82387.530	3.0	106164.200	4.0
420.4680	20.02	-1.78	347344.370	5.0	371120.690	4.0
420.4700	39.01	-1.98	0.000	0.0	23782.910	0.0
420.4740	58.01	-1.11	6291.287	0.0	30073.970	0.0
420.4820	62.01	-2.21	2984.328	0.0	26766.559	0.0
420.4840	24.01	-3.07	45730.740	2.5	69506.160	3.5
420.4852	27.00	-4.07	28345.860	4.5	52121.210	4.5
420.4860	64.01	-.70	4194.191	0.0	27976.196	0.0
420.4923	23.00	-2.50	18258.890	2.5	42033.840	1.5
420.4990	24.00	-1.37	37233.500	5.0	61008.070	5.0
420.5006	25.02	-.70	194894.780	1.5	218669.260	1.5
420.5007	26.00	-1.68	34039.495	4.0	57813.970	3.0
420.5042	23.01	-1.92	13594.730	2.0	37369.010	2.0
420.5050	63.01	-.08	0.000	0.0	23780.930	0.0
420.5059	28.01	-2.57	106007.890	2.5	129782.070	3.5
420.5068	24.00	-3.55	29420.900	1.0	53195.030	2.0
420.5089	23.01	-1.21	16421.510	4.0	40195.520	3.0
420.5100	26.00	-4.54	20641.110	4.0	44415.057	4.0
420.5109	27.01	-5.43	24074.600	2.0	47848.500	1.0
420.5176	25.02	.30	193498.070	3.5	217271.590	4.5
420.5210	21.00	-.71	16026.520	4.5	39799.850	3.5
420.5268	16.05	-.30	522248.000	1.5	546021.000	1.5
420.5310	41.00	-.84	322.630	0.0	24102.090	0.0
420.5326	28.01	-2.65	105499.050	3.5	129271.720	3.5
420.5401	25.01	-3.70	14593.820	3.0	38366.070	2.0
420.5436	26.02	-.08	205737.510	2.0	229509.560	3.0
420.5445	17.02	-1.15	217913.100	1.5	241685.100	2.5
420.5475	26.01	-5.93	21308.080	1.5	45079.910	2.5
420.5529	26.00	-4.27	27559.568	2.0	51331.090	2.0
420.5533	26.02	-4.56	182408.910	3.0	206180.410	3.0
420.5593	10.01	-1.00	279218.660	2.5	302989.820	1.5
420.5600	60.01	-.87	5000.766	0.0	28778.586	0.0
420.5668	9.02	-4.92	444056.420	.5	467827.160	1.5
420.5790	58.01	-1.33	7017.204	0.0	30793.950	0.0
420.5810	42.00	.32	25487.776	0.0	49264.409	0.0
420.5822	25.01	-4.66	82387.530	3.0	106157.400	3.0
420.5823	23.00	-4.75	15571.900	2.5	39341.760	3.5
420.5845	25.01	-3.51	43131.400	2.0	66901.140	2.0
420.5848	9.02	-3.80	444057.440	1.5	467827.160	1.5
420.5880	73.00	-1.63	3871.561	0.0	27647.798	0.0
420.5890	58.01	-.94	10162.848	0.0	33939.029	0.0
420.5891	25.00	-2.81	37164.250	6.5	60933.730	5.5
420.5892	26.02	-.25	198821.390	6.0	222590.860	7.0
420.5917	22.01	-3.98	8997.690	3.5	32767.020	3.5
420.5947	26.02	-4.55	89907.850	4.0	113677.010	5.0
420.5947	26.02	-4.75	89907.850	5.0	113677.010	5.0
420.6009	24.01	-3.55	50667.330	3.5	74436.140	2.5
420.6020	44.00	-.10	7985.094	0.0	31760.540	0.0
420.6050	23.01	-4.27	13490.840	2.0	37259.420	1.0
420.6130	41.00	-.34	12582.573	0.0	36357.397	0.0
420.6130	62.01	-1.10	2984.328	0.0	26759.152	0.0
420.6144	27.00	-1.31	28345.860	4.5	52113.910	5.5
420.6176	20.01	-1.63	60533.020	.5	84300.890	.5
420.6192	23.00	-3.15	18302.270	3.5	42070.050	2.5
420.6195	26.02	-4.01	182412.650	4.0	206180.410	3.0
420.6232	23.02	-.97	160879.980	4.5	184647.530	5.5
420.6236	28.01	-4.15	95332.530	2.5	119100.060	1.5
420.6319	17.00	-1.76	72827.038	.5	96594.096	.5
420.6354	25.01	-1.71	43528.300	5.0	67295.160	4.0
420.6446	25.00	-3.39	34343.900	4.5	58110.240	4.5
420.6454	17.01	-.43	126032.000	2.0	149798.300	2.0
420.6501	10.01	-.90	279137.620	3.5	302903.650	2.5
420.6526	28.01	-1.02	106369.300	1.5	130135.190	1.5
420.6540	66.01	-1.60	0.000	0.0	23772.507	0.0
420.6580	72.01	.05	20003.065	0.0	43775.346	0.0
420.6620	45.00	-2.19	3226.301	0.0	26998.356	0.0
420.6620	62.01	-1.33	4355.506	0.0	28127.561	0.0
420.6698	26.00	-4.06	415.932	3.0	24180.848	3.0
420.6740	59.01	-.06	4355.506	0.0	28126.882	0.0
420.6783	25.02	-.29	192948.290	1.5	216712.730	2.5
420.6792	21.00	-1.75	16096.860	1.5	39861.250	2.5
420.6878	24.00	.26	37244.170	4.0	61008.070	5.0
420.6896	27.00	-4.09	32781.710	2.5	56545.510	2.5
420.7008	26.02	-2.91	114339.950	4.0	138103.120	4.0
420.7050	74.00	.01	19519.120	0.0	43286.745	0.0
420.7130	26.00	-.90	22838.320	2.0	46600.800	1.0
420.7141	20.02	-1.71	341601.460	2.0	365363.860	1.0
420.7146	25.01	-3.85	43131.400	2.0	66893.790	1.0
420.7149	9.01	-.34	229550.110	2.0	253312.480	1.0
420.7164	9.02	-.10	442278.930	2.5	466041.220	3.5
420.7217	20.02	.60	323655.060	2.0	347417.050	3.0
420.7255	25.01	-4.91	14781.190	2.0	38542.960	3.0
420.7266	26.02	-2.72	182418.700	4.0	206180.410	3.0
420.7298	28.01	-3.41	92325.850	3.5	116087.380	4.5
420.7365	24.01	-2.68	30864.610	2.5	54625.760	2.5
420.7441	26.00	-3.22	37046.000	4.0	60806.720	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
420.7447	9.01	-.56	229551.790	1.0	253312.480	1.0
420.7602	27.00	-2.58	21780.470	5.5	45540.280	5.5
420.7627	24.00	-3.93	38911.330	3.0	62671.000	4.0
420.7640	44.00	-.19	14760.326	0.0	38526.618	0.0
420.7704	9.02	-1.39	442278.930	2.5	466038.170	2.5
420.7845	28.01	-3.35	107142.210	1.5	130900.650	2.5
420.7877	25.01	-2.56	43536.900	4.0	67295.160	4.0
420.7918	9.01	-1.04	229554.450	0.0	253312.480	1.0
420.7934	24.00	-4.73	21856.940	3.0	45614.880	4.0
420.7935	22.00	-4.54	19322.988	2.0	43080.920	2.0
420.7937	25.00	-1.51	41230.300	3.5	64988.220	3.5
420.7939	23.00	-3.16	15664.750	1.5	39422.660	2.5
420.8048	17.01	.13	137877.600	2.0	161634.900	2.0
420.8079	25.02	-.30	192392.200	3.5	216149.320	3.5
420.8080	64.00	-.67	6452.602	0.0	30216.409	0.0
420.8160	41.00	-1.62	80.658	0.0	23844.013	0.0
420.8187	24.01	-4.78	50667.330	3.5	74423.840	3.5
420.8259	22.00	-1.59	19573.968	4.0	43330.070	5.0
420.8310	59.01	-1.08	1693.808	0.0	25456.316	0.0
420.8387	27.00	-2.08	29948.760	2.5	53704.140	2.5
420.8433	25.02	-4.95	90746.060	5.5	114501.180	4.5
420.8508	24.00	-2.67	37205.880	3.0	60960.580	4.0
420.8524	24.00	-2.91	23933.900	4.0	47688.510	4.0
420.8561	27.01	-3.89	21624.400	5.0	45378.800	4.0
420.8569	18.01	-3.93	172335.520	2.5	196089.870	2.5
420.8587	27.00	-1.87	29216.370	2.5	52970.620	2.5
420.8593	26.00	-4.56	27394.676	3.0	51148.892	2.0
420.8597	26.00	-3.55	27394.676	3.0	51148.870	3.0
420.8610	26.02	-.65	198848.380	7.0	222602.500	6.0
420.8660	26.01	-4.49	60956.820	3.5	84710.660	3.5
420.8727	25.01	-3.48	55759.270	3.0	79512.730	3.0
420.8743	27.00	-1.05	29948.760	2.5	53702.130	3.5
420.8835	18.01	-4.87	179592.130	2.5	203344.980	1.5
420.8881	26.02	-4.31	182480.720	2.0	206233.310	2.0
420.8890	90.01	-.89	6613.917	0.0	30373.150	0.0
420.8940	24.00	-2.21	31048.000	7.0	54800.260	6.0
420.8970	22.00	-1.20	25107.417	2.0	48859.510	1.0
420.8980	40.01	-.54	5726.684	0.0	29485.409	0.0
420.9059	24.01	-3.53	42898.120	2.5	66649.710	1.5
420.9084	23.01	-2.38	32420.040	0.0	56171.490	1.0
420.9128	26.02	-3.66	114351.920	3.0	138103.120	4.0
420.9176	24.00	-1.01	31049.330	6.0	54800.260	6.0
420.9179	25.01	-3.95	44745.460	2.0	68496.370	1.0
420.9264	29.01	-3.78	122745.770	2.0	146496.200	3.0
420.9312	26.02	-2.87	199577.710	2.0	223327.870	2.0
420.9331	10.01	-4.19	305398.620	1.5	329148.670	2.5
420.9367	24.00	-.03	31049.330	6.0	54799.180	5.0
420.9390	26.02	.20	205672.010	4.0	229421.730	4.0
420.9410	58.01	-.64	5484.711	0.0	29241.009	0.0
420.9482	19.01	-.95	189243.700	1.0	212992.900	1.0
420.9493	27.00	-4.50	28345.860	4.5	52095.000	3.5
420.9553	30.02	-2.23	237047.800	2.0	260796.600	3.0
420.9553	30.02	-3.39	237047.800	2.0	260796.600	3.0
420.9592	26.01	-4.80	62962.260	1.5	86710.840	1.5
420.9605	24.01	-2.87	50687.630	2.5	74436.140	2.5
420.9665	17.00	-2.16	71958.363	2.5	95706.534	1.5
420.9674	25.00	-1.56	37737.220	3.5	61485.340	4.5
420.9700	72.00	-.38	14437.696	0.0	38192.358	0.0
420.9746	23.01	-1.99	13511.710	1.0	37259.420	1.0
420.9791	10.01	-2.79	283322.350	1.5	307069.810	1.5
420.9816	24.01	-2.00	45730.740	2.5	69478.060	2.5
420.9847	25.00	-3.23	23719.520	1.5	47466.660	1.5
420.9860	23.00	-.38	2424.890	4.5	26171.960	4.5
420.9888	21.00	-3.60	16210.800	3.5	39957.710	4.5
420.9888	26.02	-4.08	182486.400	1.0	206233.310	2.0
420.9916	22.00	-3.06	14105.680	3.0	37852.434	4.0
420.9933	24.00	-3.84	31355.210	2.0	55101.870	3.0
420.9945	18.01	-2.46	160239.350	1.5	183985.940	1.5
421.0000	58.01	-1.25	5242.739	0.0	28995.708	0.0
421.0023	22.00	-4.33	17423.853	2.0	41170.003	3.0
421.0083	27.00	-1.26	29948.760	2.5	53694.570	3.5
421.0108	23.01	-2.45	44159.430	2.0	67905.100	3.0
421.0114	22.00	-2.29	21739.713	5.0	45485.350	5.0
421.0127	28.00	-1.48	33112.368	3.0	56857.933	4.0
421.0243	24.00	.33	31055.350	5.0	54800.260	6.0
421.0277	25.01	-4.30	82419.480	3.0	106164.200	4.0
421.0350	62.01	-1.37	806.575	0.0	24557.570	0.0
421.0353	26.00	-1.05	20019.648	1.0	43763.938	1.0
421.0381	26.00	-1.55	24772.019	1.0	48516.150	1.0
421.0429	23.00	-.50	18513.460	4.5	42257.320	5.5
421.0429	9.02	-1.90	442294.310	1.5	466038.170	2.5
421.0434	24.00	-2.53	31055.350	5.0	54799.180	5.0
421.0445	23.00	-2.26	15264.830	5.5	39008.600	5.5
421.0512	23.01	-3.66	13609.000	4.0	37352.390	5.0
421.0514	25.00	-1.28	37737.220	3.5	61480.600	3.5
421.0674	26.02	.65	198848.380	7.0	222590.860	7.0
421.0748	24.00	-1.96	24200.230	6.0	47942.290	6.0
421.0775	29.01	-4.95	110084.290	1.0	133826.200	2.0
421.0777	28.00	-2.51	31031.042	3.0	54772.940	3.0
421.0798	18.01	-4.47	191169.520	1.5	214911.300	2.5
421.0810	23.00	-1.30	18372.460	3.5	42114.170	3.5
421.0821	29.01	-4.19	113302.800	4.0	137044.450	4.0
421.0940	47.00	-.17	30327.228	0.0	54074.895	0.0
421.0960	18.01	-3.57	172335.520	2.5	196076.390	1.5
421.1000	8.04	-.20	653605.000	0.0	677352.328	0.0
421.1020	42.00	-.96	16615.449	0.0	40362.665	0.0
421.1037	24.01	-3.72	42986.730	1.5	66727.160	2.5
421.1062	10.01	-4.49	305408.510	.5	329148.800	1.5
421.1075	23.01	-4.80	49210.780	3.0	72951.000	4.0
421.1140	45.00	-.23	5646.026	0.0	29392.565	0.0
421.1153	14.02	-3.95	230267.700	2.0	254007.480	3.0
421.1222	24.00	-3.42	35618.510	1.0	59357.900	2.0
421.1248	23.00	-3.53	18438.070	4.5	42177.310	4.5
421.1272	22.00	-4.55	15220.390	5.0	38959.499	4.0
421.1290	60.01	-1.30	1613.150	0.0	25358.843	0.0
421.1316	14.02	-2.43	230268.620	3.0	254007.480	3.0
421.1319	25.02	-.37	192172.890	2.5	215911.730	1.5
421.1340	40.00	-.23	14599.011	0.0	38344.422	0.0
421.1364	24.00	-1.26	24897.550	4.0	48636.140	3.0
421.1382	23.00	-3.63	17242.050	5.5	40980.540	4.5
421.1509	26.00	-4.28	34782.406	5.0	58520.180	4.0
421.1520	24.00	-2.01	24056.110	5.0	47793.820	5.0
421.1522	23.00	-1.76	17181.980	4.5	40919.660	5.5
421.1549	20.02	-1.02	347383.510	4.0	371121.060	5.0
421.1550	24.00	-2.33	31364.330	3.0	55101.870	3.0
421.1614	20.02	-.08	347383.510	4.0	371120.690	4.0
421.1671	22.00	-3.43	25102.880	2.0	48839.740	3.0
421.1678	14.02	-1.35	230270.660	4.0	254007.480	3.0
421.1701	26.01	-3.85	61726.090	3.5	85462.780	3.5
421.1717	25.02	-2.93	124823.900	4.5	148560.500	4.5
421.1739	22.00	-1.17	20062.980	1.0	43799.455	2.0
421.1742	25.00	-.63	34423.270	3.5	58159.730	2.5
421.1771	14.02	-2.41	230267.700	2.0	254004.000	2.0
421.1800	26.01	-5.04	21308.080	1.5	45044.210	1.5
421.1829	29.01	-1.00	121078.960	3.0	144814.930	3.0
421.1860	76.00	1.30	23310.023	0.0	47052.503	0.0
421.1875	26.02	-2.73	182444.700	3.0	206180.410	3.0
421.1880	40.01	-1.21	4194.191	0.0	27936.558	0.0
421.1914	24.00	-4.76	27300.190	1.0	51035.680	2.0
421.1928	26.02	-2.82	199595.300	3.0	223330.710	3.0
421.1933	14.02	-1.53	230268.620	3.0	254004.000	2.0
421.1940	25.00	-.29	38008.700	5.5	61744.040	5.5
421.1953	24.00	-4.63	38911.330	3.0	62646.600	2.0
421.2000	64.01	-.46	3387.616	0.0	27129.306	0.0
421.2040	41.00	-.30	12905.203	0.0	36646.668	0.0
421.2055	26.00	-3.69	27559.568	2.0	51294.262	3.0
421.2060	44.00	.27	6452.602	0.0	30193.954	0.0
421.2125	14.02	-1.68	230267.700	2.0	254002.000	1.0
421.2143	27.02	-3.26	83773.400	1.5	107507.600	.5
421.2160	25.02	-.82	194971.150	2.5	218705.250	2.5
421.2176	25.00	-3.02	37737.220	3.5	61471.230	2.5
421.2203	23.00	-2.90	15688.800	2.5	39422.660	2.5
421.2231	28.01	-1.48	107082.210	2.5	130815.910	3.5
421.2260	92.01	-1.44	4355.506	0.0	28095.731	0.0
421.2329	21.00	-.49	16021.780	1.5	39754.930	2.5
421.2338	25.01	-2.71	81322.330	1.0	105055.430	2.0
421.2350	29.01	-3.39	115662.770	4.0	139395.800	4.0
421.2365	28.01	-4.67	116275.810	3.5	140008.760	3.5
421.2396	14.03	.38	291497.500	1.5	315230.270	2.5
421.2414	14.03	.54	291497.600	2.5	315230.270	3.5
421.2414	14.03	-.76	291497.600	2.5	315230.270	2.5
421.2420	25.00	-3.10	23719.520	1.5	47452.160	.5
421.2432	26.02	-3.58	199595.300	3.0	223327.870	2.0
421.2476	22.00	-3.98	25107.417	2.0	48839.740	3.0
421.2496	21.00	-.08	16022.720	2.5	39754.930	2.5
421.2523	24.00	-2.70	24282.340	4.0	48014.400	4.0
421.2530	41.00	-.56	10808.108	0.0	34546.811	0.0
421.2579	18.02	-2.27	243145.760	2.0	266877.500	3.0
421.2588	21.00	-5.82	14926.240	2.5	38657.930	2.5
421.2611	9.01	-.17	264952.690	2.0	288684.250	2.0
421.2620	40.00	-.70	10808.108	0.0	34546.304	0.0
421.2629	26.02	-3.96	199595.300	3.0	223326.760	4.0
421.2682	25.00	-4.60	34343.900	4.5	58075.060	5.5
421.2707	26.01	-4.68	75600.930	3.5	99331.950	4.5
421.2728	30.02	-1.96	238205.500	1.0	261936.400	1.0
421.2790	69.01	-1.96	8711.012	0.0	32448.250	0.0
421.2799	27.02	-3.59	83799.600	2.5	107530.100	3.5
421.2807	28.01	-4.50	114052.040	3.5	137782.500	4.5
421.2826	25.01	-2.68	62572.200	2.0	86302.550	3.0
421.2834	28.00	-2.08	31031.042	3.0	54761.346	4.0
421.2910	25.00	-3.99	27201.540	2.5	50931.420	2.5
421.2950	46.00	-.45	11614.683	0.0	35351.020	0.0
421.3020	39.00	-.11	16131.504	0.0	39867.446	0.0
421.3023	26.02	-3.10	114325.350	5.0	138054.590	5.0
421.3040	58.01	-1.08	5404.054	0.0	29139.884	0.0
421.3050	62.01	-1.80	3871.561	0.0	27607.334	0.0
421.3053	24.00	-4.47	40982.970	2.0	64712.040	3.0
421.3070	90.00	-1.57	2500.383	0.0	26236.044	0.0
421.3131	20.02	-.02	323003.560	1.0	346732.190	1.0
421.3140	23.00	-2.97	15571.900	2.5	39300.480	2.5
421.3183	26.01	-3.95	60956.820	3.5	84685.160	3.5
421.3190	24.00	-4.22	24833.860	3.0	48562.160	4.0
421.3260	41.00	-.39	12179.286	0.0	35913.876	0.0
421.3270	75.00	.01	27020.269	0.0	50754.803	0.0
421.3323	24.00	-2.47	31009.000	3.0	54736.550	4.0
421.3334	26.02	-4.07	89907.850	4.0	113635.340	4.0
421.3334	26.02	-4.62	89907.850	5.0	113635.340	4.0
421.3355	24.00	-2.40	27223.050	2.0	50950.420	3.0
421.3368	27.01	-5.00	24267.800	1.0	47995.100	0.0
421.3380	25.00	-2.95	37184.250	6.5	60891.480	6.5
421.3407	24.00	-1.00	37233.500	5.0	60960.580	4.0
421.3417	23.00	-4.60	10892.500	3.5	34619.520	2.5
421.3426	26.00	-3.64	21999.132	4.0	45726.104	5.0
421.3460	41.00	-.19	16696.107	0.0	40429.571	0.0
421.3480	23.00	-1.41	18438.070	4.5	42164.740	3.5
421.3538	16.01	-1.49	128233.070	2.5	151959.410	1.5
421.3540	39.00	-.56	14840.984	0.0	38573.997	0.0
421.3552	26.01	-3.38	62689.960	2.5	86416.220	3.5
421.3565	25.02	.08	193235.430	2.5	216961.620	3.5
421.3606	9.01	-1.13	264958.290	3.0	288684.250	2.0
421.3638	24.00	-2.63	20520.920	3.0	44246.700	4.0
421.3649	26.00	-1.04	22946.810	1.0	46672.523	0.0
421.3652	23.03	-1.88	264401.900	4.0	288127.600	4.0
421.3776	17.01	-1.78	158723.700	1.0	182448.700	2.0
421.3860	40.00	-.72	4839.451	0.0	28570.662	0.0
421.3860	76.00	.45	24842.516	0.0	48573.727	0.0
421.3863	28.01	-3.87	114052.040	3.5	137776.550	3.5
421.3931	24.00	-4.42	35396.020	4.0	59122.150	3.0
421.3960	59.01	-2.03	1693.808	0.0	25424.456	0.0
421.3968	24.01	-4.57	39877.280	3.5	63601.200	3.5
421.3970	24.00	-2.49	31377.960	4.0	55101.870	3.0
421.4040	58.01	-.58	4839.451	0.0	28569.648	0.0
421.4044	24.01	-3.58	59130.510	1.5	82854.000	.5
421.4092	25.00	-1.87	38669.600	3.5	62392.820	4.5
421.4105	26.02	-2.61	199603.610	4.0	223326.760	4.0
421.4130	24.00	-3.42	20523.690	4.0	44246.700	4.0
421.4174	24.00	-5.00	20523.940	5.0	44246.700	4.0
421.4256	25.00	-4.17	44993.920	3.5	68716.220	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
421.4353	26.00	-2.65	21038.987	2.0	44760.739	1.0
421.4420	92.01	-2.17	241.973	0.0	23970.030	0.0
421.4440	44.00	.28	13550.463	0.0	37278.408	0.0
421.4444	24.00	-2.50	24093.160	2.0	47814.400	3.0
421.4455	28.01	-4.76	75721.680	5.5	99442.860	4.5
421.4486	26.00	-3.91	19912.486	2.0	43633.491	2.0
421.4556	26.01	-4.33	60807.280	4.5	84527.890	4.5
421.4560	23.00	-4.87	22313.990	5.5	46034.580	5.5
421.4627	21.00	-2.83	16141.040	2.5	39861.250	2.5
421.4634	27.00	-3.12	23152.570	3.5	46872.740	3.5
421.4653	28.00	-4.69	30979.789	4.0	54699.652	3.0
421.4668	28.01	-4.74	92792.080	3.5	116512.060	3.5
421.4693	28.01	-.51	104147.290	5.5	127867.130	4.5
421.4730	41.00	-1.16	967.890	0.0	24694.202	0.0
421.4795	7.00	-2.10	83317.800	1.5	107037.069	2.5
421.4818	26.00	-1.81	32873.623	4.0	56592.760	4.0
421.4839	9.01	-1.96	246654.740	0.0	270373.760	1.0
421.4853	18.01	-.81	186815.960	3.5	210534.900	4.5
421.4966	27.02	-3.23	83789.300	.5	107507.600	.5
421.5020	64.01	-.58	3387.616	0.0	27112.296	0.0
421.5160	76.00	-.94	13953.751	0.0	37677.643	0.0
421.5198	20.02	-1.58	347344.370	5.0	371061.370	4.0
421.5249	24.01	-4.43	53271.070	2.5	76987.780	2.5
421.5302	24.00	-1.96	37244.170	4.0	60960.580	4.0
421.5357	30.02	-4.00	238205.500	1.0	261921.600	2.0
421.5380	74.00	-.31	19438.462	0.0	43161.116	0.0
421.5421	26.01	-4.16	61332.820	1.5	85048.560	1.5
421.5426	26.00	-3.13	24118.815	4.0	47834.529	5.0
421.5462	26.00	-4.10	22249.430	3.0	45964.944	2.0
421.5471	22.00	-2.80	14028.470	2.0	37743.933	3.0
421.5474	26.00	-3.46	24118.815	4.0	47834.260	3.0
421.5504	9.01	.67	264958.290	3.0	288673.570	4.0
421.5518	22.00	-3.95	17540.205	3.0	41255.400	4.0
421.5519	38.01	-.14	0.000	0.0	23721.871	0.0
421.5539	37.00	-1.88	0.000	0.0	23721.759	0.0
421.5544	25.01	-2.21	62587.500	3.0	86302.550	3.0
421.5617	26.02	-3.70	114339.950	4.0	138054.590	5.0
421.5701	23.01	-4.04	13490.840	2.0	37205.010	3.0
421.5743	24.00	-2.61	27176.220	1.0	50890.150	2.0
421.5743	24.01	-3.41	25035.640	.5	48749.570	.5
421.5809	28.01	-2.77	94729.250	2.5	118442.810	1.5
421.5823	18.01	-3.24	185624.730	3.5	209338.210	3.5
421.5834	25.00	-4.19	34423.270	3.5	58136.690	3.5
421.5869	24.01	-3.45	67012.280	2.5	90725.500	3.5
421.5883	18.01	-2.61	185624.730	3.5	209337.870	4.5
421.5963	9.02	-4.62	444056.420	.5	467769.110	.5
421.5971	26.00	-2.36	21715.735	5.0	45428.385	4.0
421.6075	9.01	.59	264952.690	2.0	288664.750	3.0
421.6086	21.00	-.63	16009.710	.5	39721.710	1.5
421.6087	7.00	-2.20	83284.040	.5	106996.032	1.5
421.6113	56.01	-1.21	49390.050	0.0	73108.579	0.0
421.6130	9.01	-1.48	246662.010	1.0	270373.760	1.0
421.6143	26.00	-1.81	37046.000	4.0	60757.680	4.0
421.6145	9.02	-3.95	444057.440	1.5	467769.110	.5
421.6185	26.00	-3.44	0.000	4.0	23711.443	4.0
421.6222	26.00	-4.75	19788.248	4.0	43499.485	4.0
421.6239	18.01	-3.05	186815.960	3.5	210527.100	2.5
421.6248	22.00	-2.56	19322.988	2.0	43034.080	1.0
421.6283	9.01	-2.14	264952.690	2.0	288663.580	2.0
421.6350	23.00	-4.51	2311.370	3.5	26021.890	3.5
421.6358	23.01	-3.91	49568.450	3.0	73278.920	4.0
421.6360	24.00	-.82	24303.940	3.0	48014.400	4.0
421.6374	23.00	-2.45	2220.130	2.5	25930.510	1.5
421.6440	18.01	-3.74	185093.230	4.5	208803.240	4.5
421.6440	18.01	-2.01	185093.230	4.5	208803.240	5.5
421.6587	28.00	-3.35	33112.368	3.0	56821.553	3.0
421.6616	28.01	-4.69	105588.890	4.5	129297.910	3.5
421.6671	26.00	-2.28	37046.000	4.0	60754.710	4.0
421.6785	24.00	-4.16	41043.350	3.0	64751.420	4.0
421.6792	16.01	-4.46	109560.500	.5	133268.530	.5
421.6817	9.01	-3.24	264965.680	4.0	288673.570	4.0
421.6835	9.01	-.69	264965.680	4.0	288673.470	5.0
421.6839	29.01	-1.82	122867.530	1.0	146575.300	2.0
421.6947	25.02	-1.78	192576.420	2.5	216283.580	3.5
421.7047	27.01	-4.99	40694.900	4.0	64401.500	4.0
421.7056	28.01	-3.86	112686.300	2.5	136392.850	3.5
421.7063	23.01	-4.70	49201.660	2.0	72908.170	3.0
421.7066	10.01	-1.23	279137.620	3.5	302844.110	2.5
421.7070	24.01	-3.81	25043.100	1.5	48749.570	.5
421.7071	9.01	-1.52	264958.290	3.0	288664.750	3.0
421.7169	10.01	.09	279137.620	3.5	302843.530	3.5
421.7185	25.00	-1.19	38008.700	5.5	61714.520	4.5
421.7196	26.02	-3.14	199603.610	4.0	223309.370	5.0
421.7200	64.01	-.53	5242.739	0.0	28955.155	0.0
421.7225	16.01	-.33	128599.110	3.5	152304.710	3.5
421.7270	44.00	-.51	6452.602	0.0	30164.624	0.0
421.7280	9.01	-1.56	264958.290	3.0	288663.580	2.0
421.7280	60.01	-1.73	2984.328	0.0	26696.294	0.0
421.7331	22.01	-3.78	16625.250	1.5	40330.250	.5
421.7385	13.01	-2.58	121480.300	3.0	145185.000	2.0
421.7477	24.01	-3.68	53566.220	3.5	77270.400	4.5
421.7481	25.02	-.52	195112.810	3.5	218816.970	2.5
421.7491	13.01	-2.94	121480.900	2.0	145185.000	1.0
421.7491	13.01	-3.33	121480.900	2.0	145185.000	2.0
421.7536	26.00	-.20	27666.334	1.0	51370.184	2.0
421.7545	13.01	-3.42	121481.200	1.0	145185.000	1.0
421.7545	13.01	-3.20	121481.200	1.0	145185.000	0.0
421.7545	13.01	-4.51	121481.200	1.0	145185.000	2.0
421.7560	57.01	-.01	15566.901	0.0	39277.293	0.0
421.7573	20.02	-4.42	347417.050	3.0	371120.690	4.0
421.7590	58.01	-.21	8469.040	0.0	32179.263	0.0
421.7598	11.02	-4.83	444825.000	2.5	468528.500	1.5
421.7612	24.00	-.78	24282.340	4.0	47985.760	5.0
421.7677	23.00	-3.28	9824.580	2.5	33527.640	2.5
421.7716	25.02	-1.99	192172.890	2.5	215875.730	2.5
421.7726	25.02	.53	192989.050	5.5	216691.830	5.5
421.7748	25.02	-.34	192012.750	1.5	215715.410	1.5
421.7760	77.00	-1.14	15970.189	0.0	39679.456	0.0
421.7775	28.00	-1.46	28569.210	2.0	52271.716	2.0
421.7800	39.00	-.51	10404.820	0.0	34113.863	0.0
421.7895	28.01	-3.77	114052.040	3.5	137753.870	4.5
421.7911	24.00	-2.91	32097.360	6.0	55799.100	7.0
421.7940	41.00	-1.12	645.260	0.0	24353.516	0.0
421.7960	24.00	-3.72	29824.750	3.0	53526.220	4.0
421.7975	28.00	-3.73	31031.042	3.0	54732.425	2.0
421.7990	9.01	-1.97	264952.690	2.0	288653.990	3.0
421.8006	27.00	-3.53	20500.710	1.5	44201.920	2.5
421.8061	23.00	-2.95	14910.040	3.5	38610.940	3.5
421.8122	26.00	-6.07	7985.783	2.0	31686.342	2.0
421.8125	25.02	-3.71	121117.140	3.5	144817.680	3.5
421.8148	23.01	-4.25	49593.410	5.0	73293.620	5.0
421.8177	22.01	-4.52	8997.690	3.5	32697.940	2.5
421.8190	90.01	-1.32	11614.683	0.0	35321.534	0.0
421.8200	26.00	-3.94	19621.004	5.0	43321.120	6.0
421.8234	21.00	-.41	16021.780	1.5	39721.710	1.5
421.8271	24.00	-3.83	29584.620	2.0	53284.340	3.0
421.8276	26.02	-4.68	182480.720	2.0	206180.410	3.0
421.8328	24.00	-1.40	31987.060	4.0	55686.460	5.0
421.8341	8.02	-2.29	267257.290	0.0	290956.620	1.0
421.8353	15.01	-.86	103668.740	3.0	127368.000	2.0
421.8380	25.01	-2.32	55759.270	3.0	79458.380	2.0
421.8401	21.00	-.52	16022.720	2.5	39721.710	1.5
421.8450	40.00	-1.21	5000.766	0.0	28706.155	0.0
421.8499	23.00	-1.57	15724.220	3.5	39422.660	2.5
421.8517	25.01	-3.13	81322.330	1.0	105020.670	1.0
421.8540	90.01	-1.46	10485.478	0.0	34190.362	0.0
421.8558	25.02	-.79	194971.150	2.5	218669.260	1.5
421.8560	70.01	.02	37344.432	0.0	61049.203	0.0
421.8560	74.00	-.77	18147.942	0.0	41852.713	0.0
421.8650	23.00	-2.43	18372.460	3.5	42070.050	2.5
421.8663	26.02	-4.86	89907.850	4.0	113605.370	3.0
421.8666	18.01	-.50	159393.310	1.5	183090.810	1.5
421.8679	9.01	-.19	264958.290	3.0	288655.720	4.0
421.8684	24.00	-1.98	27703.840	4.0	51401.240	5.0
421.8686	23.01	-3.80	49210.780	3.0	72908.170	3.0
421.8714	23.00	-3.08	13801.530	1.5	37498.760	2.5
421.8728	23.00	-1.30	2424.890	4.5	26122.040	3.5
421.8769	23.00	-4.30	14548.830	2.5	38245.750	3.5
421.8796	28.01	-3.26	94067.140	1.5	117763.910	1.5
421.8825	25.02	-1.21	192365.520	1.5	216062.130	2.5
421.8855	7.00	-2.93	83284.040	.5	106980.480	.5
421.8869	25.00	-2.64	34463.370	1.5	58159.730	2.5
421.8987	9.01	-.02	264958.290	3.0	288653.990	3.0
421.8990	26.01	-3.79	60989.480	4.5	84685.160	3.5
421.9017	24.00	-2.70	24940.610	2.0	48636.140	3.0
421.9028	20.02	-2.42	359156.830	1.0	382852.300	2.0
421.9079	24.00	-3.55	29584.620	2.0	53279.800	2.0
421.9103	26.00	-3.78	27166.804	4.0	50861.850	3.0
421.9109	26.02	-4.54	199139.760	5.0	222834.770	6.0
421.9165	23.00	-2.39	15571.900	2.5	39266.600	1.5
421.9302	18.01	-3.81	186890.950	2.5	210584.880	1.5
421.9310	62.00	-1.17	241.973	0.0	23942.531	0.0
421.9348	28.00	-1.59	28578.046	3.0	52271.716	2.0
421.9364	26.00	-.13	28819.966	5.0	52513.546	6.0
421.9370	10.01	-.49	279137.620	3.5	302831.170	3.5
421.9380	74.00	-1.58	6129.972	0.0	29830.136	0.0
421.9400	42.00	-.85	18389.915	0.0	42089.967	0.0
421.9409	28.01	-.78	104298.230	4.5	127991.560	3.5
421.9416	26.00	-2.78	24118.815	4.0	47812.104	4.0
421.9430	28.01	-3.82	110021.920	4.5	133715.130	4.5
421.9476	23.01	-3.44	49723.680	4.0	73416.630	5.0
421.9478	24.00	-3.38	24093.160	2.0	47786.100	2.0
421.9485	25.01	-4.38	48317.850	4.0	72010.750	4.0
421.9494	23.00	-1.60	2311.370	3.5	26004.220	2.5
421.9556	26.00	-4.74	31686.342	2.0	55378.842	2.0
421.9583	26.00	-2.12	28604.610	2.0	52296.960	2.0
421.9596	29.01	-3.36	115639.020	2.0	139331.300	3.0
421.9612	24.00	-3.13	24282.340	4.0	47974.530	3.0
421.9706	9.01	-1.26	246682.100	2.0	270373.760	1.0
421.9719	21.00	-.62	16009.710	.5	39701.300	.5
421.9745	10.01	.75	279137.620	3.5	302829.060	4.5
421.9760	22.01	-1.45	39476.870	2.5	63168.230	2.5
421.9882	25.00	-2.43	37789.930	2.5	61480.600	3.5
421.9994	9.01	-2.88	264965.680	4.0	288655.720	4.0
421.9996	25.00	-3.67	41230.300	3.5	64920.330	3.5
422.0042	26.00	-1.70	31686.342	2.0	55376.117	1.0
422.0055	23.01	-2.33	13511.710	1.0	37201.410	0.0
422.0071	20.01	-1.33	60611.280	1.5	84300.890	.5
422.0116	26.02	-.17	205732.370	3.0	229421.730	4.0
422.0140	62.01	-1.62	3468.273	0.0	27164.169	0.0
422.0214	26.02	-3.61	158729.890	3.0	182418.700	4.0
422.0219	20.02	-1.93	323003.560	1.0	346692.340	0.0
422.0250	60.01	-1.40	2500.383	0.0	26195.662	0.0
422.0267	27.00	-2.47	23184.230	2.5	46872.740	3.5
422.0296	25.01	-3.75	82830.750	4.0	106519.100	5.0
422.0303	9.01	-.89	264965.680	4.0	288653.990	3.0
422.0317	10.01	-3.20	281720.280	1.5	305408.510	.5
422.0329	9.01	-3.66	264952.690	2.0	288640.850	1.0
422.0340	26.00	-1.26	24772.019	1.0	48460.120	0.0
422.0384	22.00	-1.36	25227.217	3.0	48915.070	2.0
422.0435	27.00	-3.48	27497.060	2.5	51184.630	3.5
422.0463	24.00	-1.85	23933.900	4.0	47621.310	3.0
422.0542	25.00	-4.58	34423.270	3.5	58110.240	4.5
422.0595	25.00	-.39	33825.490	2.5	57512.160	1.5
422.0630	39.00	.28	14840.984	0.0	38534.129	0.0
422.0650	40.00	-1.72	5000.766	0.0	28693.799	0.0
422.0660	62.01	-.89	4355.506	0.0	28048.483	0.0
422.0680	44.00	.01	13873.093	0.0	37565.958	0.0
422.0800	77.00	-.30	26213.694	0.0	49905.885	0.0
422.0894	10.01	-.06	279218.660	2.5	302903.650	2.5
422.1073	27.00	-1.47	30742.650	.5	54426.640	1.5
422.1080	75.00	-.80	11534.025	0.0	35224.644	0.0
422.1087	10.01	-.74	279218.660	2.5	302902.570	1.5
422.1174	25.00	-3.48	27248.000	1.5	50931.420	2.5
422.1240	28.01	-2.07	107082.210	2.5	130765.260	3.5
422.1279	27.00	-2.01	28777.270	3.5	52460.100	2.5
422.1279	28.01	-.62	105588.890	4.5	129271.720	3.5
422.1292	26.02	-3.78	158729.890	3.0	182412.650	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
422.1338	24.00	-3.05	33040.100	2.0	56722.600	1.0
422.1397	26.01	-2.99	49506.990	1.5	73189.160	1.5
422.1440	9.01	-2.05	264952.690	2.0	288634.620	3.0
422.1458	29.01	-2.54	122745.770	2.0	146427.600	1.0
422.1502	25.02	-.44	192741.670	.5	216423.250	.5
422.1511	25.02	-.08	192989.050	5.5	216670.580	4.5
422.1538	9.01	-.89	264952.690	2.0	288634.070	2.0
422.1552	25.00	-.93	37789.930	2.5	61471.230	2.5
422.1566	24.00	-4.71	24833.860	3.0	48515.080	3.0
422.1570	24.00	-.14	31055.350	5.0	54736.550	4.0
422.1682	28.00	-2.08	26665.903	3.0	50346.477	2.0
422.1700	26.01	-3.70	49506.990	1.5	73187.460	.5
422.1700	8.01	-1.30	232462.830	2.5	256143.300	3.5
422.1766	17.01	-.63	158768.600	2.0	182448.700	2.0
422.1789	28.00	-3.38	30979.789	4.0	54659.759	5.0
422.1802	19.02	-2.53	214232.300	.5	237912.200	1.5
422.1818	26.02	-4.85	93388.750	4.0	117068.560	3.0
422.1869	21.00	-.65	16021.780	1.5	39701.300	.5
422.1937	24.00	-4.88	24093.160	2.0	47772.300	1.0
422.1959	26.02	-4.40	158729.890	3.0	182408.910	3.0
422.1994	24.01	-2.20	45669.540	1.5	69348.360	1.5
422.2060	74.00	-.86	15002.299	0.0	38687.420	0.0
422.2073	9.01	-1.96	264952.690	2.0	288631.070	1.0
422.2080	10.01	-3.18	281720.280	1.5	305398.620	1.5
422.2087	15.02	.21	117834.500	.5	141512.800	1.5
422.2099	7.00	-2.70	83317.800	1.5	106996.032	1.5
422.2166	20.02	-1.83	347383.510	4.0	371061.370	4.0
422.2178	20.02	-1.55	347383.510	4.0	371061.300	3.0
422.2196	25.01	-3.94	48333.060	5.0	72010.750	4.0
422.2206	23.00	-1.74	17242.050	5.5	40919.680	5.5
422.2218	26.00	-1.04	19757.020	3.0	43434.585	3.0
422.2246	27.00	-2.25	25041.160	1.5	48718.570	2.5
422.2266	9.02	-3.69	445006.130	2.5	468683.430	2.5
422.2267	25.01	-3.99	81236.890	1.0	104914.180	0.0
422.2271	26.02	.26	168329.670	3.0	192006.940	2.0
422.2275	22.00	-4.04	11776.806	4.0	35454.051	4.0
422.2280	25.02	-1.21	192880.160	3.5	216557.380	3.5
422.2299	23.02	-.80	160321.890	2.5	183999.000	3.5
422.2319	23.00	-.29	15571.900	2.5	39248.900	1.5
422.2347	26.00	-3.73	20874.482	3.0	44551.325	3.0
422.2358	9.02	-3.21	445006.130	2.5	468682.910	3.5
422.2360	92.00	-.22	3710.246	0.0	27393.684	0.0
422.2363	28.01	-4.66	76402.030	2.5	100078.780	1.5
422.2401	28.01	-2.64	108548.610	1.5	132225.150	1.5
422.2410	42.00	-.91	18389.915	0.0	42073.072	0.0
422.2421	9.01	-1.90	264952.690	2.0	288629.120	3.0
422.2439	9.01	-.78	264958.290	3.0	288634.620	3.0
422.2478	26.02	-4.24	93392.450	3.0	117068.560	3.0
422.2479	27.00	-3.02	29294.520	3.5	52970.620	2.5
422.2479	23.00	-4.00	18438.070	4.5	42114.170	3.5
422.2517	9.01	-1.97	264952.690	2.0	288628.580	2.0
422.2537	9.01	-1.58	264958.290	3.0	288634.070	2.0
422.2574	23.00	-1.40	18805.050	.5	42480.620	.5
422.2600	58.01	-.44	967.890	0.0	24649.982	0.0
422.2629	21.00	-5.32	14926.240	2.5	38601.500	1.5
422.2638	18.01	-.52	160239.350	1.5	183914.560	.5
422.2670	69.00	-.28	8711.012	0.0	32392.711	0.0
422.2680	41.00	-1.11	9275.615	0.0	32957.258	0.0
422.2740	24.00	-1.50	24299.890	2.0	47974.530	3.0
422.2774	26.02	-4.44	199634.920	6.0	223309.370	5.0
422.2857	24.00	-1.84	35813.730	3.0	59487.710	4.0
422.2926	18.01	-3.51	190511.190	2.5	214184.790	3.5
422.2979	23.00	-.39	18680.120	5.5	42353.420	6.5
422.2979	19.01	-.24	166461.500	1.0	190134.800	1.0
422.2980	59.01	-.36	403.288	0.0	24083.249	0.0
422.3014	28.01	-2.86	112719.750	3.5	136392.850	3.5
422.3015	9.01	-.96	264965.680	4.0	288638.780	5.0
422.3020	64.01	-.04	18873.860	0.0	42553.596	0.0
422.3029	22.00	-4.23	13981.750	1.0	37654.770	2.0
422.3126	7.00	-1.75	83364.590	2.5	107037.069	2.5
422.3200	9.01	-2.80	264958.290	3.0	288630.350	4.0
422.3232	25.01	-4.65	44745.460	2.0	68417.340	2.0
422.3277	24.00	-2.48	39158.630	4.0	62830.260	5.0
422.3348	26.01	-4.04	60625.470	5.5	84296.700	5.5
422.3419	9.01	-1.31	264958.290	3.0	288629.120	3.0
422.3462	24.00	-3.39	24303.940	3.0	47974.530	3.0
422.3515	9.01	-1.89	264958.290	3.0	288628.580	2.0
422.3580	29.01	-3.11	122745.770	2.0	146415.700	2.0
422.3580	25.02	-2.31	192392.200	3.5	216062.130	2.5
422.3598	25.01	-3.57	43339.100	2.0	67008.930	3.0
422.3700	62.01	-1.80	2661.698	0.0	26337.622	0.0
422.3731	26.00	-4.66	23783.617	5.0	47452.702	4.0
422.3738	9.01	-1.18	264958.290	3.0	288627.330	4.0
422.3756	9.01	-.79	264965.680	4.0	288634.620	3.0
422.3767	26.01	-4.89	61041.780	2.5	84710.660	3.5
422.3773	27.00	-2.18	23855.620	4.5	47524.470	4.5
422.3775	28.01	-2.65	68131.210	3.5	91800.050	4.5
422.3780	28.00	-2.70	31031.042	3.0	54699.852	3.0
422.3801	24.00	-4.91	41043.350	3.0	64712.040	3.0
422.3826	25.02	-.31	195308.790	4.5	218977.340	3.5
422.3830	29.01	-3.44	115662.770	4.0	139331.300	3.0
422.3880	58.01	-1.17	4194.191	0.0	27869.106	0.0
422.3907	28.01	-1.74	103663.500	1.5	127331.600	2.5
422.4010	28.01	-6.42	29070.930	1.5	52738.450	2.5
422.4085	24.00	-3.23	27223.050	2.0	50890.150	2.0
422.4089	24.01	-4.09	31117.590	2.5	54784.670	3.5
422.4139	23.00	-.45	15724.220	3.5	39391.020	4.5
422.4160	26.00	-3.20	27166.804	4.0	50833.485	5.0
422.4187	9.02	-3.01	442636.270	3.5	466302.800	3.5
422.4230	62.01	-2.16	3468.273	0.0	27141.226	0.0
422.4250	90.01	-2.57	1451.835	0.0	25124.676	0.0
422.4270	64.00	-.48	7420.492	0.0	31093.221	0.0
422.4296	26.02	-4.18	199660.840	5.0	223326.760	4.0
422.4324	25.00	-1.34	38120.180	4.5	61785.940	3.5
422.4336	9.02	-3.09	442636.270	3.5	466301.960	2.5
422.4381	25.02	-.07	191915.430	.5	215580.870	.5
422.4419	23.01	-3.92	23391.090	5.0	47056.320	4.0
422.4428	28.01	-1.31	105838.060	3.5	129503.240	4.5
422.4472	10.01	-.86	279324.890	1.5	302989.820	1.5
422.4503	26.00	-4.12	27666.334	1.0	51331.090	2.0
422.4505	24.00	.20	37205.880	3.0	60870.630	4.0
422.4515	23.01	-2.47	13594.730	2.0	37259.420	1.0
422.4519	9.01	-.86	264965.680	4.0	288630.350	4.0
422.4530	24.00	-4.40	24897.550	4.0	48562.160	4.0
422.4531	15.01	-.89	107361.100	3.0	131025.700	4.0
422.4629	26.00	-2.77	22249.430	3.0	45913.480	3.0
422.4642	10.01	-.75	279324.890	1.5	302988.870	.5
422.4665	23.00	-1.37	18513.460	4.5	42177.310	4.5
422.4738	9.01	-2.03	264965.680	4.0	288629.120	3.0
422.4754	22.00	.35	22404.690	3.0	46068.040	4.0
422.4760	74.00	-.08	23793.968	0.0	47463.952	0.0
422.4821	24.01	-1.70	42986.730	1.5	66649.710	1.5
422.4822	27.00	-2.92	27497.060	2.5	51160.030	2.5
422.4822	8.01	-1.36	232462.830	2.5	256125.800	2.5
422.4874	7.00	-2.23	83317.800	1.5	106980.480	.5
422.4937	23.01	-3.36	13542.680	3.0	37205.010	3.0
422.4942	17.01	.04	158786.400	3.0	182448.700	2.0
422.5029	18.01	-1.75	186815.960	3.5	210477.770	3.5
422.5030	64.00	-.49	1693.808	0.0	25362.279	0.0
422.5031	28.00	-3.63	30912.838	1.0	54574.640	1.0
422.5058	9.01	.29	264965.680	4.0	288627.330	4.0
422.5060	23.00	-3.34	14949.300	4.5	38610.940	3.5
422.5069	25.00	-1.04	33825.490	2.5	57487.080	2.5
422.5074	25.02	-1.91	195315.780	2.5	218977.340	3.5
422.5083	25.00	-4.95	27201.540	2.5	50863.050	1.5
422.5090	44.00	.24	20083.723	0.0	43751.858	0.0
422.5150	64.01	-1.19	4758.794	0.0	28426.593	0.0
422.5176	9.01	.78	264965.680	4.0	288626.670	5.0
422.5229	23.01	-1.34	16340.970	3.0	40001.660	2.0
422.5238	29.01	-2.97	116080.460	3.0	139741.100	3.0
422.5303	23.02	-1.11	160576.620	3.5	184236.900	4.5
422.5304	8.01	-.90	232462.830	2.5	256123.100	3.5
422.5330	62.01	-1.10	1451.835	0.0	25118.626	0.0
422.5330	59.01	-.42	0.000	0.0	23666.791	0.0
422.5401	23.01	-4.05	30267.460	2.0	53927.190	3.0
422.5444	26.00	-.06	27559.568	2.0	51219.059	3.0
422.5460	40.00	-.59	12259.943	0.0	35926.005	0.0
422.5470	22.00	-2.27	19421.576	3.0	43080.920	2.0
422.5478	17.02	-3.49	217913.100	1.5	241572.400	1.5
422.5494	28.01	-4.59	114836.630	3.5	138495.840	4.5
422.5565	21.00	-2.95	16141.040	2.5	39799.850	3.5
422.5651	26.00	-2.58	27543.000	1.0	51201.330	2.0
422.5681	28.01	-2.91	99154.810	4.5	122812.970	3.5
422.5693	26.00	-2.53	34039.495	4.0	57697.590	4.0
422.5697	21.00	-2.86	16096.860	1.5	39754.930	2.5
422.5706	22.00	-3.48	19573.968	4.0	43231.990	4.0
422.5763	25.00	-1.73	41230.300	3.5	64888.000	4.5
422.5850	64.00	.69	1693.808	0.0	25357.686	0.0
422.5912	23.00	-2.23	9824.580	2.5	33481.450	3.5
422.5940	22.00	-2.44	15108.121	3.0	38764.832	3.0
422.5947	26.00	-1.11	24574.655	4.0	48231.330	5.0
422.6073	23.00	-1.64	13801.530	1.5	37457.500	1.5
422.6180	62.00	-.65	806.575	0.0	24468.605	0.0
422.6206	28.01	-3.81	114052.040	3.5	137707.260	3.5
422.6220	41.00	-.92	8307.725	0.0	31969.532	0.0
422.6223	18.01	-2.72	191012.350	1.5	214667.480	2.5
422.6305	28.01	-3.52	114052.040	3.5	137706.710	2.5
422.6312	9.02	-.17	442636.270	3.5	466290.900	4.5
422.6328	26.01	-4.41	62945.120	3.5	86599.660	2.5
422.6340	74.00	-.73	19115.832	0.0	42776.967	0.0
422.6397	28.00	-2.38	33112.368	3.0	56766.523	4.0
422.6426	26.00	-1.81	22946.810	1.0	46600.800	1.0
422.6426	17.00	-2.06	71958.363	2.5	95612.357	1.5
422.6530	76.00	-1.06	15082.956	0.0	38743.027	0.0
422.6570	32.00	-.08	16292.819	0.0	39952.666	0.0
422.6610	23.00	-.39	15688.800	2.5	39341.760	3.5
422.6611	18.01	-.85	172213.800	1.5	195866.760	1.5
422.6660	44.00	-.55	14921.641	0.0	38580.984	0.0
422.6696	24.00	-1.81	33934.880	3.0	57587.360	4.0
422.6728	20.00	.20	0.000	0.0	23652.304	1.0
422.6753	24.00	-1.09	23933.900	4.0	47586.060	5.0
422.6818	13.01	-.72	121480.300	3.0	145132.100	4.0
422.6911	23.00	-3.20	18513.460	4.5	42164.740	3.5
422.6920	74.00	-.80	17986.627	0.0	41644.515	0.0
422.6922	10.01	-3.26	280173.010	4.5	303824.230	3.5
422.6990	18.01	-.30	172213.800	1.5	195864.640	2.5
422.7059	21.00	-4.46	16210.800	3.5	39861.250	2.5
422.7140	64.01	-1.07	4758.794	0.0	28415.451	0.0
422.7163	26.01	-5.02	23317.600	2.5	46967.470	2.5
422.7164	28.01	-2.91	94729.250	2.5	118379.110	2.5
422.7309	24.01	-4.65	68305.730	1.5	91954.780	2.5
422.7330	92.01	-1.52	6210.629	0.0	29866.222	0.0
422.7341	22.01	-2.41	9118.150	4.5	32767.020	3.5
422.7389	17.01	-.67	158723.700	1.0	182372.300	1.0
422.7389	13.01	-2.15	121480.300	3.0	145128.900	3.0
422.7390	90.00	-1.00	7178.519	0.0	30833.777	0.0
422.7410	58.01	-1.05	5646.026	0.0	29301.172	0.0
422.7412	26.00	-3.73	27559.568	2.0	51208.040	1.0
422.7424	26.00	.34	26874.534	5.0	50524.940	6.0
422.7440	28.01	-1.65	107082.210	2.5	130730.530	2.5
422.7460	75.00	.84	18793.202	0.0	42446.068	0.0
422.7474	22.00	-2.80	25388.334	4.0	49036.460	4.0
422.7496	13.01	-1.25	121480.900	2.0	145126.900	3.0
422.7510	41.00	-1.10	9356.272	0.0	33010.858	0.0
422.7534	25.00	-4.37	23818.870	.5	47466.660	1.5
422.7730	60.01	-1.07	3710.246	0.0	27363.601	0.0
422.7736	7.01	-.06	174212.030	2.0	197858.690	1.0
422.7747	23.00	-.80	13810.900	.5	37457.500	1.5
422.7749	9.01	-.31	264994.260	0.0	288640.850	1.0
422.7750	58.01	-.17	5565.369	0.0	29216.612	0.0
422.7760	40.00	.09	5807.341	0.0	29460.529	0.0
422.7769	24.01	-4.32	40415.340	.5	64061.820	1.5
422.7781	23.00	-3.98	11100.650	4.5	34747.060	3.5
422.7809	18.02	-1.84	243424.970	3.0	267071.220	4.0
422.7818	13.01	-3.33	121480.300	3.0	145126.500	2.0
422.7926	13.01	-1.78	121480.900	2.0	145126.500	2.0
422.7957	26.00	-1.71	34328.733	3.0	57974.160	2.0
422.7979	13.01	-1.05	121481.200	1.0	145126.500	2.0

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WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
422.8030	60.01	-1.71	1613.150	0.0	25264.827	0.0
422.8080	72.00	-2.22	0.000	0.0	23651.397	0.0
422.8155	20.02	.87	347417.050	3.0	371061.370	4.0
422.8160	18.01	-.97	135085.920	1.5	158730.210	2.5
422.8167	20.02	-.56	347417.050	3.0	371061.300	3.0
422.8200	60.01	-1.44	3710.246	0.0	27360.972	0.0
422.8257	24.00	-1.51	32097.360	6.0	55741.110	6.0
422.8266	25.01	-2.98	62564.700	1.0	86208.400	1.0
422.8300	58.01	-.96	7017.204	0.0	30667.371	0.0
422.8326	6.00	-2.11	61981.820	1.0	85625.180	0.0
422.8610	73.00	-1.13	12179.286	0.0	35827.719	0.0
422.8638	28.01	-3.70	112906.930	1.5	136548.550	2.5
422.8661	25.02	.02	192665.800	4.5	216307.290	4.5
422.8704	26.00	-3.82	27166.804	4.0	50808.053	4.0
422.8738	26.01	-7.42	20805.830	4.5	44446.890	3.5
422.8836	24.00	-1.97	31352.420	1.0	54992.930	2.0
422.8872	27.00	-1.22	29216.370	2.5	52856.680	3.5
422.9006	23.01	-3.69	49268.610	4.0	72908.170	3.0
422.9046	23.01	-4.64	44098.460	3.0	67737.800	2.0
422.9086	22.00	-1.06	12118.394	4.0	35757.510	4.0
422.9150	41.00	-.05	9436.930	0.0	33082.343	0.0
422.9240	22.00	-4.00	14105.680	3.0	37743.933	3.0
422.9310	44.00	-.30	13873.093	0.0	37517.612	0.0
422.9335	24.00	-3.17	31355.210	2.0	54992.930	2.0
422.9393	26.01	-3.68	62962.260	1.5	86599.660	2.5
422.9408	26.00	-3.46	20874.482	3.0	44511.795	2.0
422.9409	23.00	-5.52	10892.500	3.5	34529.810	4.5
422.9441	24.00	-2.42	37233.500	5.0	60870.630	4.0
422.9485	28.00	-1.75	31031.042	3.0	54667.928	4.0
422.9498	9.01	-.34	264994.260	0.0	288631.070	1.0
422.9507	26.00	-2.02	26406.490	1.0	50043.250	1.0
422.9536	26.00	-3.78	23783.617	5.0	47420.215	5.0
422.9606	28.01	-1.38	105838.060	3.5	129474.270	3.5
422.9607	25.01	-3.74	62572.200	2.0	86208.400	1.0
422.9616	18.01	-2.61	186890.950	2.5	210527.100	2.5
422.9626	22.00	-.98	25388.334	4.0	49024.430	3.0
422.9691	23.00	-.56	15664.750	1.5	39300.480	2.5
422.9700	62.01	-1.39	322.630	0.0	23964.969	0.0
422.9756	26.00	-5.98	11976.239	4.0	35611.608	3.0
422.9800	64.01	-.06	12985.861	0.0	36627.641	0.0
422.9801	25.02	.01	194545.780	.5	218180.900	1.5
422.9806	24.01	-3.51	30864.610	2.5	54499.700	1.5
422.9830	41.00	-1.26	2742.356	0.0	26383.968	0.0
422.9944	27.00	-4.51	1406.840	2.5	25041.160	1.5
423.0016	22.00	-4.67	24694.895	4.0	48328.810	4.0
423.0120	58.01	-1.31	4113.534	0.0	27753.525	0.0
423.0128	25.00	-3.02	23818.870	.5	47452.160	.5
423.0200	45.00	-1.72	10243.505	0.0	33883.049	0.0
423.0234	15.01	-1.26	107361.100	3.0	130993.800	3.0
423.0287	24.00	-2.03	24056.110	5.0	47688.510	4.0
423.0310	44.00	-.49	8469.040	0.0	32107.970	0.0
423.0320	41.00	-.24	12179.286	0.0	35818.160	0.0
423.0375	28.00	-2.38	30619.440	2.0	54251.353	3.0
423.0386	29.01	-1.59	123304.630	1.0	146936.480	2.0
423.0459	7.00	-2.19	83364.590	2.5	106996.032	1.5
423.0468	24.00	-1.50	24286.540	1.0	47917.930	2.0
423.0497	26.00	-2.14	37046.000	4.0	60677.230	5.0
423.0578	24.00	-4.03	29584.620	2.0	53215.400	1.0
423.0730	62.00	-1.21	0.000	0.0	23636.583	0.0
423.0739	26.02	-2.58	199700.830	4.0	223330.710	3.0
423.0753	22.00	-4.68	17540.205	3.0	41170.003	3.0
423.0841	23.01	-4.86	49593.410	5.0	73222.720	4.0
423.0873	28.01	-4.03	105668.780	2.5	129297.910	3.5
423.0900	29.00	-1.57	43474.403	0.0	67110.036	0.0
423.0950	57.01	-.18	15647.559	0.0	39282.913	0.0
423.0968	24.00	-3.52	31364.330	3.0	54992.930	2.0
423.1003	23.03	-2.47	263593.000	2.0	287221.400	2.0
423.1027	28.00	.29	28569.210	2.0	52197.482	3.0
423.1039	16.01	-1.32	140708.510	2.5	164336.710	3.5
423.1110	26.00	-2.96	24338.766	3.0	47966.571	3.0
423.1156	25.01	-4.03	44138.960	1.0	67766.510	2.0
423.1183	23.01	-2.84	13741.610	3.0	37369.010	2.0
423.1302	18.01	-3.21	185624.730	3.5	209251.460	3.5
423.1351	24.00	-1.52	37244.170	4.0	60870.630	4.0
423.1380	22.00	-4.24	14028.470	2.0	37654.770	2.0
423.1396	26.02	-1.79	199139.760	5.0	222765.970	4.0
423.1446	26.02	-3.02	199700.830	4.0	223326.760	4.0
423.1482	28.01	-.88	105668.780	2.5	129294.510	2.5
423.1496	26.00	-4.66	26224.961	3.0	49850.610	3.0
423.1527	25.01	-2.83	62564.700	1.0	86190.180	2.0
423.1532	10.01	-.08	279218.660	2.5	302844.110	2.5
423.1599	26.00	-3.12	21038.987	2.0	44664.061	2.0
423.1630	40.01	-.72	14034.408	0.0	37665.964	0.0
423.1632	24.00	-1.09	35862.820	4.0	59487.710	4.0
423.1636	10.01	.26	279218.660	2.5	302843.530	3.5
423.1639	21.00	-2.64	16096.860	1.5	39721.710	1.5
423.1647	24.00	-3.09	24833.860	3.0	48458.670	2.0
423.1653	8.01	-1.59	232462.830	2.5	256087.600	2.5
423.1670	92.00	.04	7581.807	0.0	31213.139	0.0
423.1733	28.01	-3.76	112906.930	1.5	136531.260	1.5
423.1817	25.00	-1.60	38120.180	4.5	61744.040	5.5
423.1824	18.01	-4.09	185624.730	3.5	209248.550	2.5
423.1950	41.00	-1.55	322.630	0.0	23952.399	0.0
423.1990	70.00	-.75	17905.969	0.0	41535.514	0.0
423.2040	92.01	-2.26	241.973	0.0	23871.239	0.0
423.2053	18.01	-3.68	186815.960	3.5	210438.500	4.5
423.2059	23.01	-.82	32040.760	2.0	55663.270	1.0
423.2123	24.00	-3.67	33934.880	3.0	57557.030	3.0
423.2144	18.01	-2.80	186890.950	2.5	210512.980	1.5
423.2247	22.00	-4.23	25102.880	2.0	48724.340	2.0
423.2261	24.00	-4.81	33935.650	2.0	57557.030	3.0
423.2320	44.00	-1.02	8711.012	0.0	32338.715	0.0
423.2349	24.00	-2.95	35501.260	3.0	59122.150	3.0
423.2367	23.01	-2.36	30306.400	3.0	53927.190	3.0
423.2380	60.01	-1.02	483.945	0.0	24111.313	0.0
423.2388	24.01	-4.51	40228.440	5.5	63849.110	5.5
423.2388	8.01	-2.27	232462.830	2.5	256083.500	1.5
423.2440	72.01	-.09	18793.202	0.0	42420.235	0.0
423.2455	23.00	.38	15770.720	4.5	39391.020	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
423.2471	23.02	-1.97	161027.320	4.5	184647.530	5.5
423.2474	27.00	-1.64	21920.090	4.5	45540.280	5.5
423.2551	26.02	.12	199212.720	4.0	222832.480	5.0
423.2555	23.00	-6.15	14910.040	3.5	38529.780	4.5
423.2570	58.01	-.89	5726.684	0.0	29352.991	0.0
423.2590	42.00	.48	16615.449	0.0	40241.645	0.0
423.2609	28.00	-1.95	28578.046	3.0	52197.482	3.0
423.2623	23.02	-.26	160379.640	2.5	183999.000	3.5
423.2641	28.01	-4.90	89100.490	3.5	112719.750	3.5
423.2729	26.00	-4.96	888.132	1.0	24506.902	2.0
423.2756	29.01	-2.91	110365.980	2.0	133984.600	3.0
423.2770	28.01	-1.05	105861.190	2.5	129479.730	1.5
423.2781	24.00	-4.74	25206.020	3.0	48824.500	4.0
423.2860	24.00	-2.14	24299.890	2.0	47917.930	2.0
423.2870	25.01	-2.38	62572.200	2.0	86190.180	2.0
423.2906	25.02	-.71	192665.800	4.5	216283.580	3.5
423.2917	25.00	-3.13	41031.480	4.5	64649.200	3.5
423.2935	24.01	-3.61	45730.740	2.5	69348.360	1.5
423.2949	23.00	.19	15724.220	3.5	39341.760	3.5
423.2960	75.00	-1.32	17583.339	0.0	41207.470	0.0
423.2972	22.00	-2.00	25107.417	2.0	48724.830	1.0
423.3000	74.00	-.79	17986.627	0.0	41610.534	0.0
423.3014	24.00	-3.45	35870.530	4.0	59487.710	4.0
423.3060	22.00	-2.54	25107.417	2.0	48724.340	2.0
423.3112	26.01	-3.40	54870.620	2.5	78487.250	1.5
423.3127	29.01	-4.89	113302.800	4.0	136919.350	3.0
423.3159	26.01	-1.92	20830.520	2.5	44446.890	3.5
423.3213	24.01	-3.34	65709.530	5.5	89325.600	4.5
423.3234	21.00	-4.31	15041.980	3.5	38657.930	2.5
423.3245	24.01	-2.49	31168.780	3.5	54784.670	3.5
423.3274	28.01	-.69	106620.530	3.5	130236.260	2.5
423.3275	28.01	-4.13	105668.780	2.5	129284.500	2.5
423.3396	25.00	-3.74	27248.000	1.5	50863.050	1.5
423.3460	76.00	-.85	12905.203	0.0	36526.543	0.0
423.3490	42.00	-.18	23955.283	0.0	47576.456	0.0
423.3501	25.01	-2.91	46903.260	2.0	70517.720	3.0
423.3548	17.01	-.59	158723.700	1.0	182337.900	0.0
423.3571	26.01	-4.09	62065.570	3.5	85679.640	2.5
423.3586	24.00	-3.56	24303.940	3.0	47917.930	2.0
423.3604	21.00	-1.81	16141.040	2.5	39754.930	2.5
423.3612	26.00	-.68	20019.648	1.0	43633.491	2.0
423.3652	29.01	-4.12	117928.480	1.0	141542.100	2.0
423.3652	24.00	-2.25	37205.880	3.0	60819.500	3.0
423.3713	20.02	-.70	347344.370	5.0	370957.650	5.0
423.3715	27.00	-3.91	31699.690	4.5	55312.960	4.5
423.3736	20.02	1.11	347344.370	5.0	370957.520	6.0
423.3745	23.03	-2.22	263608.300	3.0	287221.400	2.0
423.3749	28.01	-1.27	105861.190	2.5	129474.270	3.5
423.3849	22.00	-2.50	25227.217	3.0	48839.740	3.0
423.3851	10.01	.19	279218.660	2.5	302831.170	3.5
423.3982	27.00	-3.51	0.000	4.5	23611.780	5.5
423.3991	23.00	-2.33	323.420	3.5	23935.150	2.5
423.4000	23.00	.02	15688.800	2.5	39300.480	2.5
423.4031	26.00	-1.52	28819.966	5.0	52431.470	6.0
423.4068	26.00	-2.78	34362.860	1.0	57974.160	2.0
423.4082	26.02	-4.53	199660.840	5.0	223272.060	6.0
423.4086	17.01	-.29	128621.900	1.0	152233.100	2.0
423.4190	60.01	-1.60	1451.835	0.0	25069.103	0.0
423.4192	26.02	-1.03	199212.720	4.0	222823.330	4.0
423.4210	58.01	-.86	4113.534	0.0	27730.690	0.0
423.4228	24.00	-4.67	29584.620	2.0	53195.030	2.0
423.4251	23.01	-2.31	13594.730	2.0	37205.010	3.0
423.4253	28.01	-4.41	112906.930	1.5	136517.200	.5
423.4350	74.00	-.23	19115.832	0.0	42732.208	0.0
423.4355	27.01	-5.60	27902.500	4.0	51512.200	3.0
423.4455	28.01	-2.71	107082.210	2.5	130691.350	1.5
423.4461	24.00	-1.66	35807.900	2.0	59417.010	3.0
423.4480	24.00	-3.24	25177.390	4.0	48786.390	5.0
423.4500	28.01	-4.08	94705.930	3.5	118314.820	2.5
423.4516	23.00	-2.83	0.000	1.5	23608.800	1.5
423.4553	26.00	-3.01	28604.610	2.0	52213.207	3.0
423.4559	23.01	-1.20	30318.630	4.0	53927.190	3.0
423.4563	26.02	-1.81	199700.830	4.0	223309.370	5.0
423.4570	62.01	-1.08	3468.273	0.0	27083.422	0.0
423.4630	40.00	-1.11	5000.766	0.0	28615.580	0.0
423.4652	22.00	-1.36	15156.787	4.0	38764.832	3.0
423.4680	23.01	-4.39	13542.680	3.0	37150.570	4.0
423.4730	58.01	-1.01	6533.259	0.0	30147.515	0.0
423.4760	68.00	-1.26	5323.396	0.0	28937.485	0.0
423.4770	9.02	-4.06	442694.580	1.5	466301.960	2.5
423.4834	24.01	-3.25	65029.670	.5	88636.700	1.5
423.5030	42.00	-.59	21051.613	0.0	44664.197	0.0
423.5070	64.01	-1.18	8791.670	0.0	32404.031	0.0
423.5142	25.00	-.30	23549.200	2.5	47154.510	1.5
423.5142	18.01	-4.08	179592.130	2.5	203197.440	3.5
423.5193	26.02	-.50	199139.760	5.0	222744.790	5.0
423.5295	25.00	-.02	23296.670	3.5	46901.130	2.5
423.5298	21.00	-2.35	16096.860	1.5	39701.300	.5
423.5337	28.00	-1.52	34163.294	2.0	57767.520	1.0
423.5347	24.00	-2.44	31352.420	1.0	54956.590	1.0
423.5376	26.00	-4.27	27394.676	3.0	50998.686	2.0
423.5431	17.01	-.26	158768.600	2.0	182372.300	1.0
423.5460	90.00	-1.72	0.000	0.0	23610.186	0.0
423.5467	17.01	-.03	147605.700	3.0	171209.200	2.0
423.5480	24.00	-2.91	39158.630	4.0	62762.060	4.0
423.5501	24.00	-1.31	35884.400	5.0	59487.710	4.0
423.5507	24.00	-1.12	35813.730	3.0	59417.010	3.0
423.5540	28.00	-2.45	33500.854	3.0	57103.946	3.0
423.5568	28.01	-3.04	105668.780	2.5	129271.720	3.5
423.5614	25.01	-3.60	62587.500	3.0	86190.180	2.0
423.5636	26.00	-3.63	20641.110	4.0	44243.668	5.0
423.5730	39.01	-1.67	967.890	0.0	24576.571	0.0
423.5763	23.00	-.14	15664.750	1.5	39266.600	1.5
423.5823	26.00	-3.32	19390.165	6.0	42991.680	5.0
423.5848	24.00	-2.67	31355.210	2.0	54956.590	1.0
423.5883	27.00	-2.27	30102.960	2.5	53704.140	2.5
423.5885	23.01	-2.29	30267.460	2.0	53868.630	2.0
423.5940	39.00	-.60	483.945	0.0	24091.456	0.0
423.5940	73.01	1.08	24761.859	0.0	48369.370	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
423.5943	26.00	-.43	19562.435	4.0	43163.282	4.0
423.5952	25.02	-4.17	124754.800	3.5	148355.600	3.5
423.5968	23.00	-2.60	18513.460	4.5	42114.170	3.5
423.5993	9.02	-4.72	442694.580	1.5	466295.150	1.5
423.6007	24.00	-1.75	24277.060	0.0	47877.550	1.0
423.6020	58.01	-.88	4678.136	0.0	28285.201	0.0
423.6059	30.02	-2.95	238336.200	2.0	261936.400	1.0
423.6060	40.00	-.28	10969.423	0.0	34576.265	0.0
423.6109	9.02	-2.98	445006.130	2.5	468606.050	3.5
423.6210	59.01	-1.30	1613.150	0.0	25219.156	0.0
423.6240	75.00	-1.44	16212.162	0.0	39818.001	0.0
423.6244	27.00	-3.55	30102.960	2.5	53702.130	3.5
423.6280	25.01	-3.14	43696.190	3.0	67295.160	4.0
423.6355	7.01	-1.93	166521.690	1.0	190120.240	1.0
423.6360	58.01	-.75	8711.012	0.0	32316.182	0.0
423.6361	28.00	-1.22	33112.368	3.0	56710.889	2.0
423.6381	24.01	-3.39	25033.950	3.5	48632.360	3.5
423.6433	20.00	-4.81	20335.360	1.0	43933.477	1.0
423.6433	20.00	-4.79	20335.360	1.0	43933.477	1.0
423.6474	28.01	-3.71	109846.000	3.5	133443.890	2.5
423.6550	40.00	-2.11	0.000	0.0	23604.112	0.0
423.6553	26.01	-3.25	61587.240	5.5	85184.690	4.5
423.6576	18.03	-2.87	268151.380	2.5	291748.700	1.5
423.6588	22.00	-2.68	25317.813	1.0	48915.070	2.0
423.6634	23.00	-4.33	2424.890	4.5	26021.890	3.5
423.6670	44.00	-.44	14599.011	0.0	38202.454	0.0
423.6740	62.01	-.58	5242.739	0.0	28845.792	0.0
423.6772	26.00	-2.76	29320.050	1.0	52916.278	2.0
423.6812	23.01	-2.91	13609.000	4.0	37205.010	3.0
423.6846	23.02	-1.49	160879.980	4.5	184475.600	4.5
423.6927	7.01	.41	187437.560	1.0	211032.930	2.0
423.6939	9.02	-4.92	466544.700	1.5	490140.000	2.5
423.6966	25.00	-3.37	37630.620	4.5	61225.770	5.5
423.6970	20.02	-1.80	340748.720	2.0	364343.850	1.0
423.6998	28.01	-3.04	94067.140	1.5	117662.110	1.5
423.7027	14.02	-3.20	225526.330	3.0	249121.140	3.0
423.7047	7.01	.21	187461.560	2.0	211056.260	3.0
423.7050	27.00	-1.74	29269.730	4.5	52864.410	4.5
423.7070	26.02	-.20	199139.760	5.0	222734.330	4.0
423.7075	26.00	-5.28	7728.058	3.0	31322.603	3.0
423.7111	25.00	-.41	38120.180	4.5	61714.520	4.5
423.7119	23.00	-4.40	10892.500	3.5	34486.800	2.5
423.7154	22.00	-4.65	14028.470	2.0	37622.573	3.0
423.7160	42.00	-.25	20809.640	0.0	44410.354	0.0
423.7221	18.01	-.55	148620.070	1.5	172213.600	1.5
423.7246	24.00	-3.03	24200.230	6.0	47793.820	5.0
423.7336	27.00	-1.97	18389.570	1.5	41982.660	1.5
423.7368	25.00	-2.27	41230.300	3.5	64823.210	2.5
423.7430	40.00	-.55	11130.738	0.0	34729.948	0.0
423.7453	25.02	-1.18	195112.810	3.5	218705.250	2.5
423.7559	25.01	-4.34	81322.330	1.0	104914.180	0.0
423.7568	13.01	-1.19	110087.500	2.0	133679.300	3.0
423.7582	26.01	-4.49	61093.440	2.5	84685.160	3.5
423.7595	22.00	-1.94	15108.121	3.0	38699.767	2.0
423.7602	27.00	-3.31	30102.960	2.5	53694.570	3.5
423.7660	62.01	-1.50	806.575	0.0	24404.504	0.0
423.7673	26.00	-3.03	24338.766	3.0	47929.981	4.0
423.7710	24.00	-1.92	24286.540	1.0	47877.550	1.0
423.7730	28.00	-1.95	30163.140	2.0	53754.036	2.0
423.7747	25.00	-1.18	38120.180	4.5	61710.980	3.5
423.7751	25.01	-3.33	79112.560	5.0	102703.340	4.0
423.7771	22.00	-1.12	18593.990	3.0	42184.660	4.0
423.7810	41.00	-.58	11130.738	0.0	34727.832	0.0
423.7866	25.01	-2.83	43311.000	1.0	66901.140	2.0
423.7869	25.01	-4.44	43339.100	2.0	66929.220	2.0
423.7889	22.00	.22	20209.444	2.0	43799.455	2.0
423.7914	28.01	-2.30	68735.980	2.5	92325.850	3.5
423.7938	8.01	-.99	232536.060	1.5	256125.800	2.5
423.8016	26.00	-3.53	27559.568	2.0	51148.870	3.0
423.8053	24.00	-.63	32097.360	6.0	55686.460	5.0
423.8053	15.01	-3.50	107361.100	3.0	130950.200	2.0
423.8062	21.00	.21	16210.800	3.5	39799.850	3.5
423.8193	28.01	-1.64	107142.210	1.5	130730.530	2.5
423.8207	28.01	-3.86	94705.930	3.5	118294.170	3.5
423.8232	25.03	-2.44	152700.500	4.0	176288.600	5.0
423.8328	23.01	-4.23	49201.660	2.0	72789.230	3.0
423.8380	57.01	-.82	3226.301	0.0	26820.221	0.0
423.8447	22.00	-4.31	18037.225	4.0	41624.130	4.0
423.8463	18.01	-1.98	186890.950	2.5	210477.770	3.5
423.8524	25.02	-1.09	192576.420	2.5	216162.900	1.5
423.8590	75.00	-1.24	18793.202	0.0	42385.953	0.0
423.8615	26.00	-2.83	29313.008	6.0	52898.980	5.0
423.8619	26.02	.11	168420.990	2.0	192006.940	2.0
423.8694	22.00	-3.21	25438.898	2.0	49024.430	3.0
423.8718	30.02	-2.10	238336.200	2.0	261921.600	2.0
423.8732	24.01	-4.12	25047.040	2.5	48632.360	3.5
423.8798	26.00	.08	27394.676	3.0	50979.627	4.0
423.8811	25.01	-3.98	14781.190	2.0	38366.070	2.0
423.8820	26.01	-2.99	54902.420	1.5	78487.250	1.5
423.8905	24.00	-4.19	27816.880	5.0	51401.240	5.0
423.8915	12.02	.29	585466.200	1.0	609050.500	2.0
423.8930	20.00	-3.61	20349.260	2.0	43933.477	1.0
423.8930	20.00	-4.27	20349.260	2.0	43933.477	1.0
423.8942	23.00	-1.49	15664.750	1.5	39248.900	1.5
423.8944	24.00	-.79	24282.340	4.0	47866.480	4.0
423.8987	11.00	-2.51	16956.172	.5	40540.070	1.5
423.9003	26.00	-4.11	22249.430	3.0	45833.240	4.0
423.9023	25.02	-.43	192948.290	1.5	216531.990	1.5
423.9070	42.00	-.71	16696.107	0.0	40286.187	0.0
423.9187	25.01	-2.44	43311.000	1.0	66893.790	1.0
423.9310	40.00	.05	5484.711	0.0	29073.455	0.0
423.9363	25.02	-1.40	194545.780	.5	218127.590	.5
423.9386	29.01	-1.19	123304.630	1.0	146886.310	1.0
423.9415	28.01	-3.14	105838.060	3.5	129419.580	4.5
423.9472	12.02	-.93	546531.600	1.0	570112.800	0.0
423.9473	25.00	-3.76	27281.850	.5	50863.050	1.5
423.9473	25.00	-4.18	34938.700	4.5	58519.900	3.5
423.9514	8.02	-2.04	267375.650	1.0	290956.620	1.0
423.9543	25.00	-2.55	37630.620	4.5	61211.430	4.5

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
423.9560	56.00	-.72	13514.000	0.0	37101.353	0.0
423.9562	27.01	-5.25	24267.800	1.0	47848.500	1.0
423.9568	21.00	-1.99	16141.040	2.5	39721.710	1.5
423.9602	23.00	-3.19	14949.300	4.5	38529.780	4.5
423.9629	27.00	-3.39	18389.570	1.5	41969.900	.5
423.9634	28.00	-2.51	34163.294	2.0	57743.596	3.0
423.9729	26.00	-1.09	23783.617	5.0	47363.390	6.0
423.9730	25.00	-.69	23719.520	1.5	47299.290	.5
423.9811	27.00	-2.68	18389.570	1.5	41968.890	2.5
423.9814	17.01	-3.47	126219.000	3.0	149798.300	2.0
423.9836	26.00	-5.85	7728.058	3.0	31307.235	4.0
423.9851	26.00	-1.32	21715.735	5.0	45294.830	5.0
423.9856	28.00	-3.99	25753.578	4.0	49332.643	4.0
423.9900	24.01	-2.23	67012.280	2.5	90591.100	2.5
423.9910	58.01	-.29	3790.903	0.0	27376.309	0.0
423.9911	10.01	-.49	279324.890	1.5	302903.650	2.5
423.9940	26.00	-1.62	24772.019	1.0	48350.620	1.0
423.9967	23.01	-4.93	49210.780	3.0	72789.230	3.0
423.9981	23.01	-3.23	44159.430	2.0	67737.600	2.0
423.9994	17.01	-2.10	137770.100	0.0	161348.400	1.0
423.9998	29.01	-4.18	115639.020	2.0	139217.300	2.0
424.0080	42.00	-.38	18147.942	0.0	41732.403	0.0
424.0084	23.00	-.67	15688.800	2.5	39266.600	1.5
424.0105	10.01	-.02	279324.890	1.5	302902.570	1.5
424.0109	24.00	-2.98	24299.890	2.0	47877.550	1.0
424.0125	14.02	-2.27	225526.330	3.0	249103.900	2.0
424.0170	18.03	-3.80	268171.380	1.5	291748.700	1.5
424.0192	23.00	-1.59	18680.120	5.5	42257.320	5.5
424.0221	18.02	-2.85	243145.760	2.0	266722.800	2.0
424.0231	10.01	-3.21	283322.350	1.5	306899.330	2.5
424.0280	42.00	.41	24681.201	0.0	48264.549	0.0
424.0336	24.00	-3.34	23512.000	1.0	47088.400	1.0
424.0340	40.00	-.45	4839.451	0.0	28422.466	0.0
424.0361	23.00	-.52	15724.220	3.5	39300.480	2.5
424.0370	26.00	-1.08	28604.610	2.0	52180.820	1.0
424.0372	29.01	-3.95	115665.400	1.0	139241.600	1.0
424.0442	25.01	-2.20	49820.160	2.0	73395.970	2.0
424.0450	62.00	-1.10	1451.835	0.0	25034.238	0.0
424.0457	20.00	-2.71	21849.634	2.0	45425.358	1.0
424.0528	24.00	-1.05	37244.170	4.0	60819.500	3.0
424.0590	92.01	-1.62	6210.629	0.0	29792.253	0.0
424.0595	25.01	-3.67	49820.160	2.0	73395.120	3.0
424.0670	26.02	.38	199139.760	5.0	222714.300	6.0
424.0682	26.00	-2.08	24118.815	4.0	47693.289	3.0
424.0683	24.00	-4.59	24940.610	2.0	48515.080	3.0
424.0710	24.00	-1.02	24056.110	5.0	47630.430	6.0
424.0735	22.00	-2.14	19573.968	4.0	43148.150	3.0
424.0742	20.02	1.02	347383.510	4.0	370957.650	5.0
424.0785	13.01	-1.96	121365.200	0.0	144939.100	1.0
424.0802	27.00	-2.76	24627.790	4.5	48201.600	3.5
424.0806	26.00	-2.99	31805.059	3.0	55378.842	2.0
424.0811	18.01	-2.04	186890.950	2.5	210464.710	2.5
424.0830	42.00	.10	20809.640	0.0	44389.930	0.0
424.0847	27.01	-3.04	63366.900	2.0	86940.460	2.0
424.0875	27.01	-4.16	21624.400	5.0	45197.800	5.0
424.0965	25.02	-.47	192576.420	2.5	216149.320	3.5
424.1020	59.01	-.48	4355.506	0.0	27934.739	0.0
424.1050	44.00	-.33	8711.012	0.0	32290.079	0.0
424.1057	24.00	-4.59	25089.200	2.0	48661.590	3.0
424.1064	23.00	-2.77	15664.750	1.5	39237.100	.5
424.1111	28.01	-2.13	108548.610	1.5	132120.700	.5
424.1119	26.00	-1.62	22838.320	2.0	46410.366	1.0
424.1160	75.00	-.97	17099.394	0.0	40677.849	0.0
424.1200	40.00	-.43	5000.766	0.0	28578.999	0.0
424.1241	7.01	-.40	187461.560	2.0	211032.930	2.0
424.1280	64.01	-.41	12985.861	0.0	36563.649	0.0
424.1295	26.01	-4.38	60956.820	3.5	84527.890	4.5
424.1300	23.00	-.62	15770.720	4.5	39341.760	3.5
424.1372	25.00	-4.56	27248.000	1.5	50818.640	.5
424.1379	17.01	-.07	128662.500	2.0	152233.100	2.0
424.1390	75.00	-.75	17099.394	0.0	40676.570	0.0
424.1415	29.01	-3.44	118163.500	2.0	141733.900	2.0
424.1424	25.00	-2.58	38934.940	2.5	62505.290	3.5
424.1450	41.00	-.76	9275.615	0.0	32852.458	0.0
424.1450	74.00	-.40	15324.929	0.0	38901.772	0.0
424.1462	23.01	-4.72	49723.680	4.0	73293.820	5.0
424.1507	27.00	-1.00	29294.520	3.5	52864.410	4.5
424.1656	27.00	-4.04	31699.690	4.5	55268.750	3.5
424.1670	92.01	-.56	4516.821	0.0	28092.441	0.0
424.1685	28.01	-1.09	104298.230	4.5	127867.130	4.5
424.1690	40.00	-.20	5162.081	0.0	28737.590	0.0
424.1732	28.01	-1.53	107142.210	1.5	130710.850	.5
424.1750	16.01	-3.69	109831.280	1.5	133399.820	1.5
424.1756	7.01	.21	187461.560	2.0	211030.070	3.0
424.1786	7.01	.60	187491.900	3.0	211060.240	4.0
424.1825	25.02	-2.86	192012.750	1.5	215580.870	.5
424.1885	27.00	-2.43	16778.160	2.5	40345.950	2.5
424.1932	25.01	-3.68	79112.560	5.0	102680.090	5.0
424.2010	58.01	-.91	7420.492	0.0	30994.222	0.0
424.2040	10.01	-1.15	279422.890	.5	302989.820	1.5
424.2059	23.00	-1.82	14548.830	2.5	38115.650	3.5
424.2081	11.00	-2.25	16973.368	1.5	40540.070	2.5
424.2081	11.00	-3.21	16973.368	1.5	40540.070	1.5
424.2083	27.00	-3.14	8460.810	2.5	32027.500	3.5
424.2150	69.01	-1.27	161.315	0.0	23734.267	0.0
424.2211	10.01	-.67	279422.890	.5	302988.870	.5
424.2260	29.00	-1.45	44442.294	0.0	68014.635	0.0
424.2328	22.01	-1.78	39602.900	1.5	63168.230	2.5
424.2355	24.01	-1.73	31219.490	4.5	54764.670	3.5
424.2389	25.01	-1.42	49820.160	2.0	73385.150	1.0
424.2448	12.01	-2.38	93310.590	2.5	116875.250	2.5
424.2448	12.01	-1.07	93310.590	2.5	116875.250	3.5
424.2502	7.01	-.62	187491.900	3.0	211056.260	3.0
424.2541	12.01	-1.23	93311.110	1.5	116875.250	2.5
424.2598	26.00	-2.49	21999.132	4.0	45562.959	3.0
424.2610	56.00	-1.12	12636.000	0.0	36206.397	0.0
424.2630	41.00	.46	18228.600	0.0	41798.885	0.0
424.2637	25.01	-3.93	82605.290	4.0	106168.900	5.0
424.2720	58.01	-.87	2339.068	0.0	25908.853	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
424.2731	26.00	-1.98	26623.726	2.0	50186.614	2.0
424.2736	24.01	-4.09	44307.440	.5	67870.500	1.5
424.2800	42.00	-.24	23955.283	0.0	47524.624	0.0
424.2821	22.00	-2.71	15108.121	3.0	38670.710	4.0
424.2830	24.00	-1.85	24303.940	3.0	47866.480	4.0
424.2864	10.01	-3.36	280262.330	3.5	303824.680	2.5
424.2886	23.01	-1.34	30306.400	3.0	53868.630	2.0
424.2920	25.01	-2.37	43339.100	2.0	66901.140	2.0
424.3060	44.00	-.48	7420.492	0.0	30988.389	0.0
424.3210	9.02	-1.78	442636.270	3.5	466196.700	3.5
424.3269	23.00	-2.36	15688.800	2.5	39248.900	1.5
424.3275	29.01	-1.71	122867.530	1.0	146427.600	1.0
424.3293	24.00	-3.93	29824.750	3.0	53384.720	3.0
424.3329	9.01	-2.68	236960.830	1.0	260520.600	0.0
424.3378	26.00	-1.70	29356.780	2.0	52916.278	2.0
424.3408	26.02	.66	199139.760	5.0	222699.090	5.0
424.3480	25.01	-2.85	65567.070	2.0	89126.000	3.0
424.3527	29.01	-4.26	123016.630	3.0	146575.300	2.0
424.3530	59.01	-1.06	3387.616	0.0	26952.902	0.0
424.3600	5.02	.48	242832.000	0.0	266396.898	0.0
424.3646	18.01	-2.38	160239.350	1.5	183797.360	2.5
424.3676	18.01	-3.80	159393.310	1.5	182951.150	.5
424.3689	25.02	-.92	191915.430	.5	215473.200	1.5
424.3720	27.01	-4.60	22414.500	3.0	45972.100	3.0
424.3807	26.00	-1.46	31322.603	3.0	54879.720	2.0
424.3830	23.00	-2.41	18805.050	.5	42362.040	.5
424.3875	27.00	-2.99	22475.360	4.5	46032.100	4.5
424.3930	90.01	-1.43	9356.272	0.0	32919.337	0.0
424.3990	73.00	-1.78	11130.738	0.0	34693.470	0.0
424.3997	18.01	-1.77	186890.950	2.5	210447.010	3.5
424.4021	27.00	-1.74	29216.370	2.5	52772.300	2.5
424.4058	10.01	-1.80	280268.960	2.5	303824.680	2.5
424.4112	23.02	-2.58	160681.480	3.5	184236.900	4.5
424.4139	10.01	-1.22	280268.960	2.5	303824.230	3.5
424.4145	23.01	-4.45	49723.680	4.0	73278.920	4.0
424.4145	25.02	-4.26	121117.140	3.5	144672.380	2.5
424.4179	25.01	-4.05	43131.400	2.0	66686.450	3.0
424.4231	9.02	-2.74	442636.270	3.5	466191.030	2.5
424.4244	25.01	-2.64	43339.100	2.0	66893.790	1.0
424.4334	24.00	-2.07	35862.820	4.0	59417.010	3.0
424.4370	74.00	-1.26	6129.972	0.0	29690.595	0.0
424.4370	92.01	-1.41	0.000	0.0	23560.623	0.0
424.4372	26.01	-4.01	62125.660	1.5	85679.640	2.5
424.4376	25.00	-3.23	41031.480	4.5	64585.440	4.5
424.4377	9.02	-4.13	442748.850	2.5	466302.800	3.5
424.4421	26.02	-.86	200504.990	3.0	224058.700	4.0
424.4440	45.00	-1.58	10243.505	0.0	33803.739	0.0
424.4491	26.02	-1.32	199212.720	4.0	222766.040	3.0
424.4504	26.02	-.55	199212.720	4.0	222765.970	4.0
424.4525	26.01	-6.44	18886.750	.5	42439.880	.5
424.4621	15.01	-.38	107361.100	3.0	130913.700	3.0
424.4644	24.01	-4.75	44307.440	.5	67859.910	.5
424.4653	25.00	-2.64	38934.940	2.5	62487.360	2.5
424.4700	62.01	-1.24	2177.753	0.0	25736.544	0.0
424.4740	63.00	-.36	12985.861	0.0	36544.430	0.0
424.4747	29.01	-3.92	115665.400	1.0	139217.300	2.0
424.4768	24.00	-2.18	33040.100	2.0	56591.880	2.0
424.4779	28.01	-3.16	32523.540	3.5	56075.260	2.5
424.4812	8.01	-.72	232536.060	1.5	256087.600	2.5
424.4830	44.00	-1.07	9517.587	0.0	33075.656	0.0
424.4850	9.01	-2.21	236960.830	1.0	260512.160	1.0
424.4855	22.00	-4.16	15975.590	3.0	39526.890	2.0
424.4981	17.02	-3.06	216524.600	2.5	240075.200	3.5
424.5041	23.01	-4.44	13490.840	2.0	37041.110	2.0
424.5089	24.00	-1.14	35807.900	2.0	59357.900	2.0
424.5152	26.00	-1.64	32873.623	4.0	56423.276	4.0
424.5156	28.00	-2.96	35639.148	3.0	59188.780	3.0
424.5160	72.00	-1.46	8872.327	0.0	32428.565	0.0
424.5180	62.01	-1.99	1935.780	0.0	25491.907	0.0
424.5205	23.00	-3.94	8412.940	.5	31962.300	.5
424.5232	24.00	-2.83	35572.940	2.0	59122.150	3.0
424.5244	28.01	-2.39	107142.210	1.5	130691.350	1.5
424.5253	22.00	-4.82	14105.680	3.0	37654.770	2.0
424.5259	26.00	-1.14	23051.744	0.0	46600.800	1.0
424.5329	9.01	-3.77	230997.660	4.0	254546.330	3.0
424.5332	26.00	-1.06	26874.534	5.0	50423.185	4.0
424.5340	64.00	-.17	7017.204	0.0	30572.443	0.0
424.5350	73.00	-1.11	11130.738	0.0	34685.922	0.0
424.5365	9.01	-2.54	230997.660	4.0	254546.130	4.0
424.5447	22.00	-.70	18037.225	4.0	41585.240	3.0
424.5450	9.03	0.00	586263.000	2.0	609811.000	3.0
424.5453	26.01	-4.05	49506.990	1.5	73054.970	2.5
424.5462	24.00	-4.91	25010.640	1.0	48558.570	2.0
424.5470	9.01	-4.01	230998.600	3.0	254546.490	2.0
424.5499	9.01	-2.76	230998.600	3.0	254546.330	3.0
424.5535	9.01	-2.44	230998.600	3.0	254546.130	4.0
424.5551	8.01	-.96	232536.060	1.5	256083.500	1.5
424.5574	27.00	-1.97	29216.370	2.5	52763.680	3.5
424.5663	25.00	-3.03	34938.700	4.5	58485.520	4.5
424.5683	9.01	-3.22	230999.780	2.0	254546.490	2.0
424.5695	26.02	.22	200504.990	3.0	224051.630	3.0
424.5712	9.01	-2.70	230999.780	2.0	254546.330	3.0
424.5724	24.00	-1.80	35870.530	4.0	59417.010	3.0
424.5773	25.02	-1.22	192365.520	1.5	215911.730	1.5
424.5840	72.01	-.57	20003.065	0.0	43555.530	0.0
424.5865	9.01	-3.23	231000.790	1.0	254546.490	2.0
424.5880	58.01	-.55	5726.684	0.0	29278.928	0.0
424.5892	25.01	-4.21	52373.180	3.0	75918.730	2.0
424.5962	25.01	-4.02	43131.400	2.0	66676.560	2.0
424.5980	58.01	-.74	4194.191	0.0	27745.880	0.0
424.6014	26.00	-2.74	26406.490	1.0	49951.360	0.0
424.6020	42.00	.61	25407.119	0.0	48958.586	0.0
424.6096	26.00	-.97	29371.860	3.0	52916.278	2.0
424.6128	26.02	.31	200514.460	4.0	224058.700	4.0
424.6140	24.00	-1.79	35813.730	3.0	59357.900	2.0
424.6148	21.00	-.60	16210.800	3.5	39754.930	2.5
424.6169	25.02	1.04	192989.050	5.5	216533.060	6.5
424.6172	17.01	-1.72	137804.400	1.0	161348.400	1.0
424.6182	27.00	-4.31	28470.510	1.5	52014.450	1.5
424.6207	9.01	-1.17	230997.660	4.0	254541.460	3.0
424.6216	9.01	0.00	230997.660	4.0	254541.410	4.0
424.6227	9.01	.87	230997.660	4.0	254541.350	5.0
424.6260	92.00	-.83	0.000	0.0	23550.136	0.0
424.6300	41.00	-.68	8630.355	0.0	32180.269	0.0
424.6321	29.01	-4.21	123016.630	3.0	146559.600	4.0
424.6330	44.00	-.22	14599.011	0.0	38148.759	0.0
424.6376	9.01	.15	230998.600	3.0	254541.460	3.0
424.6378	9.01	-.87	230998.600	3.0	254541.450	2.0
424.6385	9.01	.70	230998.600	3.0	254541.410	4.0
424.6400	69.01	-1.95	8872.327	0.0	32421.666	0.0
424.6415	24.01	-3.58	31083.110	1.5	54625.760	2.5
424.6438	25.02	-1.37	192172.890	2.5	215715.410	1.5
424.6555	25.01	-4.65	55371.300	3.0	78913.170	2.0
424.6570	64.01	-.57	9033.642	0.0	32582.059	0.0
424.6575	9.01	-.87	230999.780	2.0	254541.540	1.0
424.6587	22.00	-4.29	25317.813	1.0	48859.510	1.0
424.6589	9.01	.51	230999.780	2.0	254541.460	3.0
424.6591	9.01	.13	230999.780	2.0	254541.450	2.0
424.6609	23.01	-7.49	13609.000	4.0	37150.570	4.0
424.6676	15.02	-.10	117834.500	.5	141375.700	.5
424.6689	23.00	-3.34	13801.530	1.5	37342.660	2.5
424.6706	7.01	-2.06	187491.900	3.0	211032.930	2.0
424.6710	58.01	-.90	2097.096	0.0	25644.736	0.0
424.6730	44.00	.74	19922.407	0.0	43469.937	0.0
424.6756	28.00	-1.78	30163.140	2.0	53703.899	1.0
424.6757	9.01	-.02	231000.790	1.0	254541.540	1.0
424.6773	9.01	.28	231000.790	1.0	254541.450	2.0
424.6789	26.00	-4.35	20874.482	3.0	44415.057	4.0
424.6820	75.00	.37	34360.104	0.0	57907.134	0.0
424.6829	21.01	.26	2540.970	2.0	26081.320	2.0
424.6844	9.01	-.02	231001.270	0.0	254541.540	1.0
424.6875	25.02	-.38	194545.780	.5	218085.880	.5
424.6880	60.01	-2.05	483.945	0.0	24030.643	0.0
424.6898	29.01	-2.95	123016.630	3.0	146556.600	3.0
424.6965	29.01	-1.43	122416.100	0.0	145955.700	1.0
424.7010	25.01	-4.91	52379.380	2.0	75918.730	2.0
424.7223	7.01	-1.01	187491.900	3.0	211030.070	3.0
424.7250	26.01	-2.83	61332.820	1.5	84870.840	2.5
424.7291	26.00	-3.07	29320.050	1.0	52857.840	1.0
424.7308	26.00	-2.89	19788.248	4.0	43325.946	3.0
424.7342	26.02	-.29	199212.720	4.0	222750.230	3.0
424.7380	60.01	-.88	0.000	0.0	23543.926	0.0
424.7390	62.01	-2.41	1451.835	0.0	24995.705	0.0
424.7403	26.02	-.97	200514.460	4.0	224051.630	3.0
424.7415	26.00	.21	27166.804	4.0	50703.912	5.0
424.7450	58.01	-1.50	3306.958	0.0	26850.496	0.0
424.7465	23.01	-2.61	44200.970	1.0	67737.800	2.0
424.7472	25.00	-3.75	27281.850	.5	50818.640	.5
424.7625	9.01	-2.03	236960.830	1.0	260496.770	2.0
424.7630	22.00	-3.60	19322.988	2.0	42858.900	3.0
424.7660	59.01	-1.03	403.288	0.0	23945.662	0.0
424.7663	23.00	-4.66	9824.580	2.5	33360.310	3.5
424.7668	23.03	-2.12	264591.900	5.0	288127.600	4.0
424.7679	25.00	-1.69	37420.240	5.5	60955.880	4.5
424.7710	24.00	-3.80	23512.000	1.0	47047.470	2.0
424.7739	24.00	-3.44	27500.370	3.0	51035.680	2.0
424.7743	25.00	-1.36	33825.490	2.5	57360.780	1.5
424.7752	25.02	-1.94	194971.150	2.5	218506.390	3.5
424.7813	22.00	-3.95	16106.080	4.0	39640.980	3.0
424.7871	26.02	-.82	200524.120	5.0	224058.700	4.0
424.7875	22.00	-4.19	12118.394	4.0	35652.950	3.0
424.8000	90.01	-1.24	9114.300	0.0	32654.790	0.0
424.8090	58.01	-.65	10162.848	0.0	33702.839	0.0
424.8140	44.00	-.86	14921.641	0.0	38461.355	0.0
424.8227	26.00	-1.46	24772.019	1.0	48304.623	2.0
424.8250	23.00	-2.13	17054.870	2.5	40587.350	3.5
424.8324	26.02	.21	199212.720	4.0	222744.790	5.0
424.8326	24.00	-1.20	24282.340	4.0	47814.400	3.0
424.8391	25.02	-2.47	124823.900	4.5	148355.600	3.5
424.8403	26.00	-4.97	8154.713	1.0	31686.342	2.0
424.8492	24.00	-1.29	33060.740	3.0	56591.880	2.0
424.8560	25.01	-4.54	44315.170	6.0	67845.930	5.0
424.8570	22.00	-1.61	25493.722	2.0	49024.430	3.0
424.8656	23.01	-3.26	30613.970	4.0	54144.200	4.0
424.8660	41.00	-2.37	80.658	0.0	23617.491	0.0
424.8680	58.01	-.06	5484.711	0.0	29021.433	0.0
424.8707	24.00	-2.31	24056.110	5.0	47586.060	5.0
424.8734	24.00	-1.43	25106.340	3.0	48636.140	3.0
424.8773	26.02	-.11	168477.360	1.0	192006.940	2.0
424.8806	23.01	-3.24	13511.710	1.0	37041.110	2.0
424.8889	23.00	-3.67	15000.840	5.5	38529.780	4.5
424.8956	29.00	-.99	40974.020	0.0	64509.213	0.0
424.9012	26.01	-3.53	61156.900	3.5	84685.160	3.5
424.9014	25.02	.46	192665.800	4.5	216194.050	5.5
424.9122	22.00	-.88	18525.070	2.0	42052.720	3.0
424.9320	22.00	-4.55	14028.470	2.0	37555.021	3.0
424.9412	11.00	-3.33	16956.172	.5	40482.220	.5
424.9460	41.00	-1.75	0.000	0.0	23532.402	0.0
424.9460	74.00	-1.38	13227.833	0.0	36760.235	0.0
424.9480	59.01	-1.69	2984.328	0.0	26516.619	0.0
424.9503	24.00	-1.67	36558.550	2.0	60084.090	1.0
424.9543	25.02	.34	192392.200	3.5	215917.520	4.5
424.9550	62.01	-1.67	2661.698	0.0	26193.601	0.0
424.9559	28.01	-2.26	75917.630	3.5	99442.860	4.5
424.9565	15.03	0.00	233995.000	0.0	257520.200	1.0
424.9577	26.00	-2.59	20641.110	4.0	44166.240	3.0
424.9680	90.01	-1.81	7743.122	0.0	31274.306	0.0
424.9733	26.02	-.85	200514.460	4.0	224038.730	5.0
424.9799	25.02	-.56	194849.100	1.5	218373.000	1.5
424.9835	25.02	-.17	192880.160	3.5	216403.860	2.5
424.9854	27.02	-3.02	83773.400	1.5	107297.000	1.5
424.9914	16.01	.01	140708.510	2.5	164231.780	2.5
424.9990	57.01	-.35	15566.901	0.0	39096.368	0.0
425.0125	26.00	-.48	19912.486	2.0	43434.585	3.0
425.0166	25.01	-4.90	77945.710	7.0	101467.580	6.0
425.0178	17.01	-4.43	147053.700	2.0	170575.500	3.0
425.0190	28.01	-4.20	105981.500	4.5	129503.240	4.5
425.0191	26.00	-4.71	19390.165	6.0	42911.897	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
425.0213	26.02	.41	199212.720	4.0	222734.330	4.0
425.0280	64.00	-.58	6694.574	0.0	30222.436	0.0
425.0310	90.01	-1.74	4436.164	0.0	27963.860	0.0
425.0392	23.01	-4.36	49268.610	4.0	72789.230	3.0
425.0392	24.01	-3.66	67070.480	1.5	90591.100	2.5
425.0535	25.00	-2.48	37148.660	5.5	60668.490	4.5
425.0574	20.02	-3.20	347383.510	4.0	370903.120	3.0
425.0618	27.00	-2.40	23152.570	3.5	46671.940	2.5
425.0645	10.01	.15	279324.890	1.5	302844.110	2.5
425.0660	58.01	-1.72	3952.218	0.0	27477.976	0.0
425.0734	25.00	-1.45	37420.240	5.5	60938.970	4.5
425.0775	18.01	-3.83	189414.960	3.5	212933.460	2.5
425.0788	22.00	-4.02	16267.510	5.0	39785.940	4.0
425.0790	26.00	-.59	12560.933	3.0	36079.353	3.0
425.0855	24.00	-3.72	24940.610	2.0	48458.670	2.0
425.0866	28.00	-4.64	25753.578	4.0	49271.578	3.0
425.0878	22.01	-1.64	39926.830	2.5	63444.760	3.5
425.0896	26.00	-2.62	24772.019	1.0	48289.852	1.0
425.0952	25.01	-3.53	44899.820	3.0	68417.340	2.0
425.0999	29.01	-1.52	114511.440	1.0	138028.700	1.0
425.1066	22.00	-3.59	14105.680	3.0	37622.573	3.0
425.1082	24.01	-3.45	67334.200	3.5	90851.000	4.5
425.1181	18.00	-1.86	93143.800	2.0	116660.054	1.0
425.1189	26.02	-4.22	117950.320	4.0	141466.530	3.0
425.1200	39.00	.33	15163.614	0.0	38686.384	0.0
425.1393	24.00	-1.73	23163.270	0.0	46678.350	1.0
425.1444	25.02	.21	193756.790	4.5	217271.590	4.5
425.1478	26.02	.42	200524.120	5.0	224038.730	5.0
425.1484	26.01	-6.34	18886.750	.5	42401.330	1.5
425.1496	24.00	-1.78	24299.890	2.0	47814.400	3.0
425.1504	28.01	-4.50	109675.720	.5	133190.190	1.5
425.1593	22.00	-4.80	24694.895	4.0	48208.870	3.0
425.1600	58.01	-.93	8711.012	0.0	32231.569	0.0
425.1603	22.00	-.91	15156.787	4.0	38670.710	4.0
425.1627	28.00	-2.36	33590.159	4.0	57103.946	3.0
425.1635	28.00	-3.87	27943.543	1.0	51457.285	0.0
425.1681	25.00	-4.10	37420.240	5.5	60933.730	5.5
425.1701	25.01	-4.81	43131.400	2.0	66644.780	1.0
425.1703	23.00	-1.99	18805.050	.5	42318.420	1.5
425.1730	64.01	-.39	3064.986	0.0	26584.824	0.0
425.1757	22.00	-.40	18593.990	3.0	42107.060	4.0
425.1775	25.01	-1.24	49882.150	4.0	73395.120	3.0
425.1780	62.01	-1.54	2984.328	0.0	26503.889	0.0
425.1860	58.01	-1.48	4274.849	0.0	27793.968	0.0
425.1870	42.00	.76	28068.817	0.0	51587.880	0.0
425.1916	22.00	-4.38	14105.680	3.0	37617.868	4.0
425.1954	24.01	-3.48	52298.120	3.5	75810.100	4.5
425.1990	26.02	-.09	199262.440	3.0	222774.220	2.0
425.2017	28.00	-.39	30192.268	0.0	53703.899	1.0
425.2043	22.01	-3.34	16515.790	.5	40027.280	1.5
425.2059	11.02	-1.56	443261.600	.5	466773.000	1.5
425.2229	24.00	-1.40	24303.940	3.0	47814.400	3.0
425.2274	25.02	-1.26	192365.520	1.5	215875.730	2.5
425.2292	27.00	-3.17	816.000	3.5	24326.110	3.5
425.2357	24.00	-3.09	23512.000	1.0	47021.750	1.0
425.2478	28.01	-4.26	96535.870	3.5	120044.950	4.5
425.2486	26.00	-3.17	32873.623	4.0	56382.664	5.0
425.2520	11.00	-3.03	16973.368	1.5	40482.220	.5
425.2643	24.01	-2.39	31117.590	2.5	54625.760	2.5
425.2728	27.02	-3.34	83789.300	.5	107297.000	1.5
425.2770	25.02	-.25	192012.750	1.5	215520.220	2.5
425.2824	23.00	-1.51	15103.770	4.5	38610.940	3.5
425.2970	41.00	-.47	9436.930	0.0	32949.910	0.0
425.3016	25.01	-1.29	49889.860	3.0	73395.970	2.0
425.3077	26.02	-4.97	93392.450	3.0	116898.220	2.0
425.3083	27.00	-4.94	29269.730	4.5	52775.470	4.5
425.3170	25.01	-2.19	49889.860	3.0	73395.120	3.0
425.3360	58.01	-.70	3710.246	0.0	27221.070	0.0
425.3370	64.01	-.52	4436.164	0.0	27946.933	0.0
425.3390	7.00	-1.79	83364.590	2.5	106868.635	3.5
425.3412	28.01	-3.76	93390.060	2.5	116893.980	2.5
425.3470	26.02	-.40	199262.440	3.0	222766.040	3.0
425.3483	26.02	.12	199262.440	3.0	222765.970	4.0
425.3509	26.00	-4.59	26874.534	5.0	50377.920	5.0
425.3509	22.00	-3.96	11531.760	2.0	35035.147	2.0
425.3525	17.01	.09	128729.800	3.0	152233.100	2.0
425.3546	26.00	-1.24	37046.000	4.0	60549.180	5.0
425.3570	40.00	-.67	11130.738	0.0	34640.402	0.0
425.3590	16.02	.40	147146.000	2.0	170648.940	3.0
425.3590	16.02	-2.80	147146.000	2.0	170648.940	3.0
425.3671	23.01	-2.48	30641.710	3.0	54144.200	4.0
425.3700	41.00	-.58	8952.985	0.0	32461.930	0.0
425.3720	62.01	-2.11	3468.273	0.0	26977.108	0.0
425.3832	27.01	-6.26	24886.500	2.0	48388.100	2.0
425.3843	24.00	-2.13	24286.540	1.0	47788.080	0.0
425.3868	8.01	-.84	252607.700	4.5	276109.100	4.5
425.3868	8.01	.89	252607.700	4.5	276109.100	5.5
425.3904	27.00	-3.05	23184.230	2.5	46685.430	1.5
425.3906	25.02	.24	195315.780	2.5	218816.970	2.5
425.3930	26.00	-1.55	29356.780	2.0	52857.840	1.0
425.4031	30.02	-1.87	237506.800	1.0	261007.300	2.0
425.4031	30.02	-.71	237506.800	1.0	261007.300	2.0
425.4062	27.00	-1.18	29216.370	2.5	52716.700	3.5
425.4082	24.01	-3.26	67012.280	2.5	90512.500	1.5
425.4085	8.01	.80	252608.900	3.5	276109.100	4.5
425.4136	24.00	-1.98	38537.680	5.0	62037.600	5.0
425.4199	24.00	-2.36	27163.200	0.0	50662.770	1.0
425.4201	24.00	-2.02	24286.540	1.0	47786.100	2.0
425.4295	23.01	-4.29	49723.680	4.0	73222.720	4.0
425.4332	24.00	-.04	0.000	3.0	23498.840	4.0
425.4394	26.00	-4.82	24335.764	2.0	47834.260	3.0
425.4394	26.00	-2.97	26105.908	6.0	49604.402	5.0
425.4406	23.01	-3.01	13542.680	3.0	37041.110	2.0
425.4420	59.01	-.69	5000.766	0.0	28505.733	0.0
425.4491	18.01	-2.42	191169.520	1.5	214667.480	2.5
425.4554	24.01	-1.16	47354.630	2.5	70852.240	3.5
425.4592	27.02	-3.18	83799.600	2.5	107297.000	1.5
425.4592	24.01	-1.89	67353.600	4.5	90851.000	4.5
425.4630	23.00	-3.01	18680.120	5.5	42177.310	4.5
425.4642	22.00	-1.55	25227.217	3.0	48724.340	2.0
425.4679	24.00	-4.17	25010.640	1.0	48507.560	1.0
425.4690	41.00	-.72	8307.725	0.0	31811.200	0.0
425.4700	58.01	-1.10	6533.259	0.0	30036.679	0.0
425.4726	7.00	-2.18	83317.800	1.5	106814.459	2.5
425.4782	18.03	-2.09	268171.380	1.5	291667.730	2.5
425.4875	26.02	-1.65	199262.440	3.0	222758.280	2.0
425.4937	26.00	-4.02	24338.766	3.0	47834.260	3.0
425.4960	26.00	-3.06	24335.764	2.0	47831.132	2.0
425.4960	42.00	.56	26455.667	0.0	49957.651	0.0
425.4983	24.00	-2.38	24277.060	0.0	47772.300	1.0
425.4985	16.01	-1.74	128599.110	3.5	152094.340	2.5
425.5094	18.01	-3.93	189437.690	.5	212932.320	1.5
425.5136	28.01	-4.67	110573.360	2.5	134067.760	1.5
425.5154	7.00	-2.68	83284.040	.5	106778.337	1.5
425.5217	27.00	-.90	29269.730	4.5	52763.680	3.5
425.5217	24.01	-4.39	65680.150	4.5	89174.100	3.5
425.5313	24.00	-3.39	31393.400	5.0	54886.820	6.0
425.5380	27.00	-1.84	30443.630	1.5	53936.680	2.5
425.5384	28.00	-2.74	33610.916	2.0	57103.946	3.0
425.5440	41.00	-.11	10808.108	0.0	34307.441	0.0
425.5498	24.00	-.90	24200.230	6.0	47692.630	7.0
425.5504	26.00	-1.86	24338.766	3.0	47831.132	2.0
425.5603	18.01	-1.17	158730.210	2.5	182222.030	1.5
425.5614	29.01	-.78	114511.440	1.0	138003.200	2.0
425.5750	75.00	-1.32	17180.052	0.0	40677.673	0.0
425.5780	58.01	-.27	5646.026	0.0	29143.481	0.0
425.5822	25.02	.12	192172.890	2.5	215663.500	3.5
425.6014	25.01	-3.86	62572.200	2.0	86061.750	3.0
425.6036	22.00	-.28	18695.230	4.0	42184.660	4.0
425.6038	26.01	-4.22	60807.280	4.5	84296.700	5.5
425.6090	90.01	-1.48	9678.902	0.0	33174.646	0.0
425.6097	26.00	-2.88	34782.406	5.0	58271.500	5.0
425.6150	24.01	-1.44	52321.300	4.5	75810.100	4.5
425.6160	58.01	-1.00	4274.849	0.0	27770.206	0.0
425.6186	25.00	-2.87	34938.700	4.5	58427.300	5.5
425.6199	26.00	-4.96	27559.568	2.0	51048.100	1.0
425.6233	28.01	-.98	104503.220	2.5	127991.560	3.5
425.6240	60.01	-2.16	1613.150	0.0	25108.066	0.0
425.6250	90.00	-.88	7420.492	0.0	30915.352	0.0
425.6314	26.00	-3.01	19621.004	5.0	43108.899	4.0
425.6330	66.01	-1.44	806.575	0.0	24300.994	0.0
425.6333	26.02	.25	199262.440	3.0	222750.230	3.0
425.6348	27.00	-1.97	23184.230	2.5	46671.940	2.5
425.6390	62.01	-.62	2984.328	0.0	26478.416	0.0
425.6426	26.00	-2.19	24118.815	4.0	47606.092	5.0
425.6440	40.00	-1.54	4113.534	0.0	27607.346	0.0
425.6558	24.00	-2.67	27176.220	1.0	50662.770	1.0
425.6587	27.00	-4.05	29216.370	2.5	52702.760	1.5
425.6590	26.02	-.36	199212.720	4.0	222699.090	5.0
425.6605	17.00	-3.25	72827.038	.5	96313.330	1.5
425.6619	24.00	-2.18	24299.890	2.0	47786.100	2.0
425.6639	23.00	-2.82	8476.200	1.5	31962.300	.5
425.6645	20.02	-.07	347417.050	3.0	370903.120	3.0
425.6670	18.01	-2.68	172829.580	1.5	196315.510	2.5
425.6701	24.00	-3.46	24286.540	1.0	47772.300	1.0
425.6710	25.02	-.07	192576.420	2.5	216062.130	2.5
425.6786	26.02	-4.27	93412.930	2.0	116898.220	2.0
425.6796	26.00	-3.17	34328.733	3.0	57813.970	3.0
425.6839	29.01	-2.11	122416.100	0.0	145901.100	1.0
425.6842	24.00	-2.69	27176.220	1.0	50661.200	0.0
425.6870	20.02	-1.37	347417.050	3.0	370901.880	2.0
425.6928	22.00	-2.88	25317.813	1.0	48802.320	0.0
425.7020	23.01	-1.55	30267.460	2.0	53751.460	1.0
425.7069	28.01	-4.99	92792.080	3.5	116275.810	3.5
425.7105	25.02	-1.03	192392.200	3.5	215875.730	2.5
425.7107	25.02	-1.65	192665.800	4.5	216149.320	3.5
425.7120	58.01	-1.25	3629.588	0.0	27119.647	0.0
425.7180	10.01	-1.59	305364.030	4.5	328847.150	3.5
425.7198	10.01	.06	305364.030	4.5	328847.050	4.5
425.7219	22.00	-3.85	18141.229	5.0	41624.130	4.0
425.7267	25.00	-2.81	41230.300	3.5	64712.940	2.5
425.7326	23.00	-4.33	10892.500	3.5	34374.810	3.5
425.7354	24.00	-1.27	24303.940	3.0	47786.100	2.0
425.7361	23.00	-.50	15000.840	5.5	38482.960	6.5
425.7379	10.01	-.04	305365.130	3.5	328847.150	3.5
425.7398	10.01	-1.60	305365.130	3.5	328847.050	4.5
425.7423	16.01	.02	140750.000	1.5	164231.780	2.5
425.7442	24.01	-1.90	67369.330	5.5	90851.000	4.5
425.7492	17.01	-1.15	147053.700	2.0	170535.100	2.0
425.7500	90.00	-1.66	0.000	0.0	23487.962	0.0
425.7573	27.00	-2.87	29294.520	3.5	52775.470	4.5
425.7577	8.01	-.28	232602.570	.5	256083.500	1.5
425.7600	75.00	-.89	14115.066	0.0	37602.477	0.0
425.7669	25.00	-.61	23818.870	.5	47299.290	.5
425.7673	23.01	-4.04	49201.660	2.0	72682.060	2.0
425.7801	28.01	-4.37	110573.360	2.5	134053.050	2.5
425.7803	10.01	-.09	279422.890	.5	302902.570	1.5
425.7823	29.01	-2.62	123016.630	3.0	146496.200	3.0
425.7943	28.00	-3.01	35639.148	3.0	59118.060	2.0
425.8010	24.00	-2.42	27176.220	1.0	50654.760	2.0
425.8012	25.00	-3.59	35041.370	3.5	58519.900	3.5
425.8040	40.01	-1.25	4436.164	0.0	27921.148	0.0
425.8068	25.02	-.90	194894.780	1.5	218373.000	1.5
425.8144	26.01	-3.99	21812.040	1.5	45289.640	1.5
425.8148	27.00	-4.31	29294.520	3.5	52772.300	2.5
425.8168	27.00	-2.19	23207.760	1.5	46685.430	1.5
425.8182	24.00	-4.18	25010.640	1.0	48488.230	0.0
425.8235	25.02	-.43	193235.430	2.5	216712.730	2.5
425.8317	26.00	-4.38	704.003	2.0	24180.848	3.0
425.8336	26.02	-.28	199300.150	2.0	222776.890	1.0
425.8344	26.01	-4.34	21308.080	1.5	44784.780	2.5
425.8355	25.00	-.85	38008.700	5.5	61485.340	4.5
425.8440	22.00	-2.03	25438.898	2.0	48915.070	2.0
425.8530	74.00	-.93	17018.737	0.0	40501.018	0.0
425.8534	22.00	-1.27	18482.860	1.0	41958.510	2.0
425.8580	62.01	-1.57	3468.273	0.0	26950.279	0.0
425.8592	25.02	-3.46	121197.050	2.5	144672.380	2.5
425.8600	26.00	-3.54	22838.320	2.0	46315.610	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
425.8659	25.02	-.64	192948.290	1.5	216423.250	.5
425.8708	7.00	-2.74	83284.040	.5	106758.731	.5
425.8725	22.00	-3.51	17369.590	1.0	40844.190	1.0
425.8795	25.00	-4.41	37737.220	3.5	61211.430	4.5
425.8805	28.01	-3.37	54262.630	3.5	77736.790	4.5
425.8821	26.02	.06	199300.150	2.0	222774.220	2.0
425.8910	41.00	-.77	9275.615	0.0	32755.801	0.0
425.8954	26.00	-2.34	24338.766	3.0	47812.104	4.0
425.8990	44.00	-.13	13550.463	0.0	37030.208	0.0
425.9010	28.01	-4.34	106369.300	1.5	129842.330	2.5
425.9050	26.00	-4.00	21038.987	2.0	44511.795	2.0
425.9084	23.01	-4.15	49201.660	2.0	72674.280	2.0
425.9110	77.00	-2.35	2823.013	0.0	26302.097	0.0
425.9113	25.01	-3.53	47073.560	3.0	70546.020	4.0
425.9120	28.01	-3.65	99340.550	3.5	122812.970	3.5
425.9122	24.00	-1.56	24299.890	2.0	47772.300	1.0
425.9175	16.01	.44	140708.510	2.5	164180.630	3.5
425.9191	25.01	-1.81	43536.900	4.0	67008.930	3.0
425.9216	26.02	-.14	199262.440	3.0	222734.330	4.0
425.9236	28.01	-4.61	98969.440	5.5	122441.220	4.5
425.9302	23.00	-2.46	137.380	2.5	23608.800	1.5
425.9305	26.02	-2.96	199139.760	5.0	222611.160	5.0
425.9313	28.00	-3.19	28569.210	2.0	52040.568	2.0
425.9327	23.01	-3.72	49210.780	3.0	72682.060	2.0
425.9332	26.00	-2.86	24118.815	4.0	47590.070	4.0
425.9334	25.00	-.89	37420.240	5.5	60891.480	6.5
425.9358	18.00	-2.29	95399.870	1.0	118870.981	0.0
425.9360	26.01	-3.27	62945.120	3.5	86416.220	3.5
425.9360	74.00	.33	21293.585	0.0	44771.291	0.0
425.9390	62.01	-2.27	2661.698	0.0	26139.238	0.0
425.9401	29.00	-1.19	40086.787	0.0	63564.267	0.0
425.9414	17.01	-2.12	137877.600	2.0	161348.400	1.0
425.9481	23.00	-1.13	17116.920	3.5	40587.350	3.5
425.9674	24.00	-3.61	25089.200	2.0	48558.570	2.0
425.9712	27.00	-2.56	29294.520	3.5	52763.680	3.5
425.9750	58.01	-.77	7178.519	0.0	30654.075	0.0
425.9864	27.00	-1.92	24733.280	2.5	48201.600	3.5
425.9940	74.00	-.94	16857.422	0.0	40331.931	0.0
425.9987	26.00	-3.67	26874.534	5.0	50342.180	6.0
426.0000	44.00	-1.11	10566.135	0.0	34040.313	0.0
426.0072	26.00	-3.91	27394.676	3.0	50861.850	3.0
426.0106	28.01	-4.07	96535.870	3.5	120002.860	3.5
426.0120	64.00	-.25	483.945	0.0	23957.462	0.0
426.0124	28.01	-1.85	108368.050	2.5	131834.940	2.5
426.0138	26.00	-1.77	24772.019	1.0	48238.832	2.0
426.0275	26.02	-4.54	199139.760	5.0	222605.820	4.0
426.0290	74.00	-.24	17986.627	0.0	41459.208	0.0
426.0305	26.02	-.01	199300.150	2.0	222766.040	3.0
426.0340	90.00	-.40	9759.560	0.0	33231.865	0.0
426.0360	42.00	.37	26213.694	0.0	49685.889	0.0
426.0428	14.00	-3.34	39760.285	1.0	63225.500	2.0
426.0479	26.00	-.03	19350.882	5.0	42815.814	5.0
426.0487	25.01	-4.62	14901.180	1.0	38366.070	2.0
426.0489	24.00	-3.52	25359.620	4.0	48824.500	4.0
426.0543	24.00	-1.27	31987.060	4.0	55451.640	3.0
426.0616	27.00	-3.22	23207.760	1.5	46671.940	2.5
426.0660	42.00	-.01	25729.749	0.0	49200.291	0.0
426.0696	23.01	-3.28	13490.840	2.0	36954.580	1.0
426.0729	26.00	-2.23	22946.810	1.0	46410.366	1.0
426.0730	25.02	-.64	193498.070	3.5	216961.620	3.5
426.0739	23.01	-4.38	49210.780	3.0	72674.280	2.0
426.0758	23.01	-2.75	13741.610	3.0	37205.010	3.0
426.0758	12.02	-2.20	559987.100	1.0	583450.500	1.0
426.0758	12.02	-2.20	559987.100	1.0	583450.500	1.0
426.0772	22.00	-.30	18525.070	2.0	41988.390	3.0
426.0850	76.00	-.99	0.000	0.0	23469.496	0.0
426.0877	26.02	-1.90	199139.760	5.0	222602.500	6.0
426.0907	29.01	-4.95	113302.800	4.0	136765.380	4.0
426.0908	24.00	-4.99	27597.220	3.0	51059.790	4.0
426.0917	28.00	-2.76	28578.046	3.0	52040.568	2.0
426.0921	27.01	-4.38	24074.600	2.0	47537.100	2.0
426.0980	72.00	-.95	10485.478	0.0	33954.257	0.0
426.1041	26.01	-3.36	62662.300	5.5	86124.140	4.5
426.1043	28.01	-2.16	108763.320	.5	132225.150	1.5
426.1129	9.01	-4.51	246682.100	2.0	270143.460	2.0
426.1160	58.01	-.63	8711.012	0.0	32178.800	0.0
426.1194	17.01	-.11	147053.700	2.0	170514.700	1.0
426.1210	40.00	-1.37	5484.711	0.0	28952.224	0.0
426.1219	14.02	-1.61	234387.640	1.0	257848.500	2.0
426.1278	7.00	-2.57	83317.800	1.5	106778.337	1.5
426.1282	25.00	-.18	38008.700	5.5	61469.210	5.5
426.1293	25.02	-.89	192012.750	1.5	215473.200	1.5
426.1335	29.01	-4.55	110365.980	2.0	133826.200	2.0
426.1350	24.00	-.49	23498.840	4.0	46958.980	5.0
426.1391	26.02	.38	184181.390	1.0	207641.300	2.0
426.1402	28.01	-2.58	105838.060	3.5	129297.910	3.5
426.1420	40.00	-.49	12663.231	0.0	36129.587	0.0
426.1450	24.00	-3.92	29824.750	3.0	53284.340	3.0
426.1537	26.01	-4.63	60837.590	6.5	84296.700	5.5
426.1579	25.02	.36	194849.100	1.5	218307.980	2.5
426.1602	24.00	-1.12	25177.390	4.0	48636.140	3.0
426.1606	22.00	-.53	18593.990	3.0	42052.720	3.0
426.1629	26.01	-4.53	61726.090	3.5	85184.690	4.5
426.1682	23.01	-3.26	49568.450	3.0	73026.760	2.0
426.1702	30.02	-1.35	214878.000	3.0	238336.200	2.0
426.1702	13.01	-3.60	121480.900	2.0	144939.100	1.0
426.1710	41.00	-.81	8952.985	0.0	32417.744	0.0
426.1715	26.02	-.59	199300.150	2.0	222758.280	2.0
426.1756	13.01	-4.07	121481.200	1.0	144939.100	1.0
426.1800	59.01	-1.47	3387.616	0.0	26851.880	0.0
426.1840	24.01	-3.52	25033.950	3.5	48491.390	2.5
426.1847	8.01	-4.24	252608.900	3.5	276066.300	2.5
426.1902	13.01	-1.98	124792.000	2.0	148249.100	3.0
426.1918	24.01	-4.62	42898.120	2.5	66355.130	1.5
426.1924	24.01	-1.93	31168.780	3.5	54625.760	2.5
426.1931	28.01	-4.57	106022.790	.5	129479.730	1.5
426.1944	26.02	-4.54	166222.200	4.0	189679.070	3.0
426.2020	28.01	-2.50	105838.060	3.5	129294.510	2.5
426.2050	41.00	-.84	967.890	0.0	24430.778	0.0
426.2090	64.00	.82	6694.574	0.0	30157.241	0.0
426.2135	24.00	-3.89	25106.340	3.0	48562.160	4.0
426.2156	24.00	-3.77	23512.000	1.0	46967.700	2.0
426.2158	28.01	-4.70	115120.000	2.5	138575.690	2.5
426.2164	23.00	-.66	14949.300	4.5	38404.960	5.5
426.2171	28.01	-4.89	115108.090	2.5	138563.710	3.5
426.2180	25.02	-.55	192948.290	1.5	216403.860	2.5
426.2180	24.00	-3.41	25206.020	3.0	48661.590	3.0
426.2236	25.00	-1.05	38934.940	2.5	62390.200	1.5
426.2274	24.00	-4.59	29824.750	3.0	53279.800	2.0
426.2340	57.00	-1.27	1048.548	0.0	24509.839	0.0
426.2373	24.00	-1.02	24833.860	3.0	48268.370	4.0
426.2458	10.01	-1.11	305364.030	4.5	328818.070	3.5
426.2658	10.01	-2.67	305365.130	3.5	328818.070	3.5
426.2661	10.01	-1.22	305365.130	3.5	328818.050	2.5
426.2680	62.01	-.84	2984.328	0.0	26443.748	0.0
426.2687	26.00	-3.92	35257.309	4.0	58710.090	3.0
426.2732	18.02	-2.55	243424.970	3.0	266877.500	3.0
426.2812	23.00	-4.60	26480.280	3.5	49932.370	4.5
426.2937	22.00	-1.65	25388.334	4.0	48839.740	3.0
426.3071	26.02	-4.49	182810.660	5.0	206261.330	4.0
426.3134	22.00	.32	15220.390	5.0	38670.710	4.0
426.3143	24.00	.28	31048.000	7.0	54498.270	8.0
426.3161	8.01	-2.02	232462.830	2.5	255913.000	1.5
426.3178	26.02	-.15	199300.150	2.0	222750.230	3.0
426.3216	7.00	-2.58	83364.590	2.5	106814.459	2.5
426.3229	17.01	-1.73	147125.700	3.0	170575.500	3.0
426.3312	22.00	-5.54	14105.680	3.0	37555.021	3.0
426.3316	27.00	-2.96	25269.250	3.5	48718.570	2.5
426.3320	74.00	.37	22906.736	0.0	46362.634	0.0
426.3360	90.01	-1.62	9356.272	0.0	32811.950	0.0
426.3385	26.02	-.02	199327.950	1.0	222776.890	1.0
426.3390	72.00	-2.16	0.000	0.0	23455.513	0.0
426.3400	44.00	-1.48	10566.135	0.0	34021.593	0.0
426.3430	58.01	-.44	8307.725	0.0	31763.018	0.0
426.3447	19.01	.07	163237.000	1.0	186685.600	2.0
426.3469	23.02	-2.49	161027.320	4.5	184475.800	4.5
426.3476	22.00	-3.69	15220.390	5.0	38668.832	6.0
426.3503	24.01	-6.13	25043.100	1.5	48491.390	2.5
426.3590	57.01	.01	15647.559	0.0	39101.972	0.0
426.3711	24.01	-2.79	50667.330	3.5	74114.480	3.5
426.3810	59.01	-1.22	2984.328	0.0	26437.531	0.0
426.3840	28.01	-2.81	105838.060	3.5	129284.500	2.5
426.3851	23.01	-3.04	13594.730	2.0	37041.110	2.0
426.3871	26.02	-.32	199327.950	1.0	222774.220	2.0
426.3930	26.00	-3.06	33412.706	3.0	56858.650	2.0
426.3950	58.01	-.84	8711.012	0.0	32163.445	0.0
426.4118	23.00	-1.56	14514.750	1.5	37959.660	2.5
426.4220	24.01	-5.26	25047.040	2.5	48491.390	2.5
426.4254	25.01	-4.82	47073.560	3.0	70517.720	3.0
426.4256	25.00	-2.76	35041.370	3.5	58485.520	4.5
426.4370	58.01	-.65	7178.519	0.0	30628.642	0.0
426.4420	56.00	-.90	12266.000	0.0	35715.848	0.0
426.4489	23.01	-3.66	13511.710	1.0	36954.580	1.0
426.4496	24.00	-4.96	41393.470	5.0	64836.300	6.0
426.4551	28.01	-4.10	105981.500	4.5	129424.030	5.5
426.4581	17.00	-1.90	71958.363	2.5	95400.731	2.5
426.4615	9.02	-4.59	442748.850	2.5	466191.030	2.5
426.4624	27.00	-4.20	21215.900	.5	44658.030	1.5
426.4644	24.01	-2.58	67070.480	1.5	90512.500	1.5
426.4732	26.00	-1.80	31937.308	1.0	55376.842	2.0
426.4750	76.00	-1.04	13308.491	0.0	36756.524	0.0
426.4787	22.00	-3.48	12118.394	4.0	35559.627	5.0
426.4842	7.00	-3.44	83317.800	1.5	106758.731	.5
426.5040	22.00	-4.80	18145.400	2.0	41585.240	3.0
426.5062	24.00	-4.09	27223.050	2.0	50662.770	1.0
426.5080	62.01	-1.43	1451.835	0.0	24898.054	0.0
426.5172	26.00	-4.30	27559.568	2.0	50998.686	2.0
426.5226	24.00	-2.63	38537.680	5.0	61976.500	4.0
426.5228	26.00	-1.92	31937.308	1.0	55376.117	1.0
426.5260	26.00	-1.66	31686.342	2.0	55124.974	3.0
426.5279	22.00	-.53	18462.830	0.0	41901.360	1.0
426.5300	77.00	-1.54	12824.546	0.0	36269.556	0.0
426.5311	26.02	-3.63	114325.350	5.0	137763.700	5.0
426.5361	28.01	-3.87	105981.500	4.5	129419.580	4.5
426.5410	26.01	-4.00	63273.030	2.5	86710.840	1.5
426.5498	22.00	-3.16	19421.576	3.0	42856.900	3.0
426.5511	16.01	-4.39	109831.280	1.5	133268.530	.5
426.5557	27.01	-5.49	24411.500	0.0	47848.500	1.0
426.5608	28.01	-3.10	105861.190	2.5	129297.910	3.5
426.5610	44.00	-1.10	10566.135	0.0	34009.441	0.0
426.5634	23.00	-4.62	26352.590	2.5	49789.170	3.5
426.5683	28.01	-3.84	112686.300	2.5	136122.610	2.5
426.5685	27.01	-4.00	62440.200	1.0	85876.500	1.0
426.5692	22.00	-.90	15108.121	3.0	38544.380	3.0
426.5781	10.01	-2.01	290583.170	1.5	314018.940	.5
426.5812	24.02	-4.85	71868.500	6.0	95304.100	6.0
426.5823	28.01	-4.65	113753.040	4.5	137188.580	4.5
426.5870	25.02	-3.90	109841.120	3.5	133276.400	4.5
426.5883	10.00	-3.49	149824.221	2.0	173259.430	1.0
426.5908	26.01	-4.28	62244.570	1.5	85679.640	2.5
426.5923	25.00	-.46	23719.520	1.5	47154.510	1.5
426.6020	41.00	-.16	8630.355	0.0	32071.408	0.0
426.6087	28.01	-3.71	93390.060	2.5	116824.150	2.5
426.6165	28.01	-.76	105838.060	3.5	129271.720	3.5
426.6180	42.00	-.25	20487.010	0.0	43927.164	0.0
426.6191	24.01	-3.85	31351.150	2.5	54784.670	3.5
426.6205	22.00	-1.26	18525.070	2.0	41958.510	2.0
426.6227	28.01	-3.17	105861.190	2.5	129294.510	2.5
426.6282	18.00	-2.36	93750.639	1.0	117183.654	2.0
426.6310	62.00	-.76	806.575	0.0	24246.034	0.0
426.6320	92.00	-1.51	0.000	0.0	23439.404	0.0
426.6513	9.02	-4.32	466708.250	1.5	490140.000	1.5
426.6520	24.00	-4.20	27223.050	2.0	50654.760	2.0
426.6526	28.01	-3.91	70635.460	2.5	94067.140	1.5
426.6527	18.01	-.42	134241.650	2.5	157673.320	2.5
426.6540	74.00	-.10	23793.968	0.0	47232.164	0.0
426.6600	64.00	-.29	967.890	0.0	24405.756	0.0
426.6710	60.01	-1.46	1613.150	0.0	25050.412	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
426.6771	26.02	-.13	199327.950	1.0	222758.280	2.0
426.6795	24.00	-2.15	24200.230	6.0	47630.430	6.0
426.6923	27.01	-4.35	27484.300	3.0	50913.800	2.0
426.6968	25.02	-1.82	194971.150	2.5	218400.400	3.5
426.6968	26.00	-1.48	21999.132	4.0	45428.385	4.0
426.6984	23.00	-4.04	11100.650	4.5	34529.810	4.5
426.6988	24.00	-3.05	21856.940	3.0	45286.080	4.0
426.7000	64.00	-.52	161.315	0.0	23596.984	0.0
426.7001	6.01	.56	145549.270	1.5	168978.340	2.5
426.7015	28.01	-4.89	99418.610	3.5	122847.600	3.5
426.7030	25.01	-3.52	44315.170	6.0	67744.080	6.0
426.7125	23.01	-5.54	13490.840	2.0	36919.230	3.0
426.7170	28.01	-3.82	97799.660	1.5	121227.800	2.5
426.7187	27.00	-2.84	27497.060	2.5	50925.110	1.5
426.7219	24.00	-1.26	36577.730	4.0	60005.600	5.0
426.7261	6.01	.72	145550.700	2.5	168978.340	3.5
426.7261	6.01	-.58	145550.700	2.5	168978.340	2.5
426.7300	92.01	-1.89	887.233	0.0	24321.255	0.0
426.7329	24.00	-2.98	28637.000	3.0	52064.270	4.0
426.7354	25.02	-.16	192880.160	3.5	216307.290	4.5
426.7384	26.00	-4.03	34547.192	2.0	57974.160	2.0
426.7393	10.01	-3.60	280173.010	4.5	303599.930	3.5
426.7405	24.01	-4.46	50687.630	2.5	74114.480	3.5
426.7436	26.01	-9.13	20805.830	4.5	44232.510	4.5
426.7498	18.01	-1.94	158167.710	1.5	181594.050	2.5
426.7558	23.00	-3.37	15103.770	4.5	38529.780	4.5
426.7587	29.01	-3.37	95565.650	4.0	118991.500	4.0
426.7792	16.01	.29	129858.070	1.5	153282.800	2.5
426.7828	26.00	-1.30	25091.620	0.0	48516.150	1.0
426.7848	25.01	-1.99	62564.700	1.0	85989.120	2.0
426.7852	17.01	-4.55	149798.300	2.0	173222.700	3.0
426.7895	26.00	-.71	36940.600	2.0	60364.760	3.0
426.7926	24.00	-2.55	37205.880	3.0	60629.870	2.0
426.7946	25.01	-4.78	47073.560	3.0	70497.440	4.0
426.7970	26.02	-2.71	114339.950	4.0	137763.700	5.0
426.8010	26.01	-3.56	49101.090	.5	72524.620	1.5
426.8020	40.00	-.83	5000.766	0.0	28430.834	0.0
426.8023	27.00	-4.16	1809.330	1.5	25232.790	.5
426.8033	28.00	-2.90	34163.294	2.0	57586.700	2.0
426.8050	28.01	-4.13	105861.190	2.5	129284.500	2.5
426.8080	42.00	.20	25487.776	0.0	48917.515	0.0
426.8083	29.01	-3.61	113302.800	4.0	136725.930	5.0
426.8100	77.00	-1.29	7017.204	0.0	30446.833	0.0
426.8121	28.01	-2.07	75917.630	3.5	99340.550	3.5
426.8187	26.02	-1.52	181772.590	6.0	205195.150	5.0
426.8220	23.02	-1.63	160576.620	3.5	183999.000	3.5
426.8256	27.00	-4.36	29294.520	3.5	52716.700	3.5
426.8260	73.00	-.61	15324.929	0.0	38753.680	0.0
426.8289	23.01	-4.93	49723.680	4.0	73145.680	3.0
426.8300	58.01	-1.29	5887.999	0.0	29316.530	0.0
426.8369	24.01	-3.96	53566.220	3.5	76987.780	2.5
426.8408	22.00	-2.48	25493.722	2.0	48915.070	2.0
426.8429	28.00	-4.65	25753.578	4.0	49174.811	4.0
426.8429	25.02	-3.24	192741.670	.5	216162.900	1.5
426.8431	24.00	-3.22	31377.960	4.0	54799.180	5.0
426.8438	27.00	-2.07	20500.710	1.5	43921.890	2.5
426.8542	22.00	-2.67	25438.898	2.0	48859.510	1.0
426.8581	22.00	-3.53	18037.225	4.0	41457.620	3.0
426.8592	22.00	-.75	17423.853	2.0	40844.190	3.0
426.8592	22.00	-2.75	17423.853	2.0	40844.190	1.0
426.8636	14.02	-1.31	234428.400	1.0	257848.500	2.0
426.8650	23.00	.56	15062.940	6.5	38482.960	6.5
426.8670	41.00	-1.90	80.658	0.0	23507.159	0.0
426.8686	25.00	-3.60	38934.940	2.5	62354.760	1.5
426.8730	64.01	-.71	8791.670	0.0	32217.841	0.0
426.8737	28.00	-3.26	27414.893	2.0	50834.435	2.0
426.8740	26.00	-1.82	26623.726	2.0	50043.250	1.0
426.8776	24.00	-.96	32097.360	6.0	55516.690	6.0
426.8854	25.00	-2.57	41230.300	3.5	64649.200	3.5
426.8887	28.01	-3.56	99418.610	3.5	122837.330	4.5
426.8905	24.01	-1.62	52298.120	3.5	75716.740	3.5
426.8927	22.00	-1.11	18482.860	1.0	41901.360	1.0
426.8952	24.00	-3.43	25089.200	2.0	48507.560	1.0
426.9009	24.00	-3.69	24833.860	3.0	48251.910	3.0
426.9020	6.00	-1.84	61981.820	1.0	85399.810	2.0
426.9030	9.01	-2.13	265255.640	5.0	288673.570	4.0
426.9048	9.01	-.95	265255.640	5.0	288673.470	5.0
426.9094	9.02	-4.04	466722.420	2.5	490140.000	2.5
426.9174	28.00	-2.79	27414.893	2.0	50832.039	3.0
426.9215	25.01	-3.18	62572.200	2.0	85989.120	2.0
426.9250	58.01	-.66	7743.122	0.0	31166.440	0.0
426.9275	24.01	-2.54	31083.110	1.5	54499.700	1.5
426.9280	42.00	.30	21212.928	0.0	44636.081	0.0
426.9330	24.00	-4.72	31009.000	3.0	54425.290	4.0
426.9390	74.00	-1.27	2903.671	0.0	26326.221	0.0
426.9400	22.00	-3.68	15156.787	4.0	38572.692	5.0
426.9462	18.01	-3.38	179592.130	2.5	203007.690	1.5
426.9499	22.00	-3.72	11531.760	2.0	34947.120	1.0
426.9500	57.01	.01	14276.381	0.0	37698.327	0.0
426.9555	10.01	-2.37	283894.410	.5	307309.460	.5
426.9576	29.01	-2.87	116326.160	3.0	139741.100	3.0
426.9610	76.00	-.28	18793.202	0.0	42214.545	0.0
426.9610	92.01	-1.71	1693.808	0.0	25115.151	0.0
426.9649	28.01	-4.00	105981.500	4.5	129396.040	5.5
426.9660	28.01	-.81	115081.360	4.5	138495.840	4.5
426.9682	23.01	-3.33	49731.320	2.0	73145.680	3.0
426.9682	24.00	-3.84	21810.840	1.0	45225.200	2.0
426.9745	16.01	-.08	129787.710	.5	153201.720	1.5
426.9770	62.01	-2.50	1935.780	0.0	25356.245	0.0
426.9778	23.00	-.91	14910.040	3.5	38323.670	4.5
426.9780	74.00	-.49	18147.942	0.0	41568.352	0.0
426.9793	7.00	-3.64	83364.590	2.5	106778.337	1.5
426.9861	26.00	-4.92	27394.676	3.0	50808.053	4.0
426.9891	18.01	-4.45	179931.770	1.5	203344.980	1.5
426.9893	25.02	-.85	194894.780	1.5	218307.980	2.5
426.9940	90.00	-1.21	8065.752	0.0	31485.285	0.0
426.9959	24.00	-.99	24897.550	4.0	48310.390	5.0
427.0136	27.00	-4.91	31871.150	3.5	55283.020	2.5
427.0143	22.00	.13	18695.230	4.0	42107.060	4.0
427.0183	28.01	-4.19	92373.450	2.5	115785.060	1.5
427.0187	23.01	-4.29	49268.610	4.0	72680.200	5.0
427.0190	58.01	-.42	4436.164	0.0	27854.326	0.0
427.0280	64.00	-.66	6694.574	0.0	30112.242	0.0
427.0303	26.00	-3.06	20874.482	3.0	44285.436	2.0
427.0325	23.00	-2.83	14548.830	2.5	37959.660	2.5
427.0358	27.00	-2.03	20500.710	1.5	43911.360	1.5
427.0380	28.01	-.98	105861.190	2.5	129271.720	3.5
427.0388	26.01	-4.58	36252.960	2.5	59663.450	1.5
427.0389	28.01	-2.11	115085.360	3.5	138495.840	4.5
427.0415	27.00	-3.34	8460.810	2.5	31871.150	3.5
427.0460	20.02	-4.62	370141.770	5.0	393551.860	5.0
427.0513	28.01	-3.96	91800.050	4.5	115209.850	3.5
427.0546	26.01	-4.96	60625.470	5.5	84035.090	6.5
427.0560	60.01	-1.82	0.000	0.0	23416.133	0.0
427.0586	17.01	-.01	147125.700	3.0	170535.100	2.0
427.0667	23.01	-3.23	13741.610	3.0	37150.570	4.0
427.0690	41.00	-.29	8952.985	0.0	32368.405	0.0
427.0707	24.00	-4.58	25106.340	3.0	48515.060	3.0
427.0714	27.01	-4.49	25147.200	4.0	48555.900	5.0
427.0720	58.01	-.22	7662.464	0.0	31077.720	0.0
427.0730	62.01	-2.42	1451.835	0.0	24867.036	0.0
427.0840	62.01	-1.50	5242.739	0.0	28657.337	0.0
427.0878	28.01	-3.77	68965.650	1.5	92373.450	2.5
427.0909	24.00	-3.28	21847.880	2.0	45255.510	3.0
427.0942	27.00	-2.44	29563.170	1.5	52970.620	2.5
427.1021	22.00	-4.02	25317.813	1.0	48724.830	1.0
427.1066	29.01	-2.44	123016.630	3.0	146423.400	4.0
427.1072	24.00	-.75	25038.610	5.0	48445.350	6.0
427.1090	90.01	-2.60	1774.465	0.0	25187.692	0.0
427.1111	22.00	-2.31	25317.813	1.0	48724.340	2.0
427.1159	26.00	-.44	19757.020	3.0	43163.282	4.0
427.1170	9.01	-.13	265267.370	4.0	288673.570	4.0
427.1189	9.01	.48	265267.370	4.0	288673.470	5.0
427.1247	24.00	-3.30	31393.400	5.0	54799.180	5.0
427.1313	25.00	-3.09	38669.600	3.5	62075.020	2.5
427.1322	23.00	-3.33	17181.980	4.5	40587.350	3.5
427.1360	25.02	-3.81	121117.140	3.5	144522.300	4.5
427.1378	24.00	-1.95	27223.050	2.0	50628.110	3.0
427.1398	28.00	-3.39	25753.578	4.0	49158.529	5.0
427.1398	9.02	-2.22	442636.270	3.5	466041.220	3.5
427.1404	25.00	-3.17	35114.980	2.5	58519.900	3.5
427.1510	73.00	-1.49	10566.135	0.0	33977.060	0.0
427.1550	23.00	.35	15000.840	5.5	38404.960	5.5
427.1638	26.00	-4.90	17726.985	2.0	41130.620	1.0
427.1678	25.02	.26	192880.160	3.5	216283.580	3.5
427.1710	69.00	-.45	8711.012	0.0	32120.841	0.0
427.1763	26.00	.19	11976.239	4.0	35379.189	5.0
427.1772	26.00	-4.15	26224.961	3.0	49627.861	4.0
427.1780	28.01	-3.94	112719.750	3.5	136122.610	2.5
427.1818	20.02	-.66	350741.190	3.0	374143.840	3.0
427.1860	62.00	-.94	2258.411	0.0	25667.418	0.0
427.1871	29.01	-4.14	114511.440	1.0	137913.800	1.0
427.1891	20.02	-2.11	350741.190	3.0	374143.440	4.0
427.1904	24.01	-2.35	67448.820	4.5	90851.000	4.5
427.1931	22.01	-3.47	16525.250	1.5	40027.280	1.5
427.1943	26.00	-4.13	19621.004	5.0	43022.969	4.0
427.1955	9.02	-3.33	442636.270	3.5	466038.170	2.5
427.1964	25.02	-1.55	194971.150	2.5	218373.000	1.5
427.2006	25.01	-4.71	62587.500	3.0	85989.120	2.0
427.2010	62.01	-2.42	1451.835	0.0	24860.020	0.0
427.2060	42.00	-.12	26052.379	0.0	49460.290	0.0
427.2097	22.00	-2.71	19322.988	2.0	42724.110	2.0
427.2148	22.00	-1.73	25438.898	2.0	48839.740	3.0
427.2166	18.00	-1.94	93750.639	1.0	117151.387	1.0
427.2192	29.01	-4.66	125230.600	3.0	148631.200	3.0
427.2194	24.00	-1.66	33934.880	3.0	57335.470	4.0
427.2202	28.00	-2.13	35639.148	3.0	59039.693	4.0
427.2247	27.01	-3.13	28111.900	2.0	51512.200	3.0
427.2270	59.01	-.75	2984.328	0.0	26391.088	0.0
427.2288	9.01	-3.30	265255.640	5.0	288655.720	4.0
427.2318	22.00	-1.08	18911.399	2.0	42311.310	3.0
427.2425	22.00	-1.52	6661.003	3.0	30060.328	4.0
427.2472	29.01	-3.03	123016.630	3.0	146415.700	2.0
427.2556	25.01	-4.59	59537.400	4.0	82936.010	3.0
427.2563	24.00	-3.39	21856.940	3.0	45255.510	3.0
427.2587	26.02	-1.77	199212.720	4.0	222611.160	5.0
427.2721	20.02	.52	350741.190	3.0	374138.900	4.0
427.2740	27.00	-4.62	31871.150	3.5	55268.750	3.5
427.2781	9.01	-1.66	265267.370	4.0	288664.750	3.0
427.2790	60.01	-1.67	0.000	0.0	23403.912	0.0
427.2850	72.01	-.76	13389.148	0.0	36792.731	0.0
427.2860	90.00	-.83	8711.012	0.0	32114.540	0.0
427.2864	26.00	-3.91	29371.860	3.0	52768.780	4.0
427.2903	24.00	-.78	23386.350	3.0	46783.060	4.0
427.2936	24.01	-4.07	65029.670	.5	88426.200	.5
427.2970	41.00	-.99	10808.108	0.0	34211.034	0.0
427.3045	25.01	-4.81	81659.500	3.0	105055.430	2.0
427.3070	8.01	-1.38	232747.510	2.5	256143.300	3.5
427.3070	42.00	-.62	16534.792	0.0	39937.170	0.0
427.3100	3.00	-1.60	14904.000	0.0	38306.214	0.0
427.3135	24.01	-3.27	52321.300	4.5	75716.740	3.5
427.3145	9.01	-1.14	265288.870	3.0	288684.250	2.0
427.3152	22.00	-5.63	11639.804	3.0	35035.147	2.0
427.3246	27.00	-2.39	33150.680	1.5	56545.510	2.5
427.3252	29.01	-4.26	125247.800	2.0	148642.600	2.0
427.3305	27.00	-3.30	29948.760	2.5	53343.270	1.5
427.3314	24.00	-4.27	37233.500	5.0	60627.960	4.0
427.3315	26.01	-3.35	21812.040	1.5	45206.490	.5
427.3325	22.00	-.16	18593.990	3.0	41986.390	3.0
427.3357	26.00	-3.80	19390.165	6.0	42784.387	6.0
427.3360	41.00	-.91	12017.970	0.0	35418.760	0.0
427.3360	90.01	-1.05	8307.725	0.0	31708.515	0.0
427.3372	26.02	.35	184247.160	2.0	207641.300	2.0
427.3409	26.02	.59	184247.160	2.0	207641.100	3.0
427.3430	45.00	-.99	13873.093	0.0	37273.500	0.0
427.3440	58.01	-.58	8711.012	0.0	32111.364	0.0
427.3474	25.02	.11	195112.810	3.5	218506.390	3.5
427.3520	40.01	-1.42	6049.314	0.0	29449.228	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
427.3562	26.02	-.37	199212.720	4.0	222605.820	4.0
427.3623	22.00	-2.32	25643.695	3.0	49036.460	4.0
427.3643	11.00	-2.37	16956.172	.5	40348.830	1.5
427.3668	26.02	-1.41	199212.720	4.0	222605.240	3.0
427.3690	74.00	-.27	22342.133	0.0	45741.116	0.0
427.3778	26.00	-3.39	24574.655	4.0	47966.571	3.0
427.3838	12.00	-2.02	35051.264	1.0	58442.853	2.0
427.3871	26.00	-1.27	24772.019	1.0	48163.427	2.0
427.3874	20.02	-.59	324660.470	3.0	348051.860	4.0
427.3891	24.01	-1.93	67334.200	3.5	90725.500	3.5
427.3946	24.00	-4.00	21810.840	1.0	45201.840	1.0
427.3979	24.00	-1.90	24897.550	4.0	48288.370	4.0
427.3980	92.01	-2.11	887.233	0.0	24284.628	0.0
427.4002	24.00	-2.78	24940.610	2.0	48331.300	1.0
427.4138	26.02	-3.50	206180.410	3.0	229570.360	2.0
427.4170	64.00	-.75	0.000	0.0	23396.355	0.0
427.4225	25.02	.02	195315.780	2.5	218705.250	2.5
427.4231	8.01	-.54	232753.860	3.5	256143.300	3.5
427.4289	26.00	-1.96	36975.640	3.0	60364.760	3.0
427.4309	22.00	-.31	18482.860	1.0	41871.870	2.0
427.4333	23.01	-3.21	25191.080	2.0	48579.960	3.0
427.4359	25.01	-4.43	44521.520	4.0	67910.260	4.0
427.4366	22.00	-.60	18482.860	1.0	41871.560	0.0
427.4430	9.01	-.59	265267.370	4.0	288655.720	4.0
427.4550	74.00	.03	19922.407	0.0	43316.682	0.0
427.4568	22.00	.22	15156.787	4.0	38544.380	3.0
427.4597	22.00	-1.29	6598.749	2.0	29986.185	3.0
427.4664	24.01	-4.52	40415.340	.5	63802.410	.5
427.4690	41.00	-.89	8711.012	0.0	32104.521	0.0
427.4746	9.01	-1.48	265267.370	4.0	288653.990	3.0
427.4770	40.00	-1.48	4113.534	0.0	27506.605	0.0
427.4777	26.02	-2.20	181808.700	5.0	205195.150	5.0
427.4796	24.00	-.16	0.000	3.0	23386.350	3.0
427.4891	24.00	-2.33	24200.230	6.0	47586.060	5.0
427.5084	24.00	-4.24	25177.390	4.0	48562.160	4.0
427.5088	27.00	-1.00	28777.270	3.5	52162.020	3.5
427.5097	30.02	-3.35	260584.100	1.0	283968.800	0.0
427.5097	9.01	-.67	265288.870	3.0	288673.570	4.0
427.5107	29.00	-.12	39038.240	0.0	62429.467	0.0
427.5121	24.00	-4.53	24303.940	3.0	47688.510	4.0
427.5161	18.01	-.68	159706.460	.5	183090.810	1.5
427.5189	12.02	.11	583450.500	1.0	606834.700	2.0
427.5218	29.01	-2.60	116326.160	3.0	139710.200	2.0
427.5231	24.00	-2.43	24833.860	3.0	48217.830	2.0
427.5308	28.00	-1.91	33590.159	4.0	56973.707	5.0
427.5335	29.01	-3.46	125247.800	2.0	148631.200	3.0
427.5336	22.00	-4.72	25388.334	4.0	48771.730	5.0
427.5359	9.01	.95	265255.640	5.0	288638.910	6.0
427.5383	9.01	-2.12	265255.640	5.0	288638.780	5.0
427.5408	25.02	-1.47	124823.900	4.5	148206.900	5.5
427.5490	23.01	-4.16	49568.450	3.0	72951.000	4.0
427.5490	23.00	-3.17	17054.870	2.5	40437.420	1.5
427.5490	74.00	-.33	17986.627	0.0	41375.759	0.0
427.5529	8.01	.40	232753.860	3.5	256136.200	4.5
427.5560	58.01	-.89	4436.164	0.0	27824.913	0.0
427.5571	24.01	-2.12	31117.590	2.5	54499.700	1.5
427.5640	57.01	-1.74	2581.041	0.0	25969.352	0.0
427.5699	26.00	-3.46	20641.110	4.0	44022.518	4.0
427.5759	24.01	-4.73	67344.420	2.5	90725.500	3.5
427.5776	22.00	-1.60	18825.890	1.0	42206.880	2.0
427.5822	22.00	-2.27	25643.695	3.0	49024.430	3.0
427.5883	25.01	-1.89	62572.200	2.0	85952.600	3.0
427.5979	20.02	-4.70	370172.430	4.0	393552.310	4.0
427.5986	29.01	-1.00	123556.640	2.0	146936.480	2.0
427.5990	8.01	-.52	232745.980	1.5	256125.800	2.5
427.6028	26.01	-4.62	62083.170	4.5	85462.780	3.5
427.6105	27.00	-.75	28777.270	3.5	52156.460	4.5
427.6205	27.00	-2.20	23184.230	2.5	46562.870	1.5
427.6213	29.01	-3.91	118163.500	2.0	141542.100	2.0
427.6270	8.01	-.93	232747.510	2.5	256125.800	2.5
427.6284	25.00	-3.11	41031.480	4.5	64409.690	3.5
427.6360	22.00	-1.88	25537.276	1.0	48915.070	2.0
427.6421	28.01	-3.28	96535.870	3.5	119913.330	4.5
427.6436	22.00	-.36	13981.750	1.0	37359.130	2.0
427.6447	24.00	-3.52	21847.880	2.0	45225.200	2.0
427.6488	17.01	.19	147198.400	4.0	170575.500	3.0
427.6517	8.01	-.78	232536.060	1.5	255913.000	1.5
427.6588	23.01	-4.15	13542.680	3.0	36919.230	3.0
427.6635	22.00	-.40	18525.070	2.0	41901.360	1.0
427.6660	26.00	-1.68	31307.235	4.0	54683.390	4.0
427.6699	8.01	-1.72	232536.060	1.5	255912.000	.5
427.6704	26.00	-3.43	26351.049	5.0	49726.964	4.0
427.6710	9.01	-.09	265288.870	3.0	288664.750	3.0
427.6720	40.00	-1.34	4113.534	0.0	27495.939	0.0
427.6750	74.00	-.16	19438.462	0.0	42820.703	0.0
427.6763	8.01	.52	232747.510	2.5	256123.100	3.5
427.6786	11.00	-2.11	16973.368	1.5	40348.830	2.5
427.6786	11.00	-3.07	16973.368	1.5	40348.830	1.5
427.6810	90.01	-1.51	8307.725	0.0	31689.638	0.0
427.6910	42.00	.24	16615.449	0.0	39996.815	0.0
427.6924	9.01	-2.26	265288.870	3.0	288663.580	2.0
427.6924	9.01	-2.59	265255.640	5.0	288630.350	4.0
427.6950	23.00	.25	14949.300	4.5	38323.870	4.5
427.6960	90.01	-1.65	9114.300	0.0	32495.393	0.0
427.7150	76.00	-.61	18954.517	0.0	42334.571	0.0
427.7192	23.00	-2.30	8412.940	.5	31786.190	.5
427.7240	42.00	-.18	12259.943	0.0	35639.506	0.0
427.7260	44.00	-.97	14760.326	0.0	38139.779	0.0
427.7290	60.01	-1.89	1451.835	0.0	24831.124	0.0
427.7310	90.01	-1.85	0.000	0.0	23379.180	0.0
427.7365	24.00	-5.31	7593.160	2.0	30965.460	3.0
427.7393	27.00	-3.46	33173.360	3.5	56545.510	2.5
427.7393	26.00	-3.25	21038.987	2.0	44411.137	1.0
427.7431	8.01	-1.51	232753.860	3.5	256125.800	2.5
427.7439	24.01	-2.81	67353.600	4.5	90725.500	3.5
427.7457	8.01	-.16	232711.700	.5	256083.500	1.5
427.7477	9.01	-.90	265255.640	5.0	288627.330	4.0
427.7481	24.00	-1.79	37244.170	4.0	60615.840	3.0
427.7500	41.00	-1.74	80.658	0.0	23458.799	0.0
427.7524	18.01	.02	148842.370	2.5	172213.800	1.5
427.7528	9.01	.61	265267.370	4.0	288638.780	5.0
427.7598	9.01	.14	265255.640	5.0	288626.670	5.0
427.7663	26.00	-3.56	19621.004	5.0	42991.680	5.0
427.7677	26.00	-1.54	33412.706	3.0	56783.306	3.0
427.7695	8.01	-3.96	232526.700	1.5	255897.200	2.5
427.7735	24.00	-3.78	29824.750	3.0	53195.030	2.0
427.7766	28.01	-4.51	99442.860	4.5	122812.970	3.5
427.7777	22.01	-1.15	40074.710	3.5	63444.760	3.5
427.7843	29.01	-2.81	116371.410	4.0	139741.100	3.0
427.7865	27.01	-4.21	22009.230	4.0	45378.800	4.0
427.7882	26.02	-3.22	181825.670	4.0	205195.150	5.0
427.7925	8.01	-.26	232753.860	3.5	256123.100	3.5
427.7996	26.00	-3.00	34328.733	3.0	57697.590	4.0
427.8079	24.01	-3.41	42986.730	1.5	66355.130	1.5
427.8101	9.02	-3.61	466771.720	3.5	490140.000	2.5
427.8105	24.00	-4.14	21856.940	3.0	45225.200	2.0
427.8149	26.01	-3.89	21711.890	3.5	45079.910	2.5
427.8215	20.02	-.05	324660.470	3.0	348028.130	3.0
427.8218	22.00	.39	20795.599	5.0	44163.240	5.0
427.8220	26.00	-1.38	27166.804	4.0	50534.435	3.0
427.8250	58.01	-.82	10727.450	0.0	34101.493	0.0
427.8290	9.01	-3.30	265267.370	4.0	288634.620	3.0
427.8301	25.01	-3.83	41182.530	7.0	64549.720	6.0
427.8363	9.01	.65	265288.870	3.0	288655.720	4.0
427.8372	26.00	-3.39	22946.810	1.0	46313.610	2.0
427.8414	8.01	-1.61	232462.830	2.5	255829.400	3.5
427.8528	16.01	-.16	129787.710	.5	153153.660	.5
427.8557	22.00	-2.82	25493.722	2.0	48859.510	1.0
427.8599	25.01	-3.01	43311.000	1.0	66676.560	2.0
427.8600	45.00	-1.24	11856.655	0.0	35228.786	0.0
427.8603	28.01	-2.72	93528.440	3.5	116893.980	2.5
427.8672	25.00	-.71	38120.180	4.5	61485.340	4.5
427.8680	9.01	-.99	265288.870	3.0	288653.990	3.0
427.8683	25.01	-3.59	62587.500	3.0	85952.600	3.0
427.8690	44.00	-1.00	13873.093	0.0	37244.732	0.0
427.8738	17.02	-3.86	216710.400	3.5	240075.200	3.5
427.8775	30.02	-3.53	237642.700	3.0	261007.300	2.0
427.8775	30.02	-2.38	237642.700	3.0	261007.300	2.0
427.8788	26.00	-3.98	28604.610	2.0	51969.140	3.0
427.8790	22.00	-1.28	18593.990	3.0	41958.510	2.0
427.8804	25.00	-1.67	38669.600	3.5	62034.040	3.5
427.8817	20.02	-.52	350779.470	3.0	374143.840	3.0
427.8870	58.01	-1.16	2500.383	0.0	25871.039	0.0
427.8879	23.01	-.89	32299.240	1.0	55663.270	1.0
427.8891	20.02	.91	350779.470	3.0	374143.440	4.0
427.8916	9.01	-.76	265309.740	4.0	288673.570	4.0
427.8934	9.01	.62	265309.740	4.0	288673.470	5.0
427.8967	24.01	-5.28	25035.640	.5	48399.190	1.5
427.9060	73.00	-2.65	0.000	0.0	23369.619	0.0
427.9068	8.01	-4.12	232480.100	.5	255843.100	1.5
427.9072	9.01	-.97	265267.370	4.0	288630.350	4.0
427.9090	26.00	-2.33	29320.050	1.0	52682.930	2.0
427.9216	28.01	-2.81	53365.170	4.5	76727.360	5.5
427.9254	28.00	-4.76	30392.052	1.0	53754.036	2.0
427.9297	9.01	-1.44	265267.370	4.0	288629.120	3.0
427.9473	26.00	-1.64	31322.603	3.0	54683.390	4.0
427.9500	41.00	-.90	8630.355	0.0	31997.571	0.0
427.9541	25.00	-.63	38120.180	4.5	61480.600	3.5
427.9550	28.01	-2.73	70706.770	1.5	94067.140	1.5
427.9625	9.01	-1.47	265267.370	4.0	288627.330	4.0
427.9645	23.01	-4.15	13594.730	2.0	36954.580	1.0
427.9680	62.01	-.97	2177.753	0.0	25543.986	0.0
427.9710	41.00	-.79	12017.970	0.0	35384.039	0.0
427.9722	20.02	-4.03	350779.470	3.0	374138.900	4.0
427.9746	9.01	-.72	265267.370	4.0	288626.670	5.0
427.9755	25.01	-4.87	41190.470	6.0	64549.720	6.0
427.9806	24.00	-2.71	35501.260	3.0	58860.230	2.0
427.9811	28.00	-2.29	34408.574	1.0	57767.520	1.0
427.9870	26.00	-2.51	23051.744	0.0	46410.366	1.0
427.9876	24.00	-3.14	31377.960	4.0	54736.550	4.0
427.9907	29.01	-1.53	121524.670	3.0	144883.090	2.0
427.9933	21.01	-3.05	4802.750	2.0	28161.030	3.0
427.9940	62.01	-1.70	1935.780	0.0	25300.594	0.0
428.0071	26.00	-4.07	24335.764	2.0	47693.289	3.0
428.0078	22.00	-1.19	18695.230	4.0	42052.720	3.0
428.0098	28.01	-2.78	108763.320	.5	132120.700	.5
428.0140	58.01	-.89	5887.999	0.0	29251.721	0.0
428.0142	26.01	-4.59	62322.500	3.5	85679.640	2.5
428.0153	28.00	-1.73	33500.854	3.0	56857.933	4.0
428.0178	24.00	-1.05	31048.000	7.0	54404.940	7.0
428.0182	23.02	-2.71	160879.980	4.5	184236.900	4.5
428.0248	24.00	-4.15	35398.020	4.0	58754.580	5.0
428.0255	28.01	-4.60	110573.360	2.5	133929.880	3.5
428.0270	57.00	-.50	1048.548	0.0	24411.560	0.0
428.0320	62.01	-2.27	806.575	0.0	24169.314	0.0
428.0334	24.01	-4.43	25043.100	1.5	48399.190	1.5
428.0360	24.00	-1.86	27703.840	4.0	51059.790	4.0
428.0422	24.00	.24	31049.330	6.0	54404.940	7.0
428.0438	10.01	-3.54	280173.010	4.5	303528.530	3.5
428.0463	17.00	-3.30	71958.363	2.5	95313.749	1.5
428.0474	26.00	-2.33	24574.655	4.0	47929.981	4.0
428.0490	64.01	-.70	2823.013	0.0	26184.824	0.0
428.0508	25.00	-3.50	41230.300	3.5	64585.440	4.5
428.0514	27.00	-2.03	23207.760	1.5	46562.870	1.5
428.0532	9.01	-2.23	265309.740	4.0	288664.750	3.0
428.0540	26.00	-3.39	26105.908	6.0	49460.876	5.0
428.0570	90.00	-1.53	5484.711	0.0	28846.086	0.0
428.0583	10.01	-1.90	280173.010	4.5	303527.740	4.5
428.0600	41.00	-.99	5242.739	0.0	28603.950	0.0
428.0621	26.00	-4.54	24338.766	3.0	47693.289	3.0
428.0651	24.00	-2.59	24897.550	4.0	48251.910	3.0
428.0724	24.00	-4.55	21847.880	2.0	45201.840	1.0
428.0790	62.01	-.50	3871.561	0.0	27231.735	0.0
428.0812	25.02	-.65	195315.780	2.5	218669.260	1.5
428.0816	27.01	-4.32	63587.000	3.0	86940.460	2.0
428.0832	28.00	-3.55	35639.148	3.0	58992.520	2.0
428.0864	24.00	-1.80	27597.220	3.0	50950.420	3.0
428.0882	29.01	-3.58	116388.000	2.0	139741.100	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
428.0918	13.01	-4.38	110087.500	2.0	133440.400	3.0
428.0929	9.02	-4.73	443625.310	2.5	466978.150	1.5
428.0946	27.00	-2.40	29563.170	1.5	52915.920	.5
428.0983	24.00	-2.99	25206.020	3.0	48558.570	2.0
428.1000	58.01	-1.17	4436.164	0.0	27795.192	0.0
428.1023	24.00	-2.48	25106.340	3.0	48458.670	2.0
428.1028	22.00	-4.50	15220.390	5.0	38572.692	5.0
428.1056	24.01	-4.10	25047.040	2.5	48399.190	1.5
428.1070	90.01	-2.24	1451.835	0.0	24810.481	0.0
428.1097	25.00	-.45	23549.200	2.5	46901.130	2.5
428.1102	9.02	-4.91	443630.960	3.5	466982.860	2.5
428.1160	58.01	-1.30	4436.164	0.0	27794.319	0.0
428.1193	9.02	-3.88	466788.600	2.5	490140.000	1.5
428.1249	10.01	-.50	280473.580	1.5	303824.680	2.5
428.1364	26.01	-4.42	61512.670	4.5	84863.140	5.5
428.1369	22.00	-1.41	6556.828	1.0	29907.273	2.0
428.1401	8.01	-.45	232462.830	2.5	255813.100	2.5
428.1410	90.01	-1.44	8388.382	0.0	31745.173	0.0
428.1471	25.02	-.08	192365.520	1.5	215715.410	1.5
428.1535	24.00	-3.25	28682.180	2.0	52031.720	3.0
428.1566	8.01	-1.95	232462.630	2.5	255812.200	1.5
428.1593	26.00	-3.48	19788.248	4.0	43137.472	3.0
428.1628	25.00	-1.63	38120.180	4.5	61469.210	5.5
428.1693	25.01	-.92	85895.270	2.0	109243.950	3.0
428.1786	29.01	-2.90	122867.530	1.0	146215.700	1.0
428.1930	44.00	-.75	15405.586	0.0	38759.541	0.0
428.1936	25.01	-2.80	43339.100	2.0	66686.450	3.0
428.1940	25.02	-.57	192172.890	2.5	215520.220	2.5
428.1984	25.01	-.70	85895.270	2.0	109242.360	2.0
428.1995	8.01	-1.35	232796.270	2.5	256143.300	3.5
428.2030	40.00	.13	17744.654	0.0	41098.063	0.0
428.2030	92.01	-1.80	241.973	0.0	23595.382	0.0
428.2037	22.00	-.48	18525.070	2.0	41871.870	2.0
428.2040	90.01	-.92	6129.972	0.0	29483.327	0.0
428.2125	27.01	-1.60	61240.800	3.0	84587.120	4.0
428.2177	25.01	-.75	85895.270	2.0	109241.310	1.0
428.2181	22.00	-1.85	25493.722	2.0	48839.740	3.0
428.2188	9.01	-1.91	265309.740	4.0	288655.720	4.0
428.2200	40.00	-.56	5162.081	0.0	28514.563	0.0
428.2210	62.00	.29	3064.986	0.0	26417.414	0.0
428.2220	44.00	-1.61	6452.602	0.0	29804.975	0.0
428.2230	9.01	-2.18	265288.870	3.0	288634.620	3.0
428.2331	9.01	-4.87	265288.870	3.0	288634.070	2.0
428.2340	74.00	-.37	19115.832	0.0	42467.551	0.0
428.2360	28.01	-.75	104646.520	3.5	127991.560	3.5
428.2375	26.02	-1.63	182392.550	2.0	205737.510	2.0
428.2406	26.00	-.69	17550.180	3.0	40894.972	2.0
428.2430	24.01	-4.01	67506.340	5.5	90851.000	4.5
428.2440	59.01	-.58	4355.506	0.0	27706.680	0.0
428.2450	92.01	-1.37	4516.821	0.0	27867.940	0.0
428.2505	9.01	-1.26	265309.740	4.0	288653.990	3.0
428.2531	25.01	-1.88	44521.520	4.0	67865.630	4.0
428.2562	27.00	-1.36	28777.270	3.5	52121.210	4.5
428.2570	60.01	-1.76	483.945	0.0	23834.410	0.0
428.2614	22.00	-3.80	13981.750	1.0	37325.407	2.0
428.2615	16.01	-.09	129858.070	1.5	153201.720	1.5
428.2626	9.02	-3.87	442694.580	1.5	466038.170	2.5
428.2665	26.02	-2.03	199262.440	3.0	222605.820	4.0
428.2702	22.00	.13	15108.121	3.0	38451.298	2.0
428.2771	26.02	-3.02	199262.440	3.0	222605.240	3.0
428.2830	62.00	.01	2258.411	0.0	25607.458	0.0
428.2898	18.01	-1.06	135085.920	1.5	158428.030	.5
428.2914	23.00	-.67	15062.940	6.5	38404.960	5.5
428.2918	10.03	.31	648060.000	1.5	671402.000	2.5
428.2925	26.00	-3.34	29313.008	6.0	52654.971	7.0
428.2988	8.01	.17	232745.980	1.5	256087.600	2.5
428.3002	24.00	-1.63	33934.880	3.0	57276.420	3.0
428.3013	9.01	-.06	265288.870	3.0	288630.350	4.0
428.3085	9.02	-4.63	467827.160	1.5	491168.250	2.5
428.3100	56.00	.09	11395.000	0.0	34742.575	0.0
428.3144	24.00	-1.87	33935.650	2.0	57276.420	3.0
428.3175	13.01	-2.10	124792.000	2.0	148132.600	3.0
428.3246	25.01	-4.58	52379.380	2.0	75719.590	1.0
428.3269	8.01	.01	232747.510	2.5	256087.600	2.5
428.3298	23.01	-3.67	49210.780	3.0	72550.710	4.0
428.3318	26.02	-2.38	182392.550	2.0	205732.370	3.0
428.3320	27.00	-3.68	21215.900	.5	44555.710	1.5
428.3336	23.01	-4.60	49568.450	3.0	72908.170	3.0
428.3338	9.01	-3.90	265288.870	3.0	288628.580	2.0
428.3389	26.00	-4.35	21038.987	2.0	44378.420	1.0
428.3424	28.00	-3.06	27414.893	2.0	50754.137	2.0
428.3500	62.00	-.47	806.575	0.0	24151.970	0.0
428.3520	90.01	-1.34	9194.957	0.0	32540.243	0.0
428.3557	20.02	-2.09	350805.320	4.0	374143.840	3.0
428.3560	27.00	-3.40	25739.930	2.5	49078.430	1.5
428.3568	9.01	-1.10	265288.870	3.0	288627.330	4.0
428.3615	24.01	-3.44	67387.300	2.5	90725.500	3.5
428.3621	10.01	-3.38	280262.330	3.5	303600.500	2.5
428.3624	25.01	-3.50	82830.750	4.0	106168.900	5.0
428.3630	20.02	-.54	350805.320	4.0	374143.440	4.0
428.3726	10.01	-1.48	280262.330	3.5	303599.930	3.5
428.3740	8.01	-.19	232745.980	1.5	256083.500	1.5
428.3751	25.01	-2.87	43339.100	2.0	66676.560	2.0
428.3799	22.00	-4.20	15877.180	2.0	39214.380	3.0
428.3826	26.02	-.75	206233.310	2.0	229570.360	2.0
428.3867	25.02	-.06	194971.150	2.5	218307.980	2.5
428.3869	26.00	-5.53	7985.783	2.0	31322.603	3.0
428.3914	22.00	-3.67	18287.560	4.0	41624.130	4.0
428.4021	8.01	-1.06	232747.510	2.5	256083.500	1.5
428.4072	23.00	.25	14910.040	3.5	38245.750	3.5
428.4082	22.00	-2.62	12118.394	4.0	35454.051	4.0
428.4085	25.00	-1.19	23818.870	.5	47154.510	1.5
428.4102	26.01	-3.11	61527.590	6.5	84863.140	5.5
428.4146	25.02	-.13	192576.420	2.5	215911.730	1.5
428.4208	24.01	-2.25	31083.110	1.5	54418.080	.5
428.4282	25.02	-4.38	172613.870	2.5	195948.440	3.5
428.4330	44.00	-.31	8952.985	0.0	32293.857	0.0
428.4388	20.02	1.02	350805.320	4.0	374139.310	5.0
428.4407	26.00	-2.80	24118.815	4.0	47452.702	4.0
428.4427	25.01	-2.51	43311.000	1.0	66644.780	1.0
428.4434	8.01	-1.49	232753.860	3.5	256087.600	2.5
428.4463	20.02	-.62	350805.320	4.0	374138.900	4.0
428.4520	60.01	-.73	5000.766	0.0	28340.603	0.0
428.4568	24.00	-3.84	28679.430	1.0	52012.440	2.0
428.4671	28.00	-1.23	25753.578	4.0	49086.030	4.0
428.4717	24.00	-1.22	23305.010	2.0	46637.210	3.0
428.4790	25.02	-.52	194849.100	1.5	218180.900	1.5
428.4790	19.01	-1.45	189243.700	1.0	212575.500	2.0
428.4808	20.02	-2.91	359520.600	2.0	382852.300	2.0
428.4809	24.01	-4.81	67393.800	3.5	90725.500	3.5
428.4838	10.01	-1.02	280268.960	2.5	303600.500	2.5
428.4887	28.00	-1.52	31441.665	2.0	54772.940	3.0
428.4900	19.01	-1.74	189661.700	2.0	212992.900	1.0
428.4942	10.01	-1.76	280268.960	2.5	303599.930	3.5
428.4960	74.00	-.72	19438.462	0.0	42775.903	0.0
428.4979	16.02	.11	146736.540	1.0	170067.310	2.0
428.4979	16.02	-3.46	146736.540	1.0	170067.310	2.0
428.5000	22.00	-.15	14028.470	2.0	37359.130	2.0
428.5071	24.00	-4.61	35398.020	4.0	58728.290	4.0
428.5102	12.02	-2.17	562136.100	2.0	585466.200	1.0
428.5102	12.02	-2.17	562136.100	2.0	585466.200	1.0
428.5176	28.00	-1.97	27414.893	2.0	50744.593	1.0
428.5182	29.01	-1.88	123556.640	2.0	146886.310	1.0
428.5207	8.01	-.55	232796.270	2.5	256125.800	2.5
428.5277	26.02	-3.01	206180.410	3.0	229509.560	3.0
428.5297	9.01	.51	265309.740	4.0	288638.780	5.0
428.5369	26.01	-3.21	49101.090	.5	72429.740	.5
428.5370	58.01	-.42	7259.177	0.0	30594.385	0.0
428.5378	26.02	-2.05	182408.910	3.0	205737.510	2.0
428.5396	27.01	-3.22	27585.300	1.0	50913.800	2.0
428.5445	26.00	-1.38	26105.908	6.0	49434.142	6.0
428.5459	22.00	-2.91	18818.230	0.0	42146.390	1.0
428.5470	25.01	-4.23	41190.470	6.0	64518.570	5.0
428.5500	62.01	-2.34	2177.753	0.0	25512.253	0.0
428.5703	8.01	-2.23	232796.270	2.5	256123.100	3.5
428.5714	22.00	-4.16	15975.590	3.0	39302.360	4.0
428.5740	26.01	-3.10	63273.030	2.5	86599.660	2.5
428.5747	25.00	-4.10	37630.620	4.5	60957.210	3.5
428.5775	27.00	-3.47	1406.840	2.5	24733.280	2.5
428.5820	64.00	.20	6452.602	0.0	29785.360	0.0
428.5828	26.00	-1.33	29356.780	2.0	52682.930	2.0
428.5900	76.00	-1.09	12905.203	0.0	36237.525	0.0
428.5946	24.00	-2.23	33762.740	6.0	57088.250	5.0
428.5992	25.00	-3.85	37630.620	4.5	60955.880	4.5
428.6006	22.00	-.28	6661.003	3.0	29986.185	3.0
428.6010	74.00	-1.10	13227.833	0.0	36559.556	0.0
428.6032	25.00	-2.72	45013.550	2.5	68338.590	3.5
428.6091	26.02	-.45	184316.580	3.0	207641.300	2.0
428.6120	64.00	-.54	1693.808	0.0	25024.933	0.0
428.6128	26.02	.43	184316.580	3.0	207641.100	3.0
428.6131	23.01	-2.81	13594.730	2.0	36919.230	3.0
428.6135	22.00	-1.76	25699.950	2.0	49024.430	3.0
428.6139	27.01	-3.16	63616.000	2.0	86940.460	2.0
428.6148	25.01	-4.63	44521.520	4.0	67845.930	5.0
428.6164	26.02	.77	184316.580	3.0	207640.900	4.0
428.6218	8.02	-3.49	267632.590	2.0	290956.620	1.0
428.6220	41.00	-.42	12582.573	0.0	35913.153	0.0
428.6249	26.01	-3.18	60402.380	2.5	83726.240	3.5
428.6322	26.02	-2.31	182408.910	3.0	205732.370	3.0
428.6380	73.00	-.46	19035.175	0.0	42364.884	0.0
428.6396	22.00	-3.25	18593.990	3.0	41917.050	4.0
428.6402	23.00	-.62	15000.840	5.5	38323.870	4.5
428.6435	26.00	-2.27	23783.617	5.0	47106.463	4.0
428.6447	22.00	-2.49	18695.230	4.0	42018.010	5.0
428.6510	40.01	-1.51	7743.122	0.0	31072.124	0.0
428.6548	22.00	-2.28	25537.276	1.0	48859.510	1.0
428.6554	29.01	-3.12	116388.000	2.0	139710.200	2.0
428.6600	25.02	-1.49	193235.430	2.5	216557.380	3.5
428.6620	77.00	-1.72	12098.628	0.0	35427.031	0.0
428.6640	62.01	-1.35	3468.273	0.0	26796.567	0.0
428.6782	29.01	-2.98	117883.140	4.0	141204.100	3.0
428.6797	24.00	-4.42	28682.180	2.0	52003.060	1.0
428.6830	28.00	-4.19	33500.854	3.0	56821.553	3.0
428.6839	26.00	-3.43	19788.248	4.0	43108.899	4.0
428.6846	9.01	-.14	265309.740	4.0	288630.350	4.0
428.6851	26.00	-1.90	27559.568	2.0	50880.152	1.0
428.6867	22.00	-2.47	18825.890	1.0	42146.390	1.0
428.6916	23.00	-3.08	14514.750	1.5	37834.980	1.5
428.6970	57.01	.26	15566.901	0.0	38893.400	0.0
428.6974	26.00	-1.68	31805.059	3.0	55124.974	3.0
428.6990	41.00	-1.17	645.260	0.0	23971.650	0.0
428.7010	26.02	-1.23	182412.650	4.0	205732.370	3.0
428.7050	44.00	-.36	13550.463	0.0	36876.526	0.0
428.7073	9.01	-1.56	265309.740	4.0	288629.120	3.0
428.7080	42.00	-.66	16534.792	0.0	39860.692	0.0
428.7124	23.03	-1.99	263902.300	3.0	287221.400	2.0
428.7186	26.00	-3.41	37046.000	4.0	60364.760	3.0
428.7245	28.01	-2.33	70748.700	.5	94067.140	1.5
428.7282	25.02	-2.19	192989.050	5.5	216307.290	4.5
428.7376	27.00	-1.14	28777.270	3.5	52095.000	3.5
428.7402	9.01	-.69	265309.740	4.0	288627.330	4.0
428.7405	22.00	-.35	6742.757	4.0	30060.328	4.0
428.7414	23.02	-2.10	160681.480	3.5	183999.000	3.5
428.7475	22.00	-4.79	22404.690	3.0	45721.878	4.0
428.7523	9.01	-3.36	265309.740	4.0	288626.670	5.0
428.7573	28.01	-4.09	111783.790	3.5	135100.450	3.5
428.7619	28.01	-3.77	105981.500	4.5	129297.910	3.5
428.7621	8.01	-4.60	232526.700	1.5	255843.100	1.5
428.7661	23.01	-4.53	49201.660	2.0	72517.840	1.0
428.7672	29.01	-3.13	117928.480	1.0	141244.600	1.0
428.7699	22.00	-4.88	6598.749	2.0	29914.720	3.0
428.7707	28.01	-4.50	97799.660	1.5	121115.590	1.5
428.7815	29.01	-3.34	116080.460	3.0	139395.800	4.0
428.7826	56.01	-1.87	49390.050	0.0	72711.892	0.0
428.7840	11.00	-3.19	16956.172	.5	40271.380	.5
428.7870	92.01	-1.83	0.000	0.0	23321.603	0.0
428.7872	22.01	-1.90	8710.470	1.5	32025.500	2.5
428.7936	26.00	-2.11	27666.334	1.0	50981.020	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
428.7993	28.00	-.22	30922.763	5.0	54237.136	4.0
428.8010	25.01	-3.05	43311.000	1.0	66625.280	0.0
428.8016	24.00	-3.01	35807.900	2.0	59122.150	3.0
428.8050	90.01	-.97	14679.669	0.0	38000.293	0.0
428.8058	24.00	-1.91	33906.650	1.0	57220.670	2.0
428.8122	26.02	-1.74	182418.700	4.0	205732.370	3.0
428.8148	26.00	-1.77	22249.430	3.0	45562.959	3.0
428.8150	22.00	-2.63	8492.421	1.0	31805.940	2.0
428.8151	22.00	-2.06	6598.749	2.0	29912.262	3.0
428.8205	23.01	-2.46	30613.970	4.0	53927.190	3.0
428.8281	24.01	-4.06	53566.220	3.5	76879.030	3.5
428.8294	25.01	-2.77	43696.190	3.0	67008.930	3.0
428.8378	24.00	-.35	37205.880	3.0	60518.160	3.0
428.8378	24.00	-.75	37205.880	3.0	60518.160	3.0
428.8385	28.01	-3.65	97799.660	1.5	121111.900	.5
428.8389	22.00	-1.35	18145.400	2.0	41457.620	3.0
428.8458	28.00	-1.52	30392.052	1.0	53703.899	1.0
428.8522	29.01	-3.90	125247.800	2.0	148559.300	2.0
428.8558	24.00	-3.62	24940.610	2.0	48251.910	3.0
428.8569	27.00	-4.90	28845.220	5.5	52156.460	4.5
428.8582	26.01	-3.94	62151.610	2.5	85462.780	3.5
428.8593	15.01	-.57	101636.490	1.0	124947.600	2.0
428.8601	26.00	-2.80	29371.860	3.0	52682.930	2.0
428.8640	42.00	-.17	11775.998	0.0	35093.413	0.0
428.8660	90.00	-1.29	7420.492	0.0	30737.799	0.0
428.8670	58.01	-1.15	2581.041	0.0	25898.293	0.0
428.8705	19.01	-1.37	166461.500	1.0	189772.000	0.0
428.8710	45.00	-.60	7743.122	0.0	31060.157	0.0
428.8718	8.01	-.57	232602.570	.5	255913.000	1.5
428.8755	23.01	-3.47	13609.000	4.0	36919.230	3.0
428.8784	22.00	-4.83	6661.003	3.0	29971.078	4.0
428.8797	17.01	-3.44	161348.400	1.0	184658.400	2.0
428.8799	23.00	-2.33	8476.200	1.5	31786.190	.5
428.8840	92.00	-.18	6210.629	0.0	29526.957	0.0
428.8902	8.01	-.96	232602.570	.5	255912.000	.5
428.8959	26.00	-2.84	20874.482	3.0	44183.607	2.0
428.9069	22.00	-.42	6598.749	2.0	29907.273	2.0
428.9085	28.01	-2.36	99132.780	5.5	122441.220	4.5
428.9088	24.00	-1.54	35813.730	3.0	59122.150	3.0
428.9101	25.00	-3.82	37630.620	4.5	60938.970	4.5
428.9230	25.01	-3.10	81713.020	0.0	105020.670	1.0
428.9298	26.00	-3.90	19552.474	1.0	42859.756	2.0
428.9309	26.01	-4.71	60989.480	4.5	84296.700	5.5
428.9384	20.02	-1.34	324110.240	4.0	347417.050	3.0
428.9385	24.00	-3.52	27728.870	2.0	51035.680	2.0
428.9405	22.00	-4.44	16106.080	4.0	39412.780	5.0
428.9420	42.00	-.04	21051.613	0.0	44364.788	0.0
428.9440	41.00	-.85	5887.999	0.0	29201.066	0.0
428.9450	58.01	-1.04	3548.931	0.0	26861.943	0.0
428.9497	28.01	-4.85	113225.060	.5	136531.260	1.5
428.9589	15.03	.04	296757.800	2.0	320063.500	1.0
428.9593	25.01	-3.57	43339.100	2.0	66644.780	1.0
428.9701	26.02	-2.43	199300.150	2.0	222605.240	3.0
428.9716	24.00	-.31	0.000	3.0	23305.010	2.0
428.9793	26.01	-4.09	62158.190	4.5	85462.780	3.5
428.9841	22.00	-3.40	18037.225	4.0	41341.553	5.0
428.9904	26.00	-1.66	27394.676	3.0	50698.666	2.0
428.9905	22.00	-.12	17540.205	3.0	40844.190	3.0
428.9940	58.01	-.15	2581.041	0.0	25891.390	0.0
428.9953	24.00	-3.72	24282.340	4.0	47586.060	5.0
428.9994	9.02	-4.48	466191.030	2.5	489494.530	3.5
429.0066	25.00	-.83	37630.620	4.5	60933.730	5.5
429.0071	20.02	.71	347758.220	2.0	371061.300	3.0
429.0172	22.00	-1.65	19421.576	3.0	42724.110	2.0
429.0180	42.00	-.05	25407.119	0.0	48716.164	0.0
429.0218	26.00	-4.80	27559.568	2.0	50861.850	3.0
429.0237	22.01	-.97	9395.760	1.5	32697.940	2.5
429.0276	24.00	-2.74	25359.620	4.0	48661.590	3.0
429.0344	13.01	-2.03	121480.300	3.0	144781.900	3.0
429.0347	22.01	-1.53	16625.250	1.5	39926.830	2.5
429.0355	26.02	-1.62	182392.550	2.0	205694.040	1.0
429.0373	10.01	-.81	305364.030	4.5	328665.470	4.5
429.0381	26.00	-1.53	24118.815	4.0	47420.215	5.0
429.0401	10.01	.92	305364.030	4.5	328665.320	5.5
429.0408	25.02	-2.39	172451.230	1.5	195752.480	2.5
429.0419	23.00	-2.78	15103.770	4.5	38404.960	5.5
429.0452	22.00	-.88	17369.590	1.0	40670.600	2.0
429.0454	13.01	-1.13	121480.900	2.0	144781.900	3.0
429.0524	24.00	-4.85	31028.330	2.0	54328.950	3.0
429.0576	10.01	.83	305365.130	3.5	328665.470	4.5
429.0581	25.02	-1.87	192172.890	2.5	215473.200	1.5
429.0627	26.00	-3.34	29313.008	6.0	52613.072	5.0
429.0730	23.01	-4.10	13741.610	3.0	37041.110	2.0
429.0765	25.02	-.05	192576.420	2.5	215875.730	2.5
429.0856	26.00	-4.01	22838.320	2.0	46137.140	3.0
429.0882	18.01	-4.16	185624.730	3.5	208923.410	2.5
429.0929	22.00	-.55	6556.828	1.0	29855.248	1.0
429.0990	59.01	-2.07	1613.150	0.0	24917.795	0.0
429.0996	24.00	-1.68	37205.880	3.0	60503.940	4.0
429.0999	29.01	-4.03	108014.660	3.0	131312.700	3.0
429.1005	11.00	-2.89	16973.368	1.5	40271.380	.5
429.1038	18.02	-3.32	243424.970	3.0	266722.800	2.0
429.1038	9.02	-3.33	466196.700	3.5	489494.530	3.5
429.1040	28.01	-2.14	98822.550	6.5	122120.370	5.5
429.1066	22.00	.00	18287.560	4.0	41585.240	3.0
429.1125	26.02	-1.30	206233.310	2.0	229530.670	1.0
429.1170	75.00	-.94	16534.792	0.0	39838.460	0.0
429.1190	41.00	-.67	8307.725	0.0	31611.284	0.0
429.1200	40.00	-1.37	4355.506	0.0	27659.011	0.0
429.1200	42.00	.02	26294.352	0.0	49597.857	0.0
429.1202	22.00	-3.08	14028.470	2.0	37325.407	2.0
429.1270	8.01	-.23	232462.830	2.5	255759.400	3.5
429.1272	25.02	-1.02	193235.430	2.5	216531.990	1.5
429.1291	22.00	-5.07	6742.757	4.0	30039.211	5.0
429.1292	23.00	-.73	14949.300	4.5	38245.750	3.5
429.1331	22.01	-4.31	45548.900	1.5	68845.140	2.5
429.1350	40.00	-1.39	4113.534	0.0	27416.224	0.0
429.1428	28.01	-2.44	93528.440	3.5	116824.150	2.5
429.1431	26.00	-3.68	21999.132	4.0	45294.830	5.0
429.1451	16.01	-.97	129858.070	1.5	153153.660	.5
429.1465	26.00	-4.14	415.932	3.0	23711.443	4.0
429.1471	22.00	-2.18	18911.399	2.0	42206.880	2.0
429.1476	26.00	-3.58	12560.933	3.0	35856.386	2.0
429.1478	23.01	-4.33	49731.320	2.0	73026.760	2.0
429.1523	15.03	-.26	296757.800	2.0	320053.000	1.0
429.1578	24.00	-4.91	23933.900	4.0	47228.800	5.0
429.1602	22.01	-4.27	45472.890	.5	68767.660	1.5
429.1650	75.00	-1.36	14518.354	0.0	37819.415	0.0
429.1655	27.00	-5.00	31871.150	3.5	55165.630	2.5
429.1734	24.00	-1.92	37233.500	5.0	60527.550	6.0
429.1741	26.00	-4.12	23711.443	4.0	47005.455	5.0
429.1762	17.01	-.44	126725.100	1.0	150019.000	0.0
429.1823	23.00	.52	17242.050	5.5	40535.620	6.5
429.1863	25.01	-3.72	59537.400	4.0	82830.750	4.0
429.1898	22.00	-.81	18695.230	4.0	41988.390	3.0
429.1933	8.01	-1.63	232462.830	2.5	255755.800	2.5
429.1941	24.00	-.68	27597.220	3.0	50890.150	2.0
429.1963	26.02	-1.79	182444.700	3.0	205737.510	2.0
429.1978	27.00	-1.82	28777.270	3.5	52070.000	2.5
429.2040	41.00	-1.93	322.630	0.0	23621.574	0.0
429.2069	28.00	-1.82	32982.280	1.0	56274.516	2.0
429.2084	26.02	-.61	182379.860	5.0	205672.010	4.0
429.2097	23.00	-3.22	19026.340	2.5	42318.420	1.5
429.2121	26.00	-3.93	17550.180	3.0	40842.130	3.0
429.2130	42.00	-.56	11050.080	0.0	34346.536	0.0
429.2157	26.00	-4.71	20874.482	3.0	44166.240	3.0
429.2180	62.01	-1.45	2661.698	0.0	25959.882	0.0
429.2234	23.00	-1.68	19189.280	1.5	42480.620	.5
429.2235	8.01	-1.77	232796.270	2.5	256087.600	2.5
429.2247	27.00	-1.68	22475.360	4.5	45766.630	3.5
429.2288	26.00	-3.69	17726.985	2.0	41018.029	2.0
429.2341	28.00	-1.94	31441.665	2.0	54732.425	2.0
429.2433	29.01	-1.05	121524.670	3.0	144814.930	3.0
429.2438	25.01	-2.98	44521.520	4.0	67811.750	3.0
429.2440	28.01	-1.76	105981.500	4.5	129271.720	3.5
429.2480	41.00	-.59	8952.985	0.0	32249.541	0.0
429.2494	27.00	-4.37	31699.690	4.5	54989.620	3.5
429.2580	58.01	-.92	6452.602	0.0	29748.615	0.0
429.2641	22.00	-2.70	8436.618	0.0	31725.750	1.0
429.2693	28.01	-4.79	110573.360	2.5	133862.210	1.5
429.2726	25.01	-2.59	81732.000	1.0	105020.670	1.0
429.2740	22.00	-2.42	19322.988	2.0	42611.580	1.0
429.2770	58.01	-1.17	4436.164	0.0	27731.146	0.0
429.2868	25.02	.95	195308.790	4.5	218596.690	5.5
429.2910	26.02	-1.31	182444.700	3.0	205732.370	3.0
429.2925	25.02	-1.12	195112.810	3.5	218400.400	3.5
429.2980	24.00	-2.84	35572.940	2.0	58860.230	2.0
429.2991	8.01	-2.43	232796.270	2.5	256083.500	1.5
429.3122	26.02	-4.78	166498.000	3.0	189784.520	2.0
429.3142	28.01	-2.74	99154.810	4.5	122441.220	4.5
429.3157	28.01	-2.05	108548.610	1.5	131834.940	2.5
429.3190	23.00	-2.17	14548.830	2.5	37834.980	1.5
429.3196	25.02	-.86	194894.780	1.5	218180.900	1.5
429.3210	42.00	-.41	11372.710	0.0	34665.305	0.0
429.3231	22.00	-2.04	25438.898	2.0	48724.830	1.0
429.3257	24.00	-2.16	33934.880	3.0	57220.670	2.0
429.3266	25.01	-.47	85960.410	3.0	109246.150	4.0
429.3280	44.00	-.85	8952.985	0.0	32245.200	0.0
429.3314	23.01	-3.35	30641.710	3.0	53927.190	3.0
429.3321	22.00	-2.82	25438.898	2.0	48724.340	2.0
429.3362	7.00	-3.64	96864.020	2.5	120149.238	3.5
429.3399	24.00	-1.91	33935.650	2.0	57220.670	2.0
429.3402	29.01	-3.99	125230.600	3.0	148515.600	4.0
429.3415	22.00	-1.52	19573.968	4.0	42858.900	3.0
429.3546	24.00	-1.00	23498.840	4.0	46783.060	4.0
429.3618	26.02	-1.33	181808.700	5.0	205092.530	4.0
429.3672	25.01	-.58	85960.410	3.0	109243.950	3.0
429.3880	42.00	-.87	10888.765	0.0	34177.725	0.0
429.3950	26.00	-3.67	34692.130	1.0	57974.160	2.0
429.3950	76.00	-.13	14760.326	0.0	38048.906	0.0
429.3954	14.02	-4.82	227084.210	2.0	250366.220	3.0
429.3965	25.01	-1.00	85960.410	3.0	109242.360	2.0
429.4040	26.00	-2.54	20641.110	4.0	43922.652	3.0
429.4098	22.01	-1.05	8744.270	2.5	32025.500	2.5
429.4100	74.00	-1.10	13227.833	0.0	36515.600	0.0
429.4127	26.00	-1.84	11976.239	4.0	35257.309	4.0
429.4269	9.01	-2.25	246283.630	2.0	269563.930	2.0
429.4284	10.01	-2.17	290371.950	2.5	313652.170	1.5
429.4360	73.00	-1.24	13227.833	0.0	36514.190	0.0
429.4428	25.02	-3.94	109780.400	2.5	133059.840	3.5
429.4428	16.01	.51	130134.080	2.5	153413.520	3.5
429.4448	22.00	-2.18	25635.740	1.0	48915.070	2.0
429.4568	18.01	-3.24	189654.780	2.5	212933.460	2.5
429.4603	25.02	-.25	194849.100	1.5	218127.590	.5
429.4610	74.00	-.80	2903.671	0.0	26188.672	0.0
429.4716	22.00	-.49	18593.990	3.0	41871.870	2.0
429.4734	25.00	-3.32	45060.810	3.5	68338.590	3.5
429.4760	58.01	-.67	10162.848	0.0	33447.036	0.0
429.4766	21.01	-1.34	4883.420	3.0	28161.030	3.0
429.4786	11.02	-2.66	442710.500	1.5	465988.000	.5
429.4790	40.00	-.53	5484.711	0.0	28768.737	0.0
429.4790	44.00	-.83	8469.040	0.0	31753.066	0.0
429.4790	72.00	-1.69	2339.068	0.0	25623.094	0.0
429.4837	24.00	-2.43	24940.610	2.0	48217.830	2.0
429.4871	8.01	.24	232536.060	1.5	255813.100	2.5
429.4913	26.00	-3.12	26351.049	5.0	49627.861	4.0
429.4937	24.01	-2.01	67448.820	4.5	90725.500	3.5
429.4963	28.01	-3.69	77332.470	2.5	100609.010	2.5
429.4978	28.01	-4.79	95017.710	4.5	118294.170	3.5
429.5016	26.02	-.88	206233.310	2.0	229509.560	3.0
429.5037	8.01	-.47	232536.060	1.5	255812.200	1.5
429.5081	26.01	-5.00	61587.240	5.5	84863.140	5.5
429.5083	22.00	-1.80	18061.540	1.0	41337.430	2.0
429.5088	24.00	-2.70	25548.640	5.0	48824.500	4.0
429.5162	27.01	-3.37	63665.000	1.0	86940.460	2.0
429.5184	23.00	-4.00	10892.500	3.5	34167.840	2.5
429.5297	25.01	-2.62	81780.700	3.0	105055.430	2.0
429.5319	24.01	-4.20	31351.150	2.5	54625.760	2.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
429.5330	26.02	-2.89	206295.810	1.0	229570.360	2.0
429.5402	23.00	-5.73	11100.650	4.5	34374.810	3.5
429.5432	29.01	-4.94	125247.800	2.0	148521.800	1.0
429.5433	24.00	-1.88	37244.170	4.0	60518.160	3.0
429.5433	24.00	-1.03	37244.170	4.0	60518.160	3.0
429.5567	20.02	-.50	324110.240	4.0	347383.510	4.0
429.5620	41.00	-.32	12259.943	0.0	35539.470	0.0
429.5740	62.01	-2.13	3468.273	0.0	26747.149	0.0
429.5751	22.00	-.38	6556.828	1.0	29829.097	0.0
429.5768	25.00	-1.77	37630.620	4.5	60902.800	3.5
429.5786	22.00	-3.02	15877.180	2.0	39149.260	2.0
429.5819	8.01	-1.14	252607.700	4.5	275879.600	3.5
429.5841	24.00	-2.03	25038.610	5.0	48310.390	5.0
429.5881	28.00	-.59	30979.789	4.0	54251.353	3.0
429.5916	22.00	-3.31	25643.695	3.0	48915.070	2.0
429.5924	23.00	-.91	14949.300	4.5	38220.630	5.5
429.5930	25.02	-.51	192392.200	3.5	215663.500	3.5
429.5930	44.00	-.45	9033.642	0.0	32311.489	0.0
429.5970	71.00	-1.25	7420.492	0.0	30698.122	0.0
429.6003	20.02	-4.16	359520.600	2.0	382791.500	3.0
429.6004	23.00	-1.03	17054.870	2.5	40325.770	2.5
429.6037	27.00	-4.23	23184.230	2.5	46454.950	1.5
429.6040	8.01	-1.23	252608.900	3.5	275879.600	2.5
429.6040	8.01	-3.33	252608.900	3.5	275879.600	3.5
429.6046	29.01	-4.61	123304.630	1.0	146575.300	2.0
429.6050	57.01	-.90	6129.972	0.0	29407.168	0.0
429.6070	58.01	-.39	8872.327	0.0	32149.415	0.0
429.6080	64.01	-.80	3952.218	0.0	27229.252	0.0
429.6087	14.00	-2.73	39955.053	2.0	63225.500	2.0
429.6089	24.00	-.75	37233.500	5.0	60503.940	4.0
429.6096	23.00	.42	17181.980	4.5	40452.380	5.5
429.6160	42.00	-.05	25407.119	0.0	48683.719	0.0
429.6163	24.01	-4.87	42986.730	1.5	66256.770	.5
429.6220	76.00	-1.23	13308.491	0.0	36584.766	0.0
429.6275	24.00	-1.97	24940.610	2.0	48210.040	1.0
429.6299	27.01	-5.60	24267.800	1.0	47537.100	2.0
429.6300	64.01	-.24	13308.491	0.0	36584.333	0.0
429.6325	25.02	-.08	192880.160	3.5	216149.320	3.5
429.6370	58.01	-1.35	6452.602	0.0	29728.065	0.0
429.6373	12.02	-.21	583450.500	1.0	606719.400	2.0
429.6386	24.00	-2.73	31048.000	7.0	54316.830	6.0
429.6410	72.00	-1.90	5484.711	0.0	28759.957	0.0
429.6412	27.00	-4.74	28845.220	5.5	52113.910	5.5
429.6563	26.01	-3.36	21812.040	1.5	45079.910	2.5
429.6578	28.01	-2.02	112686.300	2.5	135954.090	3.5
429.6581	28.00	-1.63	33590.159	4.0	56857.933	4.0
429.6620	42.00	-1.22	16615.449	0.0	39889.557	0.0
429.6632	24.00	-1.08	31049.330	6.0	54316.830	6.0
429.6670	58.01	.03	4113.534	0.0	27387.372	0.0
429.6707	38.01	-.72	53286.310	0.0	76559.947	0.0
429.6740	40.01	-.74	14034.408	0.0	37307.866	0.0
429.6740	62.00	.76	3952.218	0.0	27225.676	0.0
429.6750	26.02	-2.80	181825.670	4.0	205092.530	4.0
429.6765	26.00	-3.02	34547.192	2.0	57813.970	3.0
429.6770	45.00	-.97	13389.148	0.0	36662.444	0.0
429.6814	26.02	-.50	184374.590	4.0	207641.100	3.0
429.6851	26.02	.46	184374.590	4.0	207640.900	4.0
429.6851	26.02	.92	184374.590	4.0	207640.900	5.0
429.6871	10.01	-1.38	280262.330	3.5	303528.530	3.5
429.6946	25.02	-4.63	172682.640	3.5	195948.440	3.5
429.6970	28.00	-2.69	33500.854	3.0	56766.523	4.0
429.6971	24.00	-5.72	7593.160	2.0	30858.820	2.0
429.7017	10.01	-.40	280262.330	3.5	303527.740	4.5
429.7030	24.00	-1.51	21847.880	2.0	45113.220	3.0
429.7056	17.02	-1.22	198835.500	.5	222100.700	1.5
429.7085	22.00	-2.76	25537.276	1.0	48802.320	0.0
429.7091	9.02	-1.79	443625.310	2.5	466890.320	3.5
429.7103	23.00	-1.58	15264.830	5.5	38529.780	4.5
429.7110	92.01	-1.94	241.973	0.0	23513.428	0.0
429.7241	27.01	-6.97	24886.500	2.0	48150.700	3.0
429.7259	20.02	-1.70	359520.600	2.0	382784.700	3.0
429.7304	18.01	-2.73	186074.350	2.5	209338.210	3.5
429.7444	26.02	-3.34	182408.910	3.0	205672.010	4.0
429.7477	9.02	-2.45	443630.960	3.5	466893.880	4.5
429.7487	26.00	-2.63	35257.309	4.0	58520.180	4.0
429.7500	25.02	.87	195112.810	3.5	218375.610	4.5
429.7517	28.00	-4.89	27414.893	2.0	50677.599	3.0
429.7537	12.02	-1.21	583450.500	1.0	606713.100	1.0
429.7553	26.02	-2.96	181830.020	3.0	205092.530	4.0
429.7610	56.01	-3.66	45949.496	0.0	69218.243	0.0
429.7648	21.02	-.55	136871.000	3.5	160133.000	3.5
429.7648	21.02	1.00	136871.000	3.5	160133.000	4.5
429.7648	21.02	.88	136871.000	2.5	160133.000	3.5
429.7686	25.02	-.71	194545.780	.5	217807.570	1.5
429.7688	23.00	.31	17116.920	3.5	40378.700	4.5
429.7710	44.00	.26	7985.094	0.0	31253.300	0.0
429.7744	24.00	.20	31055.350	5.0	54316.830	6.0
429.7760	59.01	-.98	0.000	0.0	23267.935	0.0
429.7923	27.00	-1.67	30443.630	1.5	53704.140	2.5
429.7964	18.01	-1.64	172829.580	1.5	196089.870	2.5
429.8024	23.00	.21	17054.870	2.5	40314.830	3.5
429.8040	26.00	-2.02	24574.655	4.0	47834.529	5.0
429.8060	24.00	-.25	37244.170	4.0	60503.940	4.0
429.8093	9.02	-1.34	443630.960	3.5	466890.550	4.5
429.8097	10.01	.21	280268.960	2.5	303528.530	3.5
429.8135	26.02	-1.19	182412.650	4.0	205672.010	4.0
429.8135	9.02	-4.60	443630.960	3.5	466890.320	3.5
429.8141	24.00	-.38	35862.820	4.0	59122.150	3.0
429.8202	26.00	-1.73	25091.620	0.0	48350.620	1.0
429.8296	28.00	-2.17	29013.228	2.0	52271.716	2.0
429.8352	28.00	-2.09	31441.665	2.0	54699.852	3.0
429.8435	26.02	-4.73	166421.330	4.0	189679.070	3.0
429.8507	28.00	-1.30	30979.789	4.0	54237.136	4.0
429.8590	24.01	-3.50	67334.200	3.5	90591.100	2.5
429.8610	26.02	-2.59	182480.720	2.0	205737.510	2.0
429.8664	22.00	-.22	6598.749	2.0	29855.248	1.0
429.8686	26.00	-1.47	27166.804	4.0	50423.185	4.0
429.8705	24.00	-.92	21856.940	3.0	45113.220	3.0
429.8730	63.00	.24	13711.778	0.0	36974.463	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
429.8760	28.00	-5.55	3409.925	2.0	26665.903	3.0
429.8762	24.00	-2.45	23933.900	4.0	47189.870	4.0
429.8864	20.02	-2.30	359543.080	4.0	382798.500	4.0
429.8900	42.00	-1.03	18147.942	0.0	41409.707	0.0
429.9037	22.00	-3.44	25605.030	0.0	48859.510	1.0
429.9090	58.01	-1.44	3952.218	0.0	27212.955	0.0
429.9117	23.01	-3.58	30673.140	2.0	53927.190	3.0
429.9140	62.00	-.96	241.973	0.0	23502.439	0.0
429.9165	9.01	.30	215069.590	2.0	238323.380	3.0
429.9178	22.00	-3.60	6661.003	3.0	29914.720	3.0
429.9185	21.00	-7.37	14926.240	2.5	38179.920	1.5
429.9228	22.00	-.01	14105.680	3.0	37359.130	2.0
429.9241	26.00	-.56	19562.435	4.0	42815.814	5.0
429.9246	26.00	-1.48	26351.049	5.0	49604.402	5.0
429.9254	26.02	-1.97	182418.700	4.0	205672.010	4.0
429.9290	64.00	.18	6291.287	0.0	29550.942	0.0
429.9340	62.01	-1.84	4355.506	0.0	27614.890	0.0
429.9360	58.01	-.83	1371.178	0.0	24630.454	0.0
429.9530	9.02	-3.84	444575.350	2.5	467827.160	1.5
429.9548	25.02	-.62	192665.800	4.5	215917.520	4.5
429.9548	24.00	-4.41	33934.880	3.0	57186.600	3.0
429.9561	26.02	-3.41	182480.720	2.0	205732.370	3.0
429.9566	24.00	-4.05	35870.530	4.0	59122.150	3.0
429.9600	41.00	-.45	5242.739	0.0	28500.716	0.0
429.9625	26.00	-1.91	24338.766	3.0	47590.070	4.0
429.9633	22.00	-1.01	6661.003	3.0	29912.262	3.0
429.9645	6.00	-3.88	64089.850	1.0	87341.040	0.0
429.9660	26.02	-2.47	182486.400	1.0	205737.510	2.0
429.9660	10.01	-4.43	305566.940	1.5	328818.050	2.5
429.9707	24.00	-.89	23386.350	3.0	46637.210	3.0
429.9710	29.01	-2.88	116080.460	3.0	139331.300	3.0
429.9754	23.03	-1.39	264482.800	2.0	287733.400	2.0
429.9884	29.01	-3.37	118484.000	3.0	141733.900	2.0
429.9910	24.00	-2.70	25038.610	5.0	48288.370	4.0
429.9920	75.00	-.65	23793.968	0.0	47050.215	0.0
430.0004	24.00	-4.90	37244.170	4.0	60493.420	3.0
430.0056	22.01	-.47	9518.050	2.5	32767.020	3.5
430.0097	18.00	-1.75	93750.639	1.0	116999.389	2.0
430.0126	24.00	-.53	33113.270	4.0	56361.860	5.0
430.0158	20.02	-3.93	359543.080	4.0	382791.500	3.0
430.0185	20.02	-3.24	370304.540	2.0	393552.810	3.0
430.0189	25.00	-.63	37420.240	5.5	60668.490	4.5
430.0193	26.02	-1.99	206261.330	4.0	229509.560	3.0
430.0196	26.00	-2.19	31307.235	4.0	54555.450	4.0
430.0200	28.01	-4.72	71457.740	3.5	94705.930	3.5
430.0237	27.00	-3.16	31699.690	4.5	54947.680	5.5
430.0247	24.00	-1.89	33906.650	1.0	57154.590	0.0
430.0280	28.01	-4.75	75721.680	5.5	98969.440	5.5
430.0326	25.02	.67	195948.440	3.5	219195.950	4.5
430.0330	58.01	-.45	3548.931	0.0	26802.960	0.0
430.0385	27.00	-2.20	23207.760	1.5	46654.950	1.5
430.0385	10.01	-3.16	280262.330	3.5	303509.520	2.5
430.0400	23.01	-3.05	44657.990	2.0	67905.100	3.0
430.0422	25.01	-3.32	79458.380	2.0	102705.370	3.0
430.0440	57.01	-2.36	0.000	0.0	23253.435	0.0
430.0455	18.01	-2.67	172829.580	1.5	196076.390	1.5
430.0467	22.00	-.51	17423.853	2.0	40670.600	2.0
430.0480	24.01	-3.41	67344.420	2.5	90591.100	2.5
430.0498	24.00	-.58	27703.840	4.0	50950.420	3.0
430.0522	26.00	-4.44	21038.987	2.0	44285.436	2.0
430.0550	23.01	-4.69	49201.660	2.0	72447.960	3.0
430.0556	22.00	-.06	6661.003	3.0	29907.273	2.0
430.0650	18.01	-3.00	150147.620	2.5	173393.380	2.5
430.0670	26.01	-3.08	63465.190	1.5	86710.840	1.5
430.0704	26.02	-2.78	206324.890	2.0	229570.360	2.0
430.0707	25.02	-4.94	109841.120	3.5	133086.570	4.5
430.0816	26.00	-1.71	32133.977	2.0	55378.842	2.0
430.0848	18.01	-4.90	159706.460	.5	182951.150	.5
430.0990	41.00	-.37	5887.999	0.0	29138.460	0.0
430.1013	20.02	.79	350900.040	2.0	374143.840	3.0
430.1026	27.00	-1.02	29216.370	2.5	52460.100	2.5
430.1051	23.01	-3.69	49593.410	5.0	72837.000	6.0
430.1081	22.00	.27	6742.757	4.0	29986.185	3.0
430.1118	23.01	-1.29	32420.040	0.0	55663.270	1.0
430.1120	28.01	-4.77	94729.250	2.5	117972.470	3.5
430.1177	24.00	-.47	27816.880	5.0	51059.790	4.0
430.1220	60.00	-.67	2339.068	0.0	25588.286	0.0
430.1248	25.01	-2.76	81812.900	2.0	105055.430	2.0
430.1255	23.00	-2.17	14514.750	1.5	37757.240	.5
430.1280	62.00	-1.20	806.575	0.0	24055.468	0.0
430.1320	26.02	-2.58	206328.220	3.0	229570.360	2.0
430.1398	24.00	-2.32	35618.510	1.0	58860.230	2.0
430.1416	20.02	-3.62	359543.080	4.0	382784.700	3.0
430.1457	22.01	-1.69	39926.830	2.5	63168.230	2.5
430.1470	92.01	-2.06	0.000	0.0	23247.866	0.0
430.1472	26.02	-1.27	206180.410	3.0	229421.730	4.0
430.1494	20.02	-.01	323655.060	2.0	346896.260	2.0
430.1600	77.00	-.68	16454.134	0.0	39701.298	0.0
430.1610	68.00	-1.52	403.288	0.0	23650.398	0.0
430.1612	10.01	-1.86	280268.960	2.5	303509.520	2.5
430.1659	27.00	-3.17	30102.960	2.5	53343.270	1.5
430.1692	28.01	-2.79	92325.850	3.5	115565.980	2.5
430.1786	25.01	-3.92	82917.780	2.0	106157.400	3.0
430.1805	10.01	-2.78	280268.960	2.5	303508.480	1.5
430.1927	22.00	-1.57	25797.600	3.0	49036.460	4.0
430.1938	22.01	-1.28	9363.710	.5	32602.510	1.5
430.1940	22.00	-2.86	15975.590	3.0	39214.380	3.0
430.1973	27.00	-4.46	21215.900	.5	44454.510	.5
430.2087	28.00	-2.13	28068.091	4.0	51306.085	3.0
430.2100	59.01	-1.61	3387.616	0.0	26632.078	0.0
430.2108	23.00	-2.86	15770.720	4.5	39008.600	5.5
430.2110	74.00	-1.07	2903.671	0.0	26148.079	0.0
430.2125	23.00	-3.06	14514.750	1.5	37752.540	2.5
430.2166	23.00	-3.19	20828.480	2.5	44066.050	3.5
430.2188	26.00	-1.75	24574.655	4.0	47812.104	4.0
430.2238	23.01	-4.77	49210.780	3.0	72447.960	3.0
430.2238	28.01	-3.66	75917.630	3.5	99154.810	4.5
430.2300	39.00	.45	15566.901	0.0	38810.282	0.0
430.2312	25.02	-1.36	194849.100	1.5	218085.680	.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
430.2382	28.01	-4.95	110573.360	2.5	133809.760	3.5
430.2390	26.02	-3.65	165719.200	4.0	188955.560	3.0
430.2493	30.02	.11	257491.100	0.0	280726.900	1.0
430.2542	23.00	-3.14	10892.500	3.5	34128.040	3.5
430.2560	27.00	-4.20	29735.180	3.5	52970.620	2.5
430.2643	22.00	-2.95	18911.399	2.0	42146.390	1.0
430.2650	58.01	-.55	10566.135	0.0	33807.626	0.0
430.2668	26.02	-2.55	206295.810	1.0	229530.670	1.0
430.2693	26.00	-4.52	19788.248	4.0	43022.969	4.0
430.2762	24.00	-.23	37233.500	5.0	60467.850	5.0
430.2764	28.01	-2.64	112719.750	3.5	135954.090	3.5
430.2768	25.00	-5.00	37586.030	1.5	60820.350	2.5
430.2803	20.02	.92	324110.240	4.0	347344.370	5.0
430.2890	40.00	-.74	5807.341	0.0	29047.535	0.0
430.2901	8.01	-1.61	252607.700	4.5	275841.300	3.5
430.2901	8.01	.03	252607.700	4.5	275841.300	4.5
430.2934	28.00	-2.72	35639.148	3.0	58872.570	4.0
430.2951	22.00	-2.82	8492.421	1.0	31725.750	1.0
430.2980	73.00	-1.29	9194.957	0.0	32434.665	0.0
430.3006	26.01	-4.37	54904.500	3.5	78137.530	3.5
430.3040	26.00	-2.32	31322.603	3.0	54555.450	4.0
430.3047	25.02	-1.03	194894.780	1.5	218127.590	.5
430.3123	22.00	-4.54	18525.070	2.0	41757.470	3.0
430.3124	8.01	-.06	252608.900	3.5	275841.300	3.5
430.3124	8.01	-1.91	252608.900	3.5	275841.300	4.5
430.3166	26.01	-2.53	21812.040	1.5	45044.210	1.5
430.3229	27.00	-3.88	1809.330	1.5	25041.160	1.5
430.3253	10.00	-3.30	148257.790	1.0	171489.485	1.0
430.3309	28.00	-4.65	33590.159	4.0	56821.553	3.0
430.3362	22.00	-2.83	25493.722	2.0	48724.830	1.0
430.3414	23.00	-3.49	20687.750	1.5	43918.580	2.5
430.3426	9.02	-2.18	443625.310	2.5	466856.070	3.5
430.3430	9.02	-1.25	443625.310	2.5	466856.050	2.5
430.3555	22.00	-2.46	15877.180	2.0	39107.250	1.0
430.3566	24.01	-2.52	47354.630	2.5	70584.640	2.5
430.3580	60.01	-.47	0.000	0.0	23236.468	0.0
430.3604	9.02	-4.87	443753.060	2.5	466982.860	2.5
430.3615	8.01	.38	232753.860	3.5	255983.600	4.5
430.3716	22.00	-3.80	18593.990	3.0	41823.190	3.0
430.3777	26.02	-3.12	199603.610	4.0	222832.480	5.0
430.3810	68.00	-1.32	5081.424	0.0	28316.650	0.0
430.3832	8.01	.61	232462.830	2.5	255691.400	3.5
430.3838	24.00	-4.04	36577.730	4.0	59806.270	5.0
430.3879	22.00	-4.49	6742.757	4.0	29971.078	4.0
430.3880	41.00	-1.34	8630.355	0.0	31865.204	0.0
430.3903	25.01	-4.46	82936.010	3.0	106164.200	4.0
430.3933	26.02	-4.31	199595.300	3.0	222823.330	4.0
430.4066	26.02	-3.01	182444.700	3.0	205672.010	4.0
430.4068	17.01	-.53	126725.100	1.0	149952.400	1.0
430.4138	23.01	-2.50	30641.710	3.0	53868.630	2.0
430.4145	26.00	-3.84	26623.726	2.0	49850.610	3.0
430.4155	22.00	-1.77	25797.600	3.0	49024.430	3.0
430.4166	8.01	-.91	232462.830	2.5	255689.600	2.5
430.4320	24.00	-2.03	33906.650	1.0	57132.590	1.0
430.4377	25.00	-2.62	45060.810	3.5	68286.440	4.5
430.4400	75.00	-.73	16534.792	0.0	39766.834	0.0
430.4420	23.03	-2.28	264902.200	3.0	288127.600	4.0
430.4474	9.02	-.76	443630.960	3.5	466856.070	3.5
430.4477	9.02	-1.68	443630.960	3.5	466856.050	2.5
430.4477	9.02	-4.75	443753.060	2.5	466978.150	1.5
430.4516	25.02	.14	195592.090	1.5	218816.970	2.5
430.4520	25.02	.31	195752.480	2.5	218977.340	3.5
430.4544	26.00	-2.18	23783.617	5.0	47008.351	5.0
430.4548	22.00	-3.03	18593.990	3.0	41818.700	4.0
430.4680	40.00	.12	14599.011	0.0	37829.541	0.0
430.4720	58.01	-.86	5887.999	0.0	29118.314	0.0
430.4722	22.00	-2.37	25635.740	1.0	48859.510	1.0
430.4739	24.00	-1.92	37244.170	4.0	60467.850	5.0
430.4748	26.02	-.68	184417.270	5.0	207640.900	4.0
430.4748	26.02	.40	184417.270	5.0	207640.900	5.0
430.4767	26.02	1.05	184417.270	5.0	207640.800	6.0
430.4802	23.00	-3.78	9544.540	.5	32767.880	1.5
430.4865	26.00	-2.78	26627.612	4.0	49850.610	3.0
430.4867	16.01	-2.37	110176.830	1.5	133399.820	1.5
430.4920	42.00	-1.10	16615.449	0.0	39844.684	0.0
430.4940	62.01	-1.17	5242.739	0.0	28471.866	0.0
430.5040	17.00	-2.95	71958.363	2.5	95180.419	3.5
430.5084	22.00	-4.73	18695.230	4.0	41917.050	4.0
430.5084	6.00	-3.85	61981.820	1.0	85203.640	2.0
430.5087	28.01	-4.50	106620.530	3.5	129842.330	2.5
430.5137	26.00	-3.19	21999.132	4.0	45220.662	3.0
430.5140	58.01	-.30	6855.889	0.0	30083.937	0.0
430.5208	26.00	-2.11	28604.610	2.0	51825.758	3.0
430.5254	19.01	-.90	189772.000	0.0	212992.900	1.0
430.5277	23.01	-4.56	49568.450	3.0	72789.230	3.0
430.5358	24.00	-1.76	31987.060	4.0	55207.400	4.0
430.5363	28.00	-1.96	31031.042	3.0	54251.353	3.0
430.5403	23.00	-1.93	15103.770	4.5	38323.870	4.5
430.5423	25.00	-2.63	37737.220	3.5	60957.210	3.5
430.5442	28.01	-2.29	113172.960	4.5	136392.850	3.5
430.5443	38.01	-.14	24516.650	0.0	47743.064	0.0
430.5453	24.00	-1.00	23305.010	2.0	46524.840	2.0
430.5455	26.00	-1.74	24335.764	2.0	47555.584	1.0
430.5458	9.03	-.77	469644.200	2.0	492864.000	2.0
430.5460	23.00	-.60	15000.840	5.5	38220.630	5.5
430.5469	8.01	-.80	232536.060	1.5	255755.800	2.5
430.5472	22.00	-1.63	14105.680	3.0	37325.407	2.0
430.5473	26.02	-4.27	199603.610	4.0	222823.330	4.0
430.5519	26.00	-1.81	34782.406	5.0	58001.880	6.0
430.5527	18.01	-4.12	179931.770	1.5	203151.200	2.5
430.5557	23.00	-4.68	19026.340	2.5	42245.610	3.5
430.5640	24.00	-2.05	33060.740	3.0	56279.560	4.0
430.5670	25.00	-.94	37737.220	3.5	60955.880	4.5
430.5707	21.01	-1.28	4802.750	2.0	28021.210	2.0
430.5760	22.00	-.82	18037.225	4.0	41255.400	4.0
430.5760	59.01	-.81	403.288	0.0	23627.992	0.0
430.5768	23.00	-3.82	15264.830	5.5	38482.960	6.5
430.5775	25.02	-.51	194849.100	1.5	218067.190	2.5
430.5798	17.00	-4.50	72488.568	1.5	95706.534	1.5
430.5853	8.01	-1.06	253046.230	1.5	276263.900	.5
430.5853	8.01	-1.80	253046.230	1.5	276263.900	1.5
430.5910	22.00	.52	6842.964	5.0	30060.328	4.0
430.5964	25.00	-.90	38008.700	5.5	61225.770	5.5
430.6005	25.00	-1.38	38008.700	5.5	61225.550	6.5
430.6033	30.02	-.30	257566.100	1.0	280782.800	2.0
430.6217	23.00	-1.59	137.380	2.5	23353.090	3.5
430.6222	28.01	-1.18	112906.930	1.5	136122.610	2.5
430.6247	8.01	-.81	253048.350	2.5	276263.900	1.5
430.6252	10.00	-2.61	148257.790	1.0	171473.313	2.0
430.6276	27.00	-2.03	27497.060	2.5	50712.450	2.5
430.6280	41.00	-.82	9356.272	0.0	32578.171	0.0
430.6284	25.02	-.74	192365.520	1.5	215580.870	.5
430.6304	28.01	-4.02	113177.610	3.5	136392.850	3.5
430.6326	22.00	-2.57	25699.950	2.0	48915.070	2.0
430.6327	10.01	-2.61	290803.820	.5	314018.940	.5
430.6340	64.00	-.21	0.000	0.0	23221.576	0.0
430.6388	10.02	-2.79	412313.110	1.0	435527.900	2.0
430.6412	25.02	-1.54	193498.070	3.5	216712.730	2.5
430.6421	25.02	-.69	192948.290	1.5	216162.900	1.5
430.6423	9.03	-2.70	469644.200	2.0	492858.800	3.0
430.6568	26.00	-1.91	27666.334	1.0	50880.152	1.0
430.6586	23.00	-.86	14910.040	3.5	38123.760	4.5
430.6651	26.02	-2.69	182480.720	2.0	205694.090	1.0
430.6682	26.00	-4.10	35611.608	3.0	58824.810	2.0
430.6720	58.01	-.38	4113.534	0.0	27333.061	0.0
430.6868	28.02	-3.51	121412.200	2.0	144624.400	1.0
430.6880	74.00	.46	24600.544	0.0	47819.208	0.0
430.6913	9.02	-4.47	443770.900	3.5	466982.860	2.5
430.6917	9.01	-1.68	265472.310	3.0	288684.250	2.0
430.6925	24.01	-1.41	47372.750	1.5	70584.640	2.5
430.6937	22.00	-1.69	6556.828	1.0	29768.655	2.0
430.6999	28.00	-2.04	33590.159	4.0	56801.654	5.0
430.7057	24.01	-3.40	67379.920	1.5	90591.100	2.5
430.7172	23.00	-1.73	0.000	1.5	23210.560	2.5
430.7215	23.00	-.65	17242.050	5.5	40452.380	5.5
430.7270	28.00	-1.20	33500.854	3.0	56710.889	2.0
430.7317	23.00	-3.57	9636.960	1.5	32846.740	2.5
430.7317	23.00	-3.56	9636.960	1.5	32846.740	2.5
430.7323	25.02	-2.21	194971.150	2.5	218180.900	1.5
430.7344	8.01	-.05	232602.570	.5	255812.200	1.5
430.7354	23.02	-3.71	161027.320	4.5	184236.900	4.5
430.7438	27.00	-.65	29563.170	1.5	52772.300	2.5
430.7443	17.01	-.11	126743.300	2.0	149952.400	1.0
430.7490	23.00	-2.50	17116.920	3.5	40325.770	2.5
430.7568	25.00	-2.66	45130.160	4.5	68338.590	3.5
430.7600	44.00	-.22	9114.300	0.0	32329.083	0.0
430.7601	22.00	-2.72	18695.230	4.0	41903.480	5.0
430.7620	26.00	-4.04	26224.961	3.0	49433.108	2.0
430.7640	74.00	-.31	19680.435	0.0	42895.003	0.0
430.7662	24.00	.03	37233.500	5.0	60441.420	6.0
430.7690	25.01	-2.30	81812.900	2.0	105020.670	1.0
430.7705	26.02	-1.80	182486.400	1.0	205694.090	1.0
430.7705	10.02	-2.92	412320.210	2.0	435527.900	2.0
430.7712	27.00	-3.36	18775.010	.5	41982.660	1.5
430.7780	60.01	-1.53	2984.328	0.0	26196.141	0.0
430.7833	25.02	-.04	195462.260	.5	218669.260	1.5
430.7879	22.01	-1.12	9395.760	1.5	32602.510	1.5
430.7905	26.00	.11	12560.933	3.0	35767.546	4.0
430.7963	28.01	-3.59	95893.760	1.5	119100.060	1.5
430.8001	28.00	-1.91	31031.042	3.0	54237.136	4.0
430.8059	26.02	-3.91	206324.890	2.0	229530.670	1.0
430.8091	23.00	-4.12	14910.040	3.5	38115.650	3.5
430.8120	41.00	-1.17	8952.985	0.0	32164.966	0.0
430.8204	25.02	-.36	192989.050	5.5	216194.050	5.5
430.8214	25.01	-4.08	43696.190	3.0	66901.140	2.0
430.8236	25.02	.05	193756.790	4.5	216961.620	3.5
430.8273	25.02	-4.77	172547.850	2.5	195752.480	2.5
430.8427	24.01	-2.78	67387.300	2.5	90591.100	2.5
430.8444	23.00	-1.96	14548.830	2.5	37752.540	2.5
430.8459	9.02	-2.09	466290.900	4.5	489494.530	3.5
430.8464	22.00	-2.03	8602.340	2.0	31805.940	2.0
430.8495	26.00	-4.21	19788.248	4.0	42991.680	5.0
430.8531	26.00	-4.56	17927.378	1.0	41130.620	1.0
430.8626	25.00	-1.14	38008.700	5.5	61211.430	4.5
430.8641	21.00	-2.24	15756.510	2.5	38959.160	3.5
430.8670	66.01	-1.19	0.000	0.0	23209.018	0.0
430.8690	41.00	-.91	8630.355	0.0	31839.265	0.0
430.8808	29.01	-3.40	118532.150	2.0	141733.900	2.0
430.8808	25.00	-2.57	37737.220	3.5	60938.970	4.5
430.8873	22.00	-4.79	25317.813	1.0	48519.210	2.0
430.8880	76.00	-.61	18954.517	0.0	42162.404	0.0
430.8891	8.01	-.67	232711.700	.5	255913.000	1.5
430.8899	9.01	-.70	265472.310	3.0	288673.570	4.0
430.9010	62.01	-1.20	1451.835	0.0	24659.022	0.0
430.9033	26.00	-1.37	29313.008	6.0	52513.546	6.0
430.9073	22.00	-.75	18141.229	5.0	41341.553	5.0
430.9077	8.01	-.05	232711.700	.5	255912.000	.5
430.9094	18.01	-1.45	150147.620	2.5	173347.830	1.5
430.9096	28.01	-2.04	91800.050	4.5	115000.250	3.5
430.9096	19.01	.05	166461.500	1.0	189661.700	2.0
430.9161	26.02	-4.52	199634.920	6.0	222834.770	6.0
430.9210	44.00	.41	25891.064	0.0	49097.174	0.0
430.9285	26.02	-2.94	199577.710	2.0	222776.890	1.0
430.9290	64.00	.14	7904.437	0.0	31110.116	0.0
430.9309	21.00	-2.17	15672.550	1.5	38871.600	2.5
430.9315	27.01	-2.31	61388.100	4.0	84587.120	4.0
430.9377	26.00	-1.44	23783.617	5.0	46982.302	6.0
430.9437	27.00	-1.76	24326.110	3.5	47524.470	4.5
430.9461	26.00	-2.48	25091.620	0.0	48289.852	1.0
430.9506	25.00	-3.33	34938.700	4.5	58136.690	3.5
430.9521	23.00	-.70	17116.920	3.5	40314.830	3.5
430.9560	41.00	-.22	12905.203	0.0	36109.428	0.0
430.9570	71.00	-2.26	1935.780	0.0	25139.951	0.0
430.9579	25.02	-1.03	195308.790	4.5	218506.390	3.5
430.9580	58.01	-1.00	5887.999	0.0	29092.116	0.0
430.9629	28.01	-4.42	113321.950	4.5	136519.280	4.5
430.9630	39.01	-.98	1371.178	0.0	24575.026	0.0
430.9634	24.01	-2.04	67393.800	3.5	90591.100	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
430.9679	26.00	-4.72	24180.848	3.0	47377.909	4.0
430.9701	24.00	-1.54	33935.650	2.0	57132.590	1.0
430.9712	27.00	-4.54	31699.690	4.5	54896.570	3.5
430.9740	58.01	-.73	3629.588	0.0	26832.844	0.0
430.9742	23.00	-.51	17181.980	4.5	40378.700	4.5
430.9770	28.01	-4.00	106283.160	2.5	129479.730	1.5
430.9781	26.02	-3.43	199577.710	2.0	222774.220	2.0
430.9798	26.00	-.63	36975.640	3.0	60172.060	4.0
430.9798	23.00	-1.69	323.420	3.5	23519.840	4.5
430.9820	40.00	-1.83	4355.506	0.0	27558.331	0.0
430.9824	22.00	-2.85	16106.080	4.0	39302.360	4.0
430.9830	22.00	-6.65	6842.964	5.0	30039.211	5.0
430.9868	22.00	-3.56	25643.695	3.0	48839.740	3.0
430.9971	23.01	-3.46	30673.140	2.0	53868.630	2.0
431.0030	25.02	-1.55	195112.810	3.5	218307.980	2.5
431.0082	27.00	-2.27	18775.010	.5	41969.900	.5
431.0121	28.01	-4.20	111783.790	3.5	134978.470	2.5
431.0216	8.00	-4.49	106785.213	2.0	129979.384	1.0
431.0222	24.00	-6.72	7593.160	2.0	30787.300	1.0
431.0223	24.00	-1.45	37233.500	5.0	60427.630	5.0
431.0238	23.00	-3.28	18805.050	.5	41999.100	1.5
431.0322	23.00	-4.32	9544.540	.5	32738.140	1.5
431.0337	26.02	-1.06	184447.380	6.0	207640.900	5.0
431.0344	22.00	-2.53	8492.421	1.0	31685.900	0.0
431.0355	26.02	.20	184447.380	6.0	207640.800	6.0
431.0355	26.02	1.17	184447.380	6.0	207640.800	7.0
431.0363	26.00	-1.73	31686.342	2.0	54879.720	2.0
431.0390	42.00	.14	24358.571	0.0	47558.328	0.0
431.0390	92.01	-1.65	6210.629	0.0	29410.386	0.0
431.0413	28.01	-2.38	112686.300	2.5	135879.410	3.5
431.0500	25.01	-2.74	79512.730	3.0	102705.370	3.0
431.0510	60.01	-2.00	1613.150	0.0	24812.261	0.0
431.0538	9.01	-2.30	265472.310	3.0	288664.750	3.0
431.0543	26.00	-2.73	29320.050	1.0	52512.460	1.0
431.0590	77.00	-1.34	12098.628	0.0	35297.308	0.0
431.0614	22.00	-1.85	18145.400	2.0	41337.430	2.0
431.0656	24.00	-1.76	23933.900	4.0	47125.700	3.0
431.0694	25.01	-.18	86057.400	4.0	109249.000	5.0
431.0700	58.01	-1.10	3952.218	0.0	27150.306	0.0
431.0720	23.01	-4.29	16421.510	4.0	39612.970	5.0
431.0733	27.00	-3.24	21920.090	4.5	45111.480	4.5
431.0755	9.01	-.79	265472.310	3.0	288663.580	2.0
431.0768	22.00	-3.05	13981.750	1.0	37172.947	1.0
431.0785	28.01	-4.24	106283.160	2.5	129474.270	3.5
431.0787	25.02	-1.68	194894.780	1.5	218085.880	.5
431.0878	25.01	-4.39	79512.730	3.0	102703.340	4.0
431.0878	25.02	.47	195315.780	2.5	218506.390	3.5
431.0980	64.01	-1.60	3952.218	0.0	27148.800	0.0
431.0997	24.00	-4.40	33906.650	1.0	57096.620	1.0
431.1030	26.02	-3.39	199634.920	6.0	222824.710	7.0
431.1125	22.00	-3.34	18525.070	2.0	41714.350	2.0
431.1223	25.01	-.70	86057.400	4.0	109246.150	4.0
431.1257	27.01	-5.79	22009.230	4.0	45197.800	5.0
431.1270	41.00	.33	13066.518	0.0	36261.539	0.0
431.1301	26.02	-3.21	199577.710	2.0	222766.040	3.0
431.1368	26.02	-4.91	114339.950	4.0	137527.920	4.0
431.1400	76.00	-1.32	5081.424	0.0	28275.746	0.0
431.1402	6.00	-4.44	61981.820	1.0	85169.610	0.0
431.1446	22.00	-2.65	25537.276	1.0	48724.830	1.0
431.1500	77.00	-1.03	9759.560	0.0	32953.344	0.0
431.1537	22.00	-3.24	25537.276	1.0	48724.340	2.0
431.1590	58.01	-.86	7017.204	0.0	30210.504	0.0
431.1632	25.01	-1.43	86057.400	4.0	109243.950	3.0
431.1645	22.00	-.65	17369.590	1.0	40556.070	1.0
431.1686	17.00	-4.23	71958.363	2.5	95144.623	2.5
431.1700	41.00	-1.85	1532.493	0.0	24725.201	0.0
431.1764	9.01	-.26	265498.410	2.0	288684.250	2.0
431.1960	8.00	-4.77	106785.213	2.0	129970.000	2.0
431.1960	8.00	-3.87	106785.213	3.0	129970.000	2.0
431.1993	28.01	-4.88	116824.150	2.5	140008.760	3.5
431.2016	23.01	-3.86	49723.680	4.0	72908.170	3.0
431.2059	28.00	-3.23	29013.228	2.0	52197.482	3.0
431.2099	8.01	-.43	232959.260	3.5	256143.300	3.5
431.2136	26.00	-4.99	31307.235	4.0	54491.080	3.0
431.2207	24.00	-3.10	37244.170	4.0	60427.630	5.0
431.2216	9.01	-3.49	265472.310	3.0	288655.720	4.0
431.2254	25.02	-4.58	172569.270	1.5	195752.480	2.5
431.2339	20.00	-2.52	23652.304	1.0	46835.055	0.0
431.2354	23.01	-5.07	13490.840	2.0	36673.510	2.0
431.2445	25.01	-2.39	81732.000	1.0	104914.180	0.0
431.2450	41.00	-1.76	322.630	0.0	23511.305	0.0
431.2473	24.00	-1.24	25106.340	3.0	48288.370	4.0
431.2484	25.02	-.16	192880.160	3.5	216062.130	2.5
431.2536	26.02	-4.77	90423.680	2.0	113605.370	3.0
431.2538	9.01	-.15	265472.310	3.0	288653.990	3.0
431.2551	25.00	-1.26	23719.520	1.5	46901.130	2.5
431.2602	26.02	-1.89	206328.220	3.0	229509.560	3.0
431.2609	27.02	-3.31	83773.400	1.5	106954.700	2.5
431.2616	27.00	-3.40	16467.900	4.5	39649.160	3.5
431.2655	24.00	-2.88	33906.650	1.0	57087.700	2.0
431.2745	26.02	-2.55	199577.710	2.0	222758.280	2.0
431.2771	38.01	-.62	53372.970	0.0	76559.919	0.0
431.2771	38.01	-1.92	53372.970	0.0	76559.919	0.0
431.2791	23.00	-4.57	9544.540	.5	32724.860	.5
431.2800	42.00	-1.11	16534.792	0.0	39721.585	0.0
431.2841	26.00	-3.15	33412.706	3.0	56592.760	4.0
431.2850	62.00	-.30	2258.411	0.0	25444.935	0.0
431.2871	22.01	-1.15	9518.050	2.5	32697.940	2.5
431.2964	25.00	-3.83	41230.300	3.5	64409.690	3.5
431.2970	42.00	-.65	20245.038	0.0	43430.917	0.0
431.2990	90.00	-1.17	2823.013	0.0	26008.784	0.0
431.3033	26.01	-2.23	62945.120	3.5	86124.140	4.5
431.3045	26.00	-4.27	22249.430	3.0	45428.385	4.0
431.3052	26.02	-3.42	199595.300	3.0	222774.220	2.0
431.3074	28.00	-3.71	22102.349	4.0	45281.152	3.0
431.3100	58.01	-1.61	5081.424	0.0	28266.604	0.0
431.3106	6.01	-.52	186443.690	1.5	209622.320	2.5
431.3128	18.01	-2.63	185624.730	3.5	208803.240	4.5
431.3130	92.00	-.62	3710.246	0.0	26895.265	0.0
431.3200	28.00	-4.60	34408.574	1.0	57586.700	2.0
431.3294	23.01	-3.28	13741.610	3.0	36919.230	3.0
431.3389	18.01	-3.27	186074.350	2.5	209251.460	3.5
431.3398	27.00	-3.70	23152.570	3.5	46329.630	2.5
431.3420	8.01	.46	232959.260	3.5	256136.200	4.5
431.3437	23.01	-3.40	49731.320	2.0	72908.170	3.0
431.3446	26.02	-1.82	181825.670	4.0	205002.470	3.0
431.3527	28.00	-2.75	33590.159	4.0	56766.523	4.0
431.3536	24.00	-4.82	41575.100	3.0	64751.420	4.0
431.3595	26.02	-3.23	114351.920	3.0	137527.920	4.0
431.3707	10.01	-4.85	283894.410	.5	307069.810	1.5
431.3730	62.01	-1.84	1935.780	0.0	25117.574	0.0
431.3763	23.03	-1.58	263111.400	4.0	286286.500	4.0
431.3811	25.00	-4.60	37586.030	1.5	60760.870	1.5
431.3840	64.00	.05	161.315	0.0	23342.518	0.0
431.3880	41.00	-.22	16696.107	0.0	39877.095	0.0
431.3882	23.00	-.73	14949.300	4.5	38123.760	4.5
431.3931	18.01	-3.54	186074.350	2.5	209248.550	2.5
431.3981	26.02	-4.08	199660.840	5.0	222834.770	6.0
431.4003	26.02	-3.34	181828.660	2.0	205002.470	3.0
431.4029	22.00	-2.32	15975.590	3.0	39149.260	2.0
431.4081	21.01	-.10	4987.640	4.0	28161.030	3.0
431.4102	14.03	-.23	276503.670	.5	299676.950	.5
431.4133	23.00	-2.72	10892.500	3.5	34065.610	2.5
431.4146	26.01	-4.85	61093.440	2.5	84266.480	2.5
431.4193	22.01	-4.71	45908.560	5.5	69081.350	4.5
431.4198	23.00	-1.69	19189.280	1.5	42362.040	.5
431.4211	24.00	-2.70	24056.110	5.0	47228.800	5.0
431.4243	26.02	-4.51	199577.710	2.0	222750.230	3.0
431.4245	25.02	.26	193498.070	3.5	216670.580	4.5
431.4249	26.01	-4.73	61512.670	4.5	84685.160	3.5
431.4256	26.02	-2.23	181830.020	3.0	205002.470	3.0
431.4264	25.02	-1.09	194894.780	1.5	218067.190	2.5
431.4300	44.00	.79	25084.489	0.0	48263.220	0.0
431.4306	26.01	-3.56	21581.640	4.5	44753.820	3.5
431.4347	22.00	-2.92	6742.757	4.0	29914.720	3.0
431.4377	25.01	-1.90	62587.500	3.0	85759.300	4.0
431.4398	25.00	-4.58	27201.540	2.5	50373.230	2.5
431.4400	64.00	.39	7420.492	0.0	30598.686	0.0
431.4425	25.00	-1.91	34938.700	4.5	58110.240	4.5
431.4520	60.01	-1.54	0.000	0.0	23177.549	0.0
431.4520	73.00	-2.41	1935.780	0.0	25113.329	0.0
431.4574	26.02	-2.88	199595.300	3.0	222766.040	3.0
431.4580	75.00	-.92	21616.215	0.0	44793.442	0.0
431.4587	26.02	-2.90	199595.300	3.0	222765.970	4.0
431.4617	23.00	-3.66	17054.870	2.5	40225.380	1.5
431.4676	18.01	-4.58	196076.390	1.5	219246.580	2.5
431.4701	22.00	-2.76	18287.560	4.0	41457.620	3.0
431.4701	25.02	-1.63	192741.670	.5	215911.730	1.5
431.4730	22.00	-.66	6598.749	2.0	29768.655	2.0
431.4766	24.00	-1.48	33040.100	2.0	56209.810	3.0
431.4804	22.00	-.41	6742.757	4.0	29912.262	3.0
431.4930	58.01	-1.22	6533.259	0.0	29708.606	0.0
431.4960	22.01	-1.18	9363.710	.5	32532.380	.5
431.4977	26.01	-3.16	38164.240	2.5	61332.820	1.5
431.4996	26.00	-4.20	31322.603	3.0	54491.080	3.0
431.5005	25.02	-.01	193235.430	2.5	216403.860	2.5
431.5070	24.01	-2.19	67344.420	2.5	90512.500	1.5
431.5087	26.00	-.96	17726.985	2.0	40894.972	2.0
431.5090	79.00	-.45	45329.526	0.0	68504.014	0.0
431.5144	9.01	-.02	265516.570	1.0	288684.250	2.0
431.5185	23.00	-4.59	19078.150	3.5	42245.610	3.5
431.5219	25.00	-.98	37789.930	2.5	60957.210	3.5
431.5250	90.00	-1.57	2823.013	0.0	25996.641	0.0
431.5267	8.01	-.26	232745.980	1.5	255913.000	1.5
431.5349	22.00	-1.73	25635.740	1.0	48802.320	0.0
431.5356	8.01	-2.36	232959.260	3.5	256125.800	2.5
431.5392	24.00	-1.60	23512.000	1.0	46678.350	1.0
431.5392	23.00	-3.54	14949.300	4.5	38115.650	3.5
431.5394	9.01	-1.92	265498.410	2.0	288664.750	3.0
431.5403	24.00	-1.97	33113.270	4.0	56279.560	4.0
431.5410	58.01	-.90	7178.519	0.0	30351.288	0.0
431.5427	24.00	-3.71	24056.110	5.0	47222.270	6.0
431.5453	8.01	-.58	232745.980	1.5	255912.000	.5
431.5536	25.00	-3.85	37737.220	3.5	60902.800	3.5
431.5536	27.00	-2.51	29294.520	3.5	52460.100	2.5
431.5552	8.01	-.88	232747.510	2.5	255913.000	1.5
431.5612	9.01	-.77	265498.410	2.0	288663.580	2.0
431.5632	24.00	-1.37	23512.000	1.0	46677.060	2.0
431.5642	24.00	-4.36	33935.650	2.0	57100.660	2.0
431.5722	9.02	-2.48	443625.310	2.5	466789.890	1.5
431.5781	9.02	-1.07	443625.310	2.5	466789.570	2.5
431.5785	23.00	-3.35	9824.580	2.5	32988.820	3.5
431.5860	8.01	-.34	232959.260	3.5	256123.100	3.5
431.5900	57.01	-2.35	3226.301	0.0	26396.439	0.0
431.5927	22.00	-2.90	18593.990	3.0	41757.470	3.0
431.5945	26.00	-3.86	19621.004	5.0	42784.387	6.0
431.5996	28.01	-4.15	112686.300	2.5	135849.410	2.5
431.6020	26.02	-3.70	199595.300	3.0	222758.280	2.0
431.6046	28.01	-4.64	107737.810	1.5	130900.650	2.5
431.6050	64.01	-.66	5242.739	0.0	28412.072	0.0
431.6122	26.02	-3.48	199603.610	4.0	222766.040	3.0
431.6124	25.01	-4.28	62572.200	2.0	85734.620	3.0
431.6135	26.02	-3.69	199603.610	4.0	222765.970	4.0
431.6145	9.01	.16	265472.310	3.0	288634.620	3.0
431.6175	28.00	-3.36	33112.368	3.0	56274.516	2.0
431.6221	28.01	-4.75	110573.360	2.5	133735.260	2.5
431.6240	23.01	-3.39	13511.710	1.0	36673.510	2.0
431.6247	9.01	-.72	265472.310	3.0	288634.070	2.0
431.6270	64.01	-1.10	9033.642	0.0	32201.794	0.0
431.6273	28.01	-4.25	110573.360	2.5	133734.980	3.5
431.6300	39.00	-.94	11292.053	0.0	34460.044	0.0
431.6344	27.00	-2.28	31699.690	4.5	54860.930	4.5
431.6426	30.02	.33	257566.100	1.0	280726.900	2.0
431.6426	30.02	.08	257566.100	1.0	280726.900	1.0
431.6478	26.02	-3.45	90423.680	2.0	113584.200	2.0
431.6480	41.00	-.81	11937.313	0.0	35104.338	0.0
431.6501	26.02	-2.58	206261.330	4.0	229421.730	4.0
431.6639	28.01	-1.87	112719.750	3.5	135879.410	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
431.6640	44.00	-1.30	9114.300	0.0	32280.466	0.0
431.6657	22.00	-2.63	25699.950	2.0	48859.510	1.0
431.6790	22.01	-1.70	16515.790	.5	39674.640	.5
431.6834	9.02	-2.46	443630.960	3.5	466789.570	2.5
431.6842	24.00	-4.08	31377.960	4.0	54536.530	5.0
431.6853	25.01	-3.11	43850.420	2.0	67008.930	3.0
431.6941	9.01	-.04	265472.310	3.0	288630.350	4.0
431.6960	70.01	-.56	30407.885	0.0	53572.334	0.0
431.7006	23.00	-1.84	15062.940	6.5	38220.630	5.5
431.7039	26.00	-1.05	28604.610	2.0	51762.120	2.0
431.7079	28.01	-3.36	76402.030	2.5	99559.330	2.5
431.7151	8.01	-.32	185235.360	.5	208392.270	1.5
431.7163	18.01	-4.64	196089.870	2.5	219246.720	3.5
431.7170	9.01	-1.43	265472.310	3.0	288629.120	3.0
431.7265	6.01	-.15	186466.020	2.5	209622.320	2.5
431.7269	25.00	-2.61	45130.160	4.5	68286.440	4.5
431.7271	9.01	-1.00	265472.310	3.0	288628.580	2.0
431.7310	40.01	-1.48	5726.684	0.0	28889.255	0.0
431.7330	58.01	-.60	8307.725	0.0	31470.189	0.0
431.7353	27.01	-3.65	62440.200	1.0	85596.030	2.0
431.7381	26.00	-2.85	29356.780	2.0	52512.460	1.0
431.7399	9.01	.37	265498.410	2.0	288653.990	3.0
431.7435	24.01	-3.36	53923.570	4.5	77078.960	5.5
431.7489	27.02	-2.76	83799.600	2.5	106954.700	2.5
431.7504	9.01	.55	265472.310	3.0	288627.330	4.0
431.7520	26.02	-2.98	199595.300	3.0	222750.230	3.0
431.7563	25.02	.46	192365.520	1.5	215520.220	2.5
431.7685	28.01	-.88	107082.210	2.5	130236.260	2.5
431.7713	25.01	-1.82	55759.270	3.0	78913.170	2.0
431.7713	30.02	-2.22	237642.700	3.0	260796.600	3.0
431.7713	30.02	-1.06	237642.700	3.0	260796.600	3.0
431.7780	8.01	-.11	232536.060	1.5	255689.600	2.5
431.7914	24.00	-1.20	33934.880	3.0	57087.700	2.0
431.8003	24.00	-1.17	35572.940	2.0	58725.280	1.0
431.8010	41.00	-1.03	10162.848	0.0	33321.664	0.0
431.8058	24.00	-2.26	33935.650	2.0	57087.700	2.0
431.8140	72.00	-1.70	5565.369	0.0	28723.488	0.0
431.8201	26.01	-2.47	63559.560	.5	86710.840	1.5
431.8266	28.01	-3.09	98969.440	5.5	122120.370	5.5
431.8290	90.01	-1.31	9517.587	0.0	32674.902	0.0
431.8337	28.00	-2.11	33112.368	3.0	56262.920	3.0
431.8430	44.00	-.63	8952.985	0.0	32109.549	0.0
431.8477	30.02	-1.94	214357.000	1.0	237506.800	1.0
431.8524	25.01	-3.47	43536.900	4.0	66686.450	3.0
431.8555	22.00	-3.80	25438.898	2.0	48588.280	3.0
431.8580	75.00	.09	27342.899	0.0	50498.659	0.0
431.8606	6.01	-.55	186427.350	.5	209576.460	1.5
431.8613	24.00	-1.55	33060.740	3.0	56209.810	3.0
431.8631	22.00	.63	18192.577	6.0	41341.553	5.0
431.8678	16.01	-.38	130134.080	2.5	153282.800	2.5
431.8710	24.01	-3.41	31351.150	2.5	54499.700	1.5
431.8810	73.00	-1.24	12743.888	0.0	35898.414	0.0
431.8850	65.00	.16	0.000	0.0	23154.312	0.0
431.8940	62.01	-.78	2177.753	0.0	25331.582	0.0
431.8997	9.01	-.65	265516.570	1.0	288663.580	2.0
431.9050	40.00	-1.92	1209.863	0.0	24363.103	0.0
431.9266	24.00	-2.51	25106.340	3.0	48251.910	3.0
431.9322	22.00	-3.00	16267.510	5.0	39412.780	5.0
431.9391	20.02	-.17	347758.220	2.0	370903.120	3.0
431.9420	26.01	-2.61	61726.090	3.5	84870.840	2.5
431.9444	26.00	-3.55	21038.987	2.0	44183.607	2.0
431.9470	22.00	-2.29	14028.470	2.0	37172.947	1.0
431.9530	62.00	-.10	1451.835	0.0	24602.502	0.0
431.9530	75.00	-1.67	14518.354	0.0	37669.021	0.0
431.9559	25.02	.76	194971.150	2.5	218115.150	3.5
431.9623	20.02	-.47	347758.220	2.0	370901.880	2.0
431.9636	24.00	-1.04	23305.010	2.0	46448.600	1.0
431.9641	8.01	-.34	185340.680	1.5	208484.240	2.5
431.9647	28.01	-3.74	94729.250	2.5	117872.780	2.5
431.9711	26.01	-2.23	63273.030	2.5	86416.220	3.5
431.9722	24.00	-3.18	31393.400	5.0	54536.530	5.0
431.9733	18.01	-2.39	161048.640	1.5	184191.710	.5
431.9851	9.01	-1.80	265498.410	2.0	288640.850	1.0
431.9870	44.00	-.59	7985.094	0.0	31133.939	0.0
431.9911	22.00	-3.02	20006.032	2.0	43148.150	3.0
431.9937	23.00	-2.11	15103.770	4.5	38245.750	3.5
432.0075	28.01	-4.29	113407.310	2.5	136548.550	2.5
432.0086	26.02	-2.49	199603.610	4.0	222744.790	5.0
432.0120	90.01	-1.84	4436.164	0.0	27583.669	0.0
432.0129	22.01	-4.17	40027.280	1.5	63168.230	2.5
432.0146	25.02	-2.86	172451.230	1.5	195592.090	1.5
432.0181	24.00	-2.11	24833.860	3.0	47974.530	3.0
432.0254	26.01	-4.71	62322.500	3.5	85462.780	3.5
432.0282	23.00	-1.76	15264.830	5.5	38404.960	5.5
432.0291	25.00	-1.48	38934.940	2.5	62075.020	2.5
432.0336	28.01	-4.68	113408.710	1.5	136548.550	2.5
432.0340	28.01	-4.04	113407.310	2.5	136547.130	3.5
432.0345	22.00	-1.93	25699.950	2.0	48839.740	3.0
432.0351	26.00	-1.47	27394.676	3.0	50534.435	3.0
432.0383	27.00	-.89	29563.170	1.5	52702.760	1.5
432.0475	26.00	-1.63	27559.568	2.0	50698.666	2.0
432.0487	26.02	-3.72	199595.300	3.0	222734.330	4.0
432.0495	25.02	-.81	192576.420	2.5	215715.410	1.5
432.0520	64.00	.19	7017.204	0.0	30162.566	0.0
432.0580	44.00	-.64	17018.737	0.0	40163.778	0.0
432.0580	90.01	-1.03	12824.546	0.0	35969.587	0.0
432.0588	24.00	-1.30	23386.350	3.0	46524.840	2.0
432.0611	24.00	-1.73	23498.840	4.0	46637.210	3.0
432.0655	27.00	-3.92	32027.500	3.5	55165.630	2.5
432.0670	72.01	-.64	17260.709	0.0	40405.268	0.0
432.0710	10.00	-3.57	150121.592	1.0	173259.430	1.0
432.0719	21.01	-.26	4883.420	3.0	28021.210	2.0
432.0720	58.01	-.58	3629.588	0.0	26773.879	0.0
432.0743	29.01	-4.16	114511.440	1.0	137649.100	2.0
432.0818	9.02	-1.09	443753.060	2.5	466890.320	3.5
432.0932	23.00	-2.16	17242.050	5.5	40378.700	4.5
432.0937	22.01	-1.88	9395.760	1.5	32532.380	.5
432.0952	28.01	-4.86	114052.040	3.5	137188.580	4.5
432.0986	25.00	-3.12	34938.700	4.5	58075.060	5.5

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
432.1014	9.01	-.09	265498.410	2.0	288634.620	3.0
432.1110	64.01	-.56	4758.794	0.0	27900.996	0.0
432.1117	9.01	-.61	265498.410	2.0	288634.070	2.0
432.1170	40.00	-1.92	1209.863	0.0	24351.744	0.0
432.1231	24.00	-2.07	23163.270	0.0	46298.320	1.0
432.1246	28.01	-4.67	113407.310	2.5	136542.280	3.5
432.1300	44.00	-1.69	9033.642	0.0	32174.826	0.0
432.1315	28.00	-1.03	30619.440	2.0	53754.036	2.0
432.1339	26.01	-2.31	63465.190	1.5	86599.660	2.5
432.1401	11.00	-2.21	16956.172	.5	40090.310	1.5
432.1472	24.00	-.80	24056.110	5.0	47189.870	4.0
432.1489	10.00	-3.26	150121.592	1.0	173255.260	0.0
432.1507	22.00	-3.02	18825.890	1.0	41959.460	0.0
432.1614	24.00	-1.23	25177.390	4.0	48310.390	5.0
432.1618	28.00	-2.54	31441.665	2.0	54574.640	1.0
432.1642	23.00	-2.08	17181.980	4.5	40314.830	3.5
432.1655	22.00	.40	18037.225	4.0	41170.003	3.0
432.1657	6.01	-1.04	186443.690	1.5	209576.460	1.5
432.1677	9.01	-3.57	265498.410	2.0	288631.070	1.0
432.1692	24.01	-2.67	67379.920	1.5	90512.500	1.5
432.1760	22.00	-1.21	17423.853	2.0	40556.070	1.0
432.1866	26.02	-2.49	199700.830	4.0	222832.480	5.0
432.1924	6.00	-2.85	64086.920	3.0	87218.260	2.0
432.1970	42.00	-.85	16696.107	0.0	39833.704	0.0
432.2002	23.00	-5.17	9636.960	1.5	32767.880	1.5
432.2019	23.01	-3.08	13542.680	3.0	36673.510	2.0
432.2040	26.02	-2.38	199603.610	4.0	222734.330	4.0
432.2042	9.01	-.93	265498.410	2.0	288629.120	3.0
432.2100	22.00	-1.12	17540.205	3.0	40670.600	2.0
432.2143	9.01	-.56	265498.410	2.0	288628.580	2.0
432.2193	9.01	-1.38	264952.690	2.0	288082.590	1.0
432.2200	64.01	-1.54	3064.986	0.0	26201.352	0.0
432.2238	28.01	-2.78	112719.750	3.5	135849.410	2.5
432.2282	28.01	-2.86	96535.870	3.5	119665.290	2.5
432.2335	23.00	-.85	19189.280	1.5	42318.420	1.5
432.2368	10.01	.36	305566.940	1.5	328695.900	2.5
432.2372	10.01	-.60	305566.940	1.5	328695.880	1.5
432.2447	23.01	-3.23	49898.220	2.0	73026.760	2.0
432.2484	8.01	-1.37	232959.260	3.5	256087.600	2.5
432.2510	57.01	-1.64	1371.178	0.0	24505.884	0.0
432.2527	22.00	-4.18	6842.964	5.0	29971.078	4.0
432.2544	25.02	-1.83	192392.200	3.5	215520.220	2.5
432.2555	22.00	-4.77	18695.230	4.0	41823.190	3.0
432.2676	6.00	-3.90	64090.950	2.0	87218.260	2.0
432.2680	73.00	-.69	17260.709	0.0	40394.506	0.0
432.2687	26.00	-4.94	21038.987	2.0	44166.240	3.0
432.2749	10.01	.06	280473.580	1.5	303600.500	2.5
432.2805	26.00	-3.73	22838.320	2.0	45964.944	2.0
432.2884	25.02	-.68	194849.100	1.5	217975.300	2.5
432.2910	26.00	-2.09	37046.000	4.0	60172.060	4.0
432.2960	44.00	.26	25084.489	0.0	48216.787	0.0
432.2974	22.00	-2.58	18818.230	0.0	41943.950	1.0
432.3000	56.00	-.67	12636.000	0.0	35768.084	0.0
432.3032	9.01	-2.14	265516.570	1.0	288641.980	0.0
432.3051	28.01	-2.22	100309.290	5.5	123434.600	4.5
432.3071	24.01	-3.60	67387.300	2.5	90512.500	1.5
432.3106	6.01	-1.25	186427.350	.5	209552.360	.5
432.3243	9.01	-1.12	265516.570	1.0	288640.850	1.0
432.3280	62.01	-1.46	806.575	0.0	23937.161	0.0
432.3335	17.00	-1.35	72488.568	1.5	95612.357	1.5
432.3361	26.00	-4.34	19788.248	4.0	42911.897	5.0
432.3395	22.00	-3.16	18695.230	4.0	41818.700	4.0
432.3396	10.01	-3.08	280700.770	3.5	303824.230	3.5
432.3404	23.00	-1.70	18805.050	.5	41928.470	.5
432.3406	22.00	-2.31	8602.340	2.0	31725.750	1.0
432.3470	41.00	-1.27	9275.615	0.0	32405.185	0.0
432.3486	9.02	-1.33	443770.900	3.5	466893.880	4.5
432.3497	23.00	-1.69	15000.840	5.5	38123.760	4.5
432.3550	59.01	-1.08	5000.766	0.0	28129.908	0.0
432.3567	28.01	-4.95	113408.710	1.5	136531.260	1.5
432.3576	26.02	-3.64	199700.830	4.0	222823.330	4.0
432.3694	27.00	-3.39	23207.760	1.5	46329.630	2.5
432.3698	28.00	-4.09	27414.893	2.0	50536.742	1.0
432.3711	26.02	-3.63	90483.590	3.0	113605.370	3.0
432.3763	27.00	-2.51	29735.180	3.5	52856.680	3.5
432.3780	24.00	-3.46	23933.900	4.0	47055.310	5.0
432.3855	24.00	-2.20	23933.900	4.0	47054.910	4.0
432.3972	28.01	-2.96	96535.870	3.5	119656.250	3.5
432.3976	22.00	-3.75	18593.990	3.0	41714.350	2.0
432.4030	40.00	-.16	14276.381	0.0	37402.955	0.0
432.4053	24.01	-3.11	66355.130	1.5	89475.080	2.5
432.4060	64.01	-.80	9033.642	0.0	32160.056	0.0
432.4081	22.00	-1.73	25605.030	0.0	48724.830	1.0
432.4109	9.02	-.04	443770.900	3.5	466890.550	4.5
432.4152	9.02	-2.22	443770.900	3.5	466890.320	3.5
432.4208	26.01	-4.07	62065.570	3.5	85184.690	4.5
432.4227	23.02	-3.14	160879.980	4.5	183999.000	3.5
432.4299	26.00	-3.65	24574.655	4.0	47693.289	3.0
432.4331	26.00	-2.59	29313.008	6.0	52431.470	6.0
432.4350	25.00	-3.28	35041.370	3.5	58159.730	2.5
432.4358	26.01	-4.92	38214.500	1.5	61332.820	1.5
432.4406	22.00	-4.83	18825.890	1.0	41943.950	1.0
432.4460	62.00	-.30	2258.411	0.0	25382.685	0.0
432.4511	9.01	-.01	265516.570	1.0	288634.070	2.0
432.4517	22.00	-1.92	25797.600	3.0	48915.070	2.0
432.4541	25.02	-3.94	109780.400	2.5	132897.740	2.5
432.4616	11.00	-1.96	16973.368	1.5	40090.310	2.5
432.4616	11.00	-2.91	16973.368	1.5	40090.310	1.5
432.4631	23.00	-2.66	15103.770	4.5	38220.630	5.5
432.4633	24.00	-2.72	24897.550	4.0	48014.400	4.0
432.4642	17.02	-.57	198983.900	1.5	222100.700	1.5
432.4728	25.00	-3.43	38669.600	3.5	61785.940	3.5
432.4790	58.01	-.65	7662.464	0.0	30784.974	0.0
432.4952	26.00	-3.74	17726.985	2.0	40842.130	3.0
432.4962	21.00	-3.58	15756.510	2.5	38871.600	2.5
432.4975	24.00	-2.53	33040.100	2.0	56155.120	2.0
432.4990	21.01	-.44	4802.750	2.0	27917.690	1.0
432.5014	24.00	-1.24	31987.060	4.0	55101.870	3.0
432.5033	25.01	-2.54	43528.300	5.0	66643.010	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
432.5050	44.00	-.40	13550.463	0.0	36671.583	0.0
432.5054	26.02	-2.41	181828.660	2.0	204943.260	2.0
432.5057	24.00	-.55	23933.900	4.0	47048.480	3.0
432.5073	9.01	-.40	265516.570	1.0	288631.070	1.0
432.5133	9.02	-4.46	443868.680	2.5	466982.860	2.5
432.5134	22.00	.54	18141.229	5.0	41255.400	4.0
432.5136	27.00	-2.82	27497.060	2.5	50611.220	3.5
432.5150	56.00	-.86	13514.000	0.0	36634.585	0.0
432.5178	26.00	-3.77	24338.766	3.0	47452.702	4.0
432.5185	29.01	-4.49	125247.800	2.0	148361.700	1.0
432.5196	25.02	.04	192948.290	1.5	216062.130	2.5
432.5203	23.01	-1.81	34228.790	3.0	57342.590	2.0
432.5239	23.01	-3.89	49568.450	3.0	72682.060	2.0
432.5239	10.01	.11	305582.270	.5	328695.880	1.5
432.5308	26.02	-1.89	181830.020	3.0	204943.260	2.0
432.5323	25.02	-1.08	195592.090	1.5	218705.250	2.5
432.5342	26.01	-4.61	50076.100	1.5	73189.160	1.5
432.5352	28.00	-.63	29084.478	4.0	52197.482	3.0
432.5372	25.03	-3.49	152700.500	4.0	175813.400	4.0
432.5377	25.00	-3.17	37789.930	2.5	60902.800	3.5
432.5383	9.02	-4.03	443865.310	1.5	466978.150	1.5
432.5396	24.01	-1.71	45730.740	2.5	68843.510	3.5
432.5424	26.01	-2.42	49506.990	1.5	72619.610	2.5
432.5440	40.00	-.99	5807.341	0.0	28926.376	0.0
432.5490	27.00	-3.94	17233.680	3.5	40345.950	2.5
432.5538	26.01	-2.61	49101.090	.5	72213.100	.5
432.5539	9.01	-1.69	265516.570	1.0	288628.580	2.0
432.5570	64.01	.74	10969.423	0.0	34087.763	0.0
432.5593	28.00	-.99	26665.903	3.0	49777.619	3.0
432.5603	22.00	-4.25	21469.494	3.0	44581.160	2.0
432.5604	23.00	-3.55	19026.340	2.5	42138.000	2.5
432.5636	24.00	-2.15	25106.340	3.0	48217.830	2.0
432.5660	26.01	-4.18	50076.100	1.5	73187.460	.5
432.5700	3.01	.66	559501.000	0.0	582618.646	0.0
432.5700	6.02	.18	310005.000	0.0	333122.646	0.0
432.5714	29.01	-4.59	123304.630	1.0	146415.700	2.0
432.5726	56.01	-1.00	50011.220	0.0	73128.727	0.0
432.5731	24.00	-3.77	25177.390	4.0	48288.370	4.0
432.5742	26.00	-5.01	0.000	4.0	23110.925	3.0
432.5760	60.01	-.71	3710.246	0.0	26827.571	0.0
432.5763	8.01	-1.05	185235.360	.5	208346.170	.5
432.5765	26.00	.06	12968.552	2.0	36079.353	3.0
432.5833	6.01	-.52	186466.020	2.5	209576.460	1.5
432.5834	28.01	-4.80	106369.300	1.5	129479.730	1.5
432.5889	14.02	-2.65	153377.050	1.0	176487.190	1.0
432.5939	26.02	-4.65	199634.920	6.0	222744.790	5.0
432.5947	26.00	-2.44	26351.049	5.0	49460.876	5.0
432.5982	22.00	-.80	25926.820	4.0	49036.460	4.0
432.6097	17.00	-3.14	72488.568	1.5	95597.593	.5
432.6121	22.00	-4.33	13981.750	1.0	37090.650	0.0
432.6139	25.00	-1.54	37630.620	4.5	60739.420	3.5
432.6140	42.00	.19	16534.792	0.0	39650.086	0.0
432.6163	6.01	-.55	186443.690	1.5	209552.360	.5
432.6233	22.00	-2.19	16106.080	4.0	39214.380	3.0
432.6250	76.00	-.79	15082.956	0.0	38197.663	0.0
432.6320	64.01	-.21	17663.997	0.0	40778.330	0.0
432.6330	41.00	-.17	9436.930	0.0	32551.209	0.0
432.6349	25.02	-.16	192365.520	1.5	215473.200	1.5
432.6354	22.00	-.25	6661.003	3.0	29768.655	2.0
432.6440	38.00	-1.47	14276.381	0.0	37390.073	0.0
432.6470	65.00	.31	0.000	0.0	23113.531	0.0
432.6519	24.00	-1.92	35618.510	1.0	58725.280	1.0
432.6643	25.01	-1.60	43536.900	4.0	66643.010	4.0
432.6676	22.00	-2.25	20126.055	3.0	43231.990	4.0
432.6695	23.01	-4.37	49568.450	3.0	72674.280	2.0
432.6740	25.00	-1.68	38120.180	4.5	61225.770	5.5
432.6740	42.00	-1.01	11050.080	0.0	34162.169	0.0
432.6744	56.01	-3.04	46154.890	0.0	69266.958	0.0
432.6755	26.00	-1.85	23783.617	5.0	46889.126	4.0
432.6820	44.00	-.77	10566.135	0.0	33677.797	0.0
432.6830	58.01	-1.21	5887.999	0.0	28999.607	0.0
432.6962	22.00	-.87	6556.828	1.0	29661.232	1.0
432.7019	30.02	.65	257678.700	2.0	280782.800	3.0
432.7019	30.02	-.50	257678.700	2.0	280782.800	2.0
432.7038	26.01	-7.66	20516.980	2.5	43620.980	1.5
432.7060	78.00	.19	33472.871	0.0	56583.251	0.0
432.7091	26.00	-1.42	28604.610	2.0	51708.330	2.0
432.7120	64.00	.04	0.000	0.0	23110.059	0.0
432.7223	9.02	-1.42	443753.060	2.5	466856.070	3.5
432.7227	9.02	-2.18	443753.060	2.5	466856.050	2.5
432.7293	22.00	-2.27	18825.890	1.0	41928.528	2.0
432.7317	28.01	-4.71	100332.090	4.5	123434.600	4.5
432.7338	18.01	-4.39	161089.310	.5	184191.710	.5
432.7380	41.00	-.75	8630.355	0.0	31739.026	0.0
432.7430	44.00	-1.29	7985.094	0.0	31093.498	0.0
432.7441	28.01	-2.29	115739.150	4.5	138841.000	3.5
432.7503	26.01	-4.93	62083.170	4.5	85184.690	4.5
432.7510	62.01	-2.36	2661.698	0.0	25769.675	0.0
432.7553	23.01	-3.35	32040.760	2.0	55142.010	3.0
432.7566	23.00	-4.28	9636.960	1.5	32738.140	1.5
432.7673	26.02	-4.50	90483.590	3.0	113584.200	2.0
432.7694	8.01	-2.48	232711.700	.5	255812.200	1.5
432.7784	26.00	-2.24	29798.960	4.0	52898.980	5.0
432.7792	28.00	-2.78	33610.916	2.0	56710.889	2.0
432.7909	26.00	-1.55	26627.612	4.0	49726.964	4.0
432.7956	25.00	-1.16	38934.940	2.5	62034.040	3.5
432.8027	24.00	-1.66	33934.880	3.0	57033.600	4.0
432.8042	23.00	-2.32	17054.870	2.5	40153.510	2.5
432.8072	26.00	-2.76	35611.608	3.0	58710.090	3.0
432.8177	14.03	.07	276579.030	1.5	299676.950	.5
432.8209	20.02	-1.33	324660.470	3.0	347758.220	2.0
432.8235	22.00	-2.77	25926.820	4.0	49024.430	3.0
432.8277	22.00	-2.79	17369.590	1.0	40466.979	2.0
432.8331	30.02	-.37	260418.100	2.0	283515.200	2.0
432.8331	30.02	.77	260418.100	2.0	283515.200	3.0
432.8430	41.00	-.78	8952.985	0.0	32056.050	0.0
432.8436	24.00	-3.31	33113.270	4.0	56209.810	3.0
432.8495	22.00	-2.11	19937.859	1.0	43034.080	1.0
432.8529	25.02	-1.05	194971.150	2.5	218067.190	2.5
432.8634	26.02	-3.24	199603.610	4.0	222699.090	5.0
432.8664	25.00	-1.92	35041.370	3.5	58136.690	3.5
432.8680	29.00	-1.79	41538.623	0.0	64640.354	0.0
432.8680	76.00	-.83	10969.423	0.0	34071.154	0.0
432.8807	22.00	-4.43	25493.722	2.0	48588.280	3.0
432.8841	24.00	-2.74	33060.740	3.0	56155.120	2.0
432.8900	66.01	-1.59	4274.849	0.0	27375.406	0.0
432.8902	28.01	-1.11	107142.210	1.5	130236.260	2.5
432.8940	64.00	-.30	7017.204	0.0	30117.547	0.0
432.9002	22.01	-2.66	40074.710	3.5	63168.230	2.5
432.9004	26.02	-2.04	206328.220	3.0	229421.730	4.0
432.9020	62.01	-.91	1451.835	0.0	24551.751	0.0
432.9021	25.02	-3.97	172855.020	4.5	195948.440	3.5
432.9032	26.00	-1.80	33765.291	2.0	56858.650	2.0
432.9182	20.02	.88	348028.130	3.0	371120.690	4.0
432.9343	16.01	-.98	110176.830	1.5	133268.530	.5
432.9360	25.02	.43	195308.790	4.5	218400.400	3.5
432.9360	63.00	-.04	13389.148	0.0	36487.250	0.0
432.9420	59.01	-1.39	1693.808	0.0	24791.590	0.0
432.9427	25.00	-1.03	38120.180	4.5	61211.430	4.5
432.9441	18.01	-.12	191974.530	1.5	215065.710	.5
432.9534	56.01	-2.01	50011.220	0.0	73108.394	0.0
432.9540	26.00	-4.84	17927.378	1.0	41018.029	2.0
432.9560	40.00	-2.31	564.603	0.0	23661.638	0.0
432.9570	73.00	-.76	15808.874	0.0	38905.856	0.0
432.9580	64.00	.15	6694.574	0.0	29791.503	0.0
432.9630	42.00	-.71	20809.640	0.0	43906.302	0.0
432.9643	23.00	-4.00	20828.480	2.5	43918.580	2.5
432.9730	41.00	-1.97	80.658	0.0	23176.786	0.0
432.9832	22.00	-2.64	25635.740	1.0	48724.830	1.0
432.9924	22.00	-1.53	25635.740	1.0	48724.340	2.0
432.9970	63.00	-.08	13711.778	0.0	36806.626	0.0
432.9974	9.01	-2.08	264994.260	0.0	288082.590	1.0
432.9997	24.00	-2.97	24897.550	4.0	47985.760	5.0
433.0020	62.00	-.28	241.973	0.0	23336.555	0.0
433.0026	23.00	-1.18	0.000	1.5	23088.060	1.5
433.0046	25.01	-1.83	79592.140	6.0	102680.090	5.0
433.0056	23.00	-4.76	9636.960	1.5	32724.860	.5
433.0204	22.01	-1.42	16515.790	.5	39602.900	1.5
433.0209	25.02	.57	192576.420	2.5	215663.500	3.5
433.0264	23.01	-4.93	49593.410	5.0	72680.200	5.0
433.0270	72.00	-1.73	4516.821	0.0	27610.069	0.0
433.0282	16.01	-1.32	110313.130	2.5	133399.820	1.5
433.0450	58.01	-.98	2581.041	0.0	25673.329	0.0
433.0459	26.01	-3.57	44915.070	3.5	68000.820	4.5
433.0567	9.02	-.74	443770.900	3.5	466856.070	3.5
433.0571	9.02	-1.89	443770.900	3.5	466856.050	2.5
433.0610	64.01	-.98	4194.191	0.0	27285.626	0.0
433.0660	74.00	-.44	19680.435	0.0	42771.604	0.0
433.0671	25.02	-.19	195315.780	2.5	218400.400	3.5
433.0676	24.00	-1.34	35640.690	0.0	58725.280	1.0
433.0701	28.00	.21	30619.440	2.0	53703.899	1.0
433.0701	22.01	-2.08	9518.050	2.5	32602.510	1.5
433.0743	26.00	-1.92	24335.764	2.0	47420.000	2.0
433.0774	24.00	-1.75	24833.860	3.0	47917.930	2.0
433.0780	39.00	-.71	10404.820	0.0	33495.349	0.0
433.0796	26.02	-4.38	199660.840	5.0	222744.790	5.0
433.0840	90.00	-1.23	8065.752	0.0	31155.961	0.0
433.0950	25.00	-2.15	37737.220	3.5	60820.350	2.5
433.0957	26.00	-2.85	26351.049	5.0	49434.142	6.0
433.0970	74.00	-.44	19680.435	0.0	42769.951	0.0
433.0977	26.02	-3.80	93392.450	3.0	116475.440	3.0
433.1035	27.00	-2.88	33462.830	2.5	56545.510	2.5
433.1160	44.00	-1.25	8711.012	0.0	31799.515	0.0
433.1180	63.00	-.48	12824.546	0.0	35912.942	0.0
433.1183	8.01	-.98	232747.510	2.5	255829.400	3.5
433.1202	18.01	-.14	135085.920	1.5	158167.710	1.5
433.1224	27.00	-.44	27497.060	2.5	50578.730	3.5
433.1294	30.02	-4.00	238205.500	1.0	261286.800	1.0
433.1306	26.00	-2.94	24338.766	3.0	47420.000	2.0
433.1331	29.01	-3.18	118163.500	2.0	141244.600	1.0
433.1363	24.01	-3.76	66256.770	.5	89337.700	1.5
433.1370	41.00	-.68	4920.109	0.0	28007.492	0.0
433.1380	64.00	-.07	6452.602	0.0	29539.932	0.0
433.1417	22.00	-3.10	25643.695	3.0	48724.340	2.0
433.1440	25.02	.61	194894.780	1.5	217975.300	2.5
433.1479	22.00	-4.10	25438.898	2.0	48519.210	2.0
433.1500	13.01	-4.97	120089.800	1.0	143170.000	1.0
433.1500	13.01	-4.66	120089.800	1.0	143170.000	2.0
433.1543	23.01	-2.61	16533.000	5.0	39612.970	5.0
433.1573	23.01	-4.59	44657.990	2.0	67737.800	2.0
433.1611	27.00	-6.55	13795.520	2.5	36875.130	1.5
433.1640	28.00	-1.50	13521.352	2.0	36600.805	2.0
433.1654	26.02	-4.76	199634.920	6.0	222714.300	6.0
433.1760	58.01	-.41	9678.902	0.0	32764.207	0.0
433.1763	25.01	-4.32	43850.420	2.0	66929.220	2.0
433.1767	23.01	-3.21	13594.730	2.0	36673.510	2.0
433.1789	26.02	-3.62	93388.750	4.0	116467.410	4.0
433.1793	27.00	-3.13	33466.870	3.5	56545.510	2.5
433.1825	26.02	-1.97	181828.660	2.0	204907.130	1.0
433.1853	23.01	-2.82	30673.140	2.0	53751.460	1.0
433.1921	23.01	-6.13	11514.760	1.0	34592.720	2.0
433.1943	12.01	-2.69	93799.700	3.5	116877.540	3.5
433.1943	12.01	-1.15	93799.700	3.5	116877.540	4.5
433.1943	12.01	-1.26	93799.700	2.5	116877.540	3.5
433.2031	18.01	-1.08	132630.650	1.5	155708.020	.5
433.2069	25.02	.07	195592.090	1.5	218669.260	1.5
433.2076	20.02	-1.06	323655.060	2.0	346732.190	1.0
433.2105	24.00	-1.66	24897.550	4.0	47974.530	3.0
433.2130	74.00	-.91	14840.984	0.0	37924.317	0.0
433.2250	75.00	-.98	14518.354	0.0	37601.048	0.0
433.2304	18.01	-4.52	179931.770	1.5	203007.690	1.5
433.2328	27.00	-3.45	23184.230	2.5	46260.020	1.5
433.2335	27.00	-3.45	31871.150	3.5	54946.900	2.5
433.2345	11.02	-4.94	440552.400	3.5	463628.100	2.5
433.2375	8.01	-2.02	232753.860	3.5	255829.400	3.5
433.2427	27.01	-2.20	63865.200	1.0	86940.460	2.0
433.2446	26.00	-3.26	22838.320	2.0	45913.480	3.0
433.2497	22.00	-1.80	20006.032	2.0	43080.920	2.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
433.2500	44.00	.15	23310.023	0.0	46391.385	0.0
433.2510	42.00	.12	27584.872	0.0	50666.181	0.0
433.2518	25.01	-4.66	83875.460	4.0	106950.240	3.0
433.2540	26.00	-4.15	31805.059	3.0	54879.720	2.0
433.2566	24.00	-2.20	25177.390	4.0	48251.910	3.0
433.2570	30.02	-1.23	257796.000	5.0	280870.500	4.0
433.2570	30.02	-3.58	257796.000	5.0	280870.500	5.0
433.2683	29.01	-4.93	125568.700	1.0	148642.600	2.0
433.2692	16.02	-.24	146696.190	0.0	169770.040	1.0
433.2692	16.02	-2.46	146696.190	0.0	169770.040	1.0
433.2706	22.00	-4.19	25388.334	4.0	48462.110	5.0
433.2710	58.01	-.60	5565.369	0.0	28645.612	0.0
433.2713	8.01	-.06	232753.860	3.5	255827.600	4.5
433.2760	26.02	-4.57	199660.840	5.0	222734.330	4.0
433.2815	17.01	-1.59	126725.100	1.0	149798.300	2.0
433.2818	23.00	-1.07	137.380	2.5	23210.560	2.5
433.2872	26.01	-4.76	21711.890	3.5	44784.780	2.5
433.2910	56.00	-.89	12636.000	0.0	35715.178	0.0
433.2929	24.01	-3.62	47354.630	2.5	70427.220	3.5
433.2949	24.01	-3.60	44307.440	.5	67379.920	1.5
433.2970	26.02	-3.58	165939.470	5.0	189011.840	4.0
433.2985	25.01	-4.16	48317.850	4.0	71390.140	3.0
433.3001	26.00	-4.50	31307.235	4.0	54379.440	3.0
433.3051	26.00	-4.70	34636.820	2.0	57708.760	2.0
433.3143	27.00	-1.71	29563.170	1.5	52634.620	.5
433.3201	28.00	-1.41	33112.368	3.0	56183.510	4.0
433.3212	26.02	-4.68	114351.920	3.0	137423.000	3.0
433.3242	23.00	-3.98	17054.870	2.5	40125.790	3.5
433.3260	40.01	-.11	19277.147	0.0	42354.461	0.0
433.3344	27.01	-6.18	25317.720	1.0	48388.100	2.0
433.3445	25.02	-4.18	172682.640	3.5	195752.480	2.5
433.3483	29.01	-4.32	116326.160	3.0	139395.800	4.0
433.3536	23.01	-6.54	14461.730	3.0	37531.090	4.0
433.3557	18.00	-1.67	95399.870	1.0	118469.117	2.0
433.3566	20.02	.98	348051.860	4.0	371121.060	5.0
433.3604	10.01	-2.31	290583.170	1.5	313652.170	1.5
433.3628	25.00	-2.72	35041.370	3.5	58110.240	4.5
433.3636	20.02	-.93	348051.860	4.0	371120.690	4.0
433.3740	57.01	-.62	1371.178	0.0	24445.936	0.0
433.3812	25.01	-4.79	59537.400	4.0	82605.290	4.0
433.3828	10.02	-4.57	356766.200	1.0	379834.000	1.0
433.3858	16.01	-1.38	130134.080	2.5	153201.720	1.5
433.3910	59.01	-.71	1613.150	0.0	24687.002	0.0
433.3956	8.01	-.85	232745.980	1.5	255813.100	2.5
433.3960	11.02	-5.00	411963.900	1.5	435031.000	.5
433.4013	25.02	-.78	195308.790	4.5	218375.610	4.5
433.4077	23.00	-1.33	9824.580	2.5	32891.060	3.5
433.4112	25.01	-3.72	44745.460	2.0	67811.750	3.0
433.4124	10.00	-2.95	148257.790	1.0	171324.017	1.0
433.4125	8.01	-.82	232745.980	1.5	255812.200	1.5
433.4150	62.01	-.94	2177.753	0.0	25250.328	0.0
433.4243	8.01	-.41	232747.510	2.5	255813.100	2.5
433.4251	23.01	-4.57	49723.680	4.0	72789.230	3.0
433.4315	26.02	-3.78	199700.830	4.0	222766.040	3.0
433.4328	26.02	-2.08	199700.830	4.0	222765.970	4.0
433.4336	30.02	.09	257796.000	5.0	280861.100	5.0
433.4336	30.02	-2.00	257796.000	5.0	280861.100	6.0
433.4370	27.00	-4.43	22475.360	4.5	45540.280	5.5
433.4413	8.01	-1.27	232747.510	2.5	255812.200	1.5
433.4451	25.02	-.21	195752.480	2.5	218816.970	2.5
433.4469	23.00	-1.29	17054.870	2.5	40119.260	2.5
433.4477	24.00	-1.76	21810.840	1.0	44875.190	2.0
433.4640	72.01	-.22	22987.393	0.0	46057.360	0.0
433.4768	23.01	-4.13	16340.970	3.0	39403.770	4.0
433.4810	42.00	.45	26133.037	0.0	49202.099	0.0
433.4828	22.00	-.63	6598.749	2.0	29661.232	1.0
433.4870	58.01	-.93	8227.067	0.0	31295.810	0.0
433.4873	22.00	-3.87	18695.230	4.0	41757.470	3.0
433.4960	57.01	-1.42	14034.408	0.0	37102.672	0.0
433.5000	7.04	-.20	709947.000	0.0	733015.051	0.0
433.5114	24.00	-3.90	31364.330	3.0	54425.290	4.0
433.5231	28.00	-2.86	33112.368	3.0	56172.704	3.0
433.5290	64.01	-.29	17583.339	0.0	40649.847	0.0
433.5323	23.00	-2.46	19078.150	3.5	42138.000	2.5
433.5326	28.01	-3.24	112686.300	2.5	135746.130	1.5
433.5334	18.00	-2.05	95399.870	1.0	118459.662	1.0
433.5424	25.02	.55	193498.070	3.5	216557.380	3.5
433.5437	8.01	-1.42	232753.860	3.5	255813.100	2.5
433.5461	26.00	-4.83	24772.019	1.0	47831.132	2.0
433.5475	23.00	-2.64	15264.830	5.5	38323.870	4.5
433.5490	58.01	-1.04	8065.752	0.0	31131.196	0.0
433.5505	23.01	-4.98	14461.730	3.0	37520.610	3.0
433.5514	28.01	-3.97	91800.050	4.5	114858.880	5.5
433.5595	23.01	-6.84	26839.820	3.0	49898.220	2.0
433.5614	11.02	-3.71	442710.500	1.5	465768.800	2.5
433.5652	29.01	-3.19	118484.000	3.0	141542.100	2.0
433.5687	23.01	-3.57	49731.320	2.0	72789.230	3.0
433.5697	25.00	-1.74	38669.600	3.5	61727.460	2.5
433.5700	90.01	-.96	11050.080	0.0	34114.406	0.0
433.5727	28.02	-4.25	121566.700	1.0	144624.400	1.0
433.5730	92.00	-1.18	0.000	0.0	23064.167	0.0
433.5757	24.00	-3.33	27597.220	3.0	50654.760	2.0
433.5768	10.02	-4.72	356776.520	2.0	379834.000	1.0
433.5817	25.02	-.47	195315.780	2.5	218373.000	1.5
433.5889	26.00	-3.90	31322.603	3.0	54379.440	3.0
433.5894	56.01	-4.33	46154.890	0.0	69218.184	0.0
433.6000	29.00	-1.77	44926.239	0.0	67988.970	0.0
433.6140	62.00	.37	3064.986	0.0	26126.972	0.0
433.6200	73.00	-.19	23793.968	0.0	46855.635	0.0
433.6220	10.00	-3.23	148257.790	1.0	171312.870	0.0
433.6235	17.01	-.50	126743.300	2.0	149798.300	2.0
433.6260	58.01	-.50	5646.026	0.0	28707.374	0.0
433.6420	44.00	-1.52	7420.492	0.0	30480.989	0.0
433.6424	22.00	-2.09	18287.560	4.0	41341.553	5.0
433.6524	26.02	-4.96	199660.840	5.0	222714.300	6.0
433.6589	26.00	-3.03	31322.603	3.0	54375.719	2.0
433.6615	28.01	-2.47	107082.210	2.5	130135.190	1.5
433.6630	24.02	-4.74	71321.800	3.0	94374.700	4.0
433.6660	72.01	.24	21535.558	0.0	44594.779	0.0
433.6673	26.02	-2.50	117950.320	4.0	141002.990	4.0
433.6737	24.00	-1.24	35807.900	2.0	58860.230	2.0
433.6750	27.00	-2.48	23207.760	1.5	46260.020	1.5
433.6784	9.02	-4.59	421005.360	.5	444057.440	1.5
433.6805	24.00	-4.68	23933.900	4.0	46985.870	5.0
433.6850	20.02	-3.58	359800.570	3.0	382852.300	2.0
433.6876	22.00	-2.08	15108.121	3.0	38159.710	3.0
433.6877	8.01	-.67	185340.680	1.5	208392.270	1.5
433.6976	9.02	-4.74	421005.360	.5	444056.420	.5
433.7027	24.00	-2.04	33934.880	3.0	56985.670	3.0
433.7040	25.01	-2.15	43850.420	2.0	66901.140	2.0
433.7048	26.00	-2.97	12560.933	3.0	35611.608	3.0
433.7072	18.01	-.48	172816.210	.5	195866.760	1.5
433.7172	24.00	-4.16	33935.650	2.0	56985.670	3.0
433.7247	23.00	-3.97	14910.040	3.5	37959.660	2.5
433.7270	44.00	-1.27	6452.602	0.0	29508.580	0.0
433.7280	90.00	-1.58	0.000	0.0	23055.924	0.0
433.7288	26.02	-2.02	199700.830	4.0	222750.230	3.0
433.7290	22.01	-2.49	16625.250	1.5	39674.640	.5
433.7290	39.00	-.64	15566.901	0.0	38622.772	0.0
433.7403	25.00	-1.23	34463.370	1.5	57512.160	1.5
433.7510	64.00	-.32	6291.287	0.0	29345.989	0.0
433.7514	30.02	.15	257678.700	2.0	280726.900	2.0
433.7514	30.02	-.80	257678.700	2.0	280726.900	1.0
433.7520	26.00	-3.19	20874.482	3.0	43922.652	3.0
433.7524	25.02	.23	193235.430	2.5	216283.580	3.5
433.7529	27.00	-1.49	29216.370	2.5	52264.490	1.5
433.7551	17.01	-3.32	138623.000	1.0	161671.000	0.0
433.7552	24.00	-1.09	7810.820	1.0	30858.820	2.0
433.7560	41.00	-1.25	9436.930	0.0	32491.366	0.0
433.7678	24.00	-3.48	31377.960	4.0	54425.290	4.0
433.7680	63.00	-.04	13389.148	0.0	36442.946	0.0
433.7719	26.01	-3.69	62125.660	1.5	85172.770	.5
433.7780	58.01	-.47	2581.041	0.0	25634.308	0.0
433.7834	24.00	-.45	35813.730	3.0	58860.230	2.0
433.7861	17.00	-2.09	72488.568	1.5	95534.923	.5
433.7884	20.02	-3.37	370515.360	3.0	393561.590	4.0
433.7885	26.01	-4.17	50142.930	2.5	73189.160	1.5
433.7923	22.01	-1.04	8710.470	1.5	31756.500	1.5
433.8131	25.00	-.70	38669.600	3.5	61714.520	4.5
433.8150	20.02	-3.09	359543.080	4.0	382587.900	4.0
433.8163	25.00	-2.39	35114.980	2.5	58159.730	2.5
433.8225	18.01	-2.32	161048.640	1.5	184093.060	.5
433.8259	25.02	-4.46	172547.850	2.5	195592.090	1.5
433.8261	26.00	-3.53	17550.180	3.0	40594.413	4.0
433.8312	26.02	-2.06	199700.830	4.0	222744.790	5.0
433.8402	7.00	-1.79	93581.520	.5	116625.000	1.5
433.8423	25.01	-2.29	43850.420	2.0	66893.790	1.0
433.8450	65.00	.06	0.000	0.0	23049.707	0.0
433.8469	22.00	-1.52	17423.853	2.0	40466.979	2.0
433.8655	22.00	-1.26	25797.600	3.0	48839.740	3.0
433.8676	2.01	-.42	411477.918	0.0	434526.424	0.0
433.8680	44.00	-.24	20809.640	0.0	43858.125	0.0
433.8690	59.01	-1.07	3387.616	0.0	26436.048	0.0
433.8694	26.01	-4.23	21711.890	3.5	44753.820	3.5
433.8700	41.00	-.93	12017.970	0.0	35066.349	0.0
433.8700	60.01	-.75	5887.999	0.0	28936.378	0.0
433.8710	42.00	-.91	18228.600	0.0	41276.925	0.0
433.8750	76.00	-.84	15082.956	0.0	38131.069	0.0
433.8789	24.00	-.61	27223.050	2.0	50264.480	3.0
433.8798	25.00	-.84	38669.600	3.5	61710.980	3.5
433.8832	30.02	-4.57	257796.000	5.0	280837.200	4.0
433.8939	28.01	-3.72	110573.360	2.5	133613.990	1.5
433.8960	62.00	-.91	806.575	0.0	23853.572	0.0
433.9003	27.00	-1.88	29735.180	3.5	52775.470	4.5
433.9129	27.00	-5.00	816.000	3.5	23855.620	4.5
433.9320	58.01	.07	10808.108	0.0	33853.193	0.0
433.9387	26.02	-4.52	199660.840	5.0	222699.090	5.0
433.9436	24.00	-.85	7927.470	2.0	30965.460	3.0
433.9459	25.00	-4.75	37630.620	4.5	60668.490	4.5
433.9538	20.02	-4.81	370515.360	3.0	393552.810	3.0
433.9555	25.02	.67	192880.160	3.5	215917.520	4.5
433.9600	27.00	-4.06	29735.180	3.5	52772.300	2.5
433.9623	27.00	-1.82	20500.710	1.5	43537.710	1.5
433.9655	9.02	-3.40	443753.060	2.5	466789.890	1.5
433.9700	23.00	-4.24	17116.920	3.5	40153.510	2.5
433.9713	24.00	-1.41	7750.780	0.0	30787.300	1.0
433.9715	9.02	-1.08	443753.060	2.5	466769.570	2.5
433.9820	42.00	.12	27584.872	0.0	50627.302	0.0
433.9823	10.01	-2.54	280473.580	1.5	303509.520	2.5
433.9920	62.00	-1.29	806.575	0.0	23848.474	0.0
434.0005	29.01	-4.24	114000.000	3.0	137034.970	3.0
434.0019	10.01	-1.02	280473.580	1.5	303508.480	1.5
434.0028	22.00	-2.06	16267.510	5.0	39302.360	4.0
434.0064	28.01	-2.48	94729.250	2.5	117763.910	1.5
434.0203	24.00	-3.49	24940.610	2.0	47974.530	3.0
434.0218	27.00	-3.17	31871.150	3.5	54904.990	2.5
434.0264	26.00	-2.81	32873.623	4.0	55907.220	5.0
434.0277	23.00	-4.04	21032.520	3.5	44066.050	3.5
434.0282	26.02	-1.79	199700.830	4.0	222734.330	4.0
434.0283	16.02	-.37	146736.540	1.0	169770.040	1.0
434.0283	16.02	-1.42	146736.540	1.0	169770.040	1.0
434.0332	20.02	-1.51	348028.130	3.0	371061.370	4.0
434.0340	44.00	-.69	16131.504	0.0	39171.174	0.0
434.0343	10.01	-4.96	282375.330	1.5	305408.510	.5
434.0345	25.01	-4.80	83933.770	3.0	106966.940	2.0
434.0345	20.02	-.07	348028.130	3.0	371061.300	3.0
434.0352	8.01	.51	232796.270	2.5	255829.400	3.5
434.0420	10.00	-3.31	149824.221	2.0	172856.990	1.0
434.0448	24.00	-2.84	24833.860	3.0	47866.480	4.0
434.0461	22.00	-3.48	18911.399	2.0	41943.950	1.0
434.0463	24.00	-4.90	24093.160	2.0	47125.700	3.0
434.0492	26.00	-3.35	22249.430	3.0	45281.816	2.0
434.0502	26.00	-2.47	27666.334	1.0	50698.666	2.0
434.0560	58.01	-.94	8065.752	0.0	31104.254	0.0
434.0577	26.00	-2.56	32873.623	4.0	55905.560	4.0
434.0586	24.00	-4.25	31393.400	5.0	54425.290	4.0
434.0603	17.01	-1.51	138623.000	1.0	161654.800	1.0
434.0671	26.00	-1.98	24574.655	4.0	47606.092	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
434.0730	57.00	-.49	8388.382	0.0	31425.982	0.0
434.0750	42.00	.35	26616.982	0.0	49654.476	0.0
434.0774	24.00	-3.94	27597.220	3.0	50628.110	3.0
434.0863	25.00	-4.66	37789.930	2.5	60820.350	2.5
434.1004	23.00	-.91	323.420	3.5	23353.090	3.5
434.1040	44.00	-.69	16615.449	0.0	39651.404	0.0
434.1130	40.00	.15	11130.738	0.0	34166.215	0.0
434.1137	22.00	-4.51	25643.695	3.0	48672.660	4.0
434.1149	25.02	.43	195948.440	3.5	218977.340	3.5
434.1168	24.00	-1.07	31049.330	6.0	54078.130	5.0
434.1212	24.00	-.78	24200.230	6.0	47228.800	5.0
434.1221	20.02	-3.74	370533.070	4.0	393561.590	4.0
434.1223	26.00	-2.48	27394.676	3.0	50423.185	4.0
434.1225	27.00	-2.34	29735.180	3.5	52763.680	3.5
434.1280	64.01	-.96	3387.616	0.0	26422.297	0.0
434.1310	22.00	-2.33	20006.032	2.0	43034.080	1.0
434.1326	14.02	-2.54	234387.640	1.0	257415.600	1.0
434.1326	14.02	-2.07	234387.640	1.0	257415.600	2.0
434.1330	24.01	-4.20	55081.700	1.5	78109.640	1.5
434.1355	22.01	-2.02	8997.690	3.5	32025.500	2.5
434.1408	26.02	-2.41	199577.710	2.0	222605.240	3.0
434.1420	42.00	-.11	20809.640	0.0	43843.578	0.0
434.1428	10.01	-1.16	280797.260	2.5	303824.680	2.5
434.1432	17.02	-.97	198835.500	.5	221862.900	.5
434.1434	23.00	-2.36	11100.650	4.5	34128.040	3.5
434.1443	28.00	-2.48	29013.228	2.0	52040.568	2.0
434.1449	24.00	-2.31	21847.880	2.0	44875.190	2.0
434.1489	11.00	-3.04	16956.172	.5	39983.270	.5
434.1513	10.01	.24	280797.260	2.5	303824.230	3.5
434.1580	26.00	-3.02	26406.490	1.0	49433.108	2.0
434.1638	28.01	-4.44	112719.750	3.5	135746.060	3.5
434.1641	6.00	-1.49	64086.920	3.0	87113.210	2.0
434.1690	92.01	-1.30	241.973	0.0	23274.479	0.0
434.1793	22.00	-4.89	25493.722	2.0	48519.210	2.0
434.1805	27.00	-3.89	31871.150	3.5	54896.570	3.5
434.1907	22.00	-1.67	25699.950	2.0	48724.830	1.0
434.1960	22.00	-4.03	18145.400	2.0	41170.003	3.0
434.1980	71.01	-.36	35892.596	0.0	58923.563	0.0
434.2000	29.01	-2.65	116371.410	4.0	139395.800	4.0
434.2000	22.00	-1.83	25699.950	2.0	48724.340	2.0
434.2009	8.01	.48	232959.260	3.5	255983.600	4.5
434.2070	44.00	-.46	9114.300	0.0	32144.790	0.0
434.2070	60.01	-2.03	483.945	0.0	23514.435	0.0
434.2128	25.00	-2.29	34463.370	1.5	57487.080	2.5
434.2140	58.01	-1.44	4839.451	0.0	27869.570	0.0
434.2143	24.00	-4.90	31009.000	3.0	54032.630	2.0
434.2167	17.01	-3.90	161634.900	2.0	184658.400	2.0
434.2180	64.01	-.48	4758.794	0.0	27788.701	0.0
434.2194	6.00	-3.28	64089.850	1.0	87113.210	2.0
434.2205	23.00	-1.54	9636.960	1.5	32660.260	2.5
434.2207	10.01	-4.29	282375.330	1.5	305398.620	1.5
434.2303	24.00	-3.27	31055.350	5.0	54078.130	5.0
434.2401	6.00	-2.15	64090.950	2.0	87113.210	2.0
434.2420	26.02	-4.22	105895.350	1.0	128917.510	2.0
434.2420	23.00	-4.91	9824.580	2.5	32846.740	2.5
434.2420	23.00	-4.18	9824.580	2.5	32846.740	2.5
434.2433	22.00	-1.63	20126.055	3.0	43148.150	3.0
434.2440	45.00	-1.99	9114.300	0.0	32142.828	0.0
434.2443	24.00	-2.91	24200.230	6.0	47222.270	6.0
434.2446	20.02	-1.33	359543.080	4.0	382565.100	5.0
434.2477	27.00	-1.64	29948.760	2.5	52970.620	2.5
434.2490	58.01	-.68	10162.848	0.0	33191.111	0.0
434.2505	25.00	-2.58	35114.980	2.5	58136.690	3.5
434.2518	9.02	-1.25	443868.680	2.5	466890.320	3.5
434.2630	25.01	-2.10	44745.460	2.0	67766.510	2.0
434.2771	17.01	-2.79	161634.900	2.0	184655.200	3.0
434.2814	8.01	-.02	253046.230	1.5	276066.300	1.5
434.2814	8.01	-1.00	253046.230	1.5	276066.300	2.5
434.2816	16.01	-1.51	127976.210	1.5	150996.270	2.5
434.2820	41.00	-.26	12017.970	0.0	35044.483	0.0
434.2830	23.00	-.66	15103.770	4.5	38123.760	4.5
434.2839	25.00	-4.09	25281.040	2.5	48300.980	1.5
434.2848	24.00	-4.59	41782.190	4.0	64802.080	5.0
434.2922	17.02	-4.93	216710.400	3.5	239729.900	2.5
434.2998	30.02	-1.78	260613.100	5.0	283632.200	4.0
434.2998	30.02	-.05	260613.100	5.0	283632.200	5.0
434.3040	40.00	-2.38	0.000	0.0	23025.346	0.0
434.3056	20.02	-3.69	370533.070	4.0	393551.860	5.0
434.3079	9.02	-2.21	443770.900	3.5	466789.570	2.5
434.3081	29.01	-3.38	123556.640	2.0	146575.300	2.0
434.3158	24.00	-1.18	21856.940	3.0	44875.190	2.0
434.3180	26.00	-3.52	22946.810	1.0	45964.944	2.0
434.3202	26.00	-3.23	33765.291	2.0	56783.306	3.0
434.3211	28.01	-3.93	98276.700	4.5	121294.670	4.5
434.3215	8.01	-.98	253048.350	2.5	276066.300	1.5
434.3215	8.01	.17	253048.350	2.5	276066.300	2.5
434.3222	26.00	-3.30	26224.961	3.0	49242.872	3.0
434.3258	26.00	-1.84	26224.961	3.0	49242.680	2.0
434.3275	26.01	-2.45	49506.990	1.5	72524.620	1.5
434.3369	22.00	-2.50	18911.399	2.0	41928.528	2.0
434.3426	8.01	-1.03	232796.270	2.5	255813.100	2.5
434.3494	25.01	-4.50	83933.770	3.0	106950.240	3.0
434.3500	60.00	-.98	0.000	0.0	23022.908	0.0
434.3596	8.01	-1.89	232796.270	2.5	255812.200	1.5
434.3620	27.02	-3.42	83938.900	3.5	106954.700	2.5
434.3645	28.01	-3.97	116087.380	4.5	139103.050	5.5
434.3677	25.01	-4.48	49291.310	3.0	72306.810	2.0
434.3677	17.01	.16	126782.800	3.0	149798.300	2.0
434.3693	26.00	-.99	24574.655	4.0	47590.070	4.0
434.3711	27.00	-2.88	26063.110	1.5	49078.430	1.5
434.3773	22.00	-1.38	17369.590	1.0	40384.580	1.0
434.3818	28.01	-4.95	106283.160	2.5	129297.910	3.5
434.3924	26.00	-1.84	35257.309	4.0	58271.500	5.0
434.3940	90.01	-2.33	1774.465	0.0	24795.041	0.0
434.3968	25.01	-1.31	43528.300	5.0	66542.260	5.0
434.3983	28.01	-3.37	115827.120	3.5	138841.000	3.5
434.4068	20.02	-3.00	362893.470	2.0	385906.900	2.0
434.4098	23.00	-2.85	13801.530	1.5	36814.800	1.5
434.4098	6.00	-2.22	64089.850	1.0	87103.120	1.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
434.4124	11.01	-1.59	308864.540	0.0	331877.670	1.0
434.4128	24.01	-3.25	66256.770	.5	89269.880	.5
434.4281	8.03	-.64	552495.100	3.5	575507.400	3.5
434.4281	8.03	.90	552495.100	3.5	575507.400	4.5
434.4281	8.03	.79	552495.100	2.5	575507.400	3.5
434.4294	22.01	-2.00	8744.270	2.5	31756.500	1.5
434.4300	64.01	-.43	4758.794	0.0	27777.462	0.0
434.4306	6.00	-1.79	64090.950	2.0	87103.120	1.0
434.4320	90.01	-2.45	0.000	0.0	23018.562	0.0
434.4357	17.01	-1.91	138623.000	1.0	161634.900	2.0
434.4359	8.01	-1.76	232747.510	2.5	255759.400	3.5
434.4360	23.00	-2.78	15103.770	4.5	38115.650	3.5
434.4460	28.01	-3.15	106283.160	2.5	129294.510	2.5
434.4473	26.02	-3.04	105906.230	2.0	128917.510	2.0
434.4496	24.00	-.65	8095.210	3.0	31106.370	4.0
434.4500	26.00	-.59	29056.312	3.0	52067.450	2.0
434.4521	25.02	-3.71	172451.230	1.5	195462.260	.5
434.4608	26.00	-3.28	33412.706	3.0	56423.276	4.0
434.4617	26.02	-2.57	199595.300	3.0	222605.820	4.0
434.4650	39.00	-.25	16292.819	0.0	39309.633	0.0
434.4660	42.00	-.12	26213.694	0.0	49230.455	0.0
434.4725	23.01	-4.65	49898.220	2.0	72908.170	3.0
434.4725	29.01	-3.60	118532.150	2.0	141542.100	2.0
434.4726	26.02	-3.77	199595.300	3.0	222605.240	3.0
434.4734	11.00	-2.74	16973.368	1.5	39983.270	.5
434.4750	8.01	-2.80	232745.980	1.5	255755.800	2.5
434.4808	20.02	.04	348051.860	4.0	371061.370	4.0
434.4821	20.02	-1.61	348051.860	4.0	371061.300	3.0
434.4885	30.02	-1.78	260623.100	4.0	283632.200	5.0
434.4885	30.02	-.14	260623.100	4.0	283632.200	4.0
434.4929	23.00	-3.03	17116.920	3.5	40125.790	3.5
434.5039	8.01	-1.47	232747.510	2.5	255755.800	2.5
434.5115	24.00	-.77	27176.220	1.0	50184.100	2.0
434.5163	18.00	-2.31	95399.870	1.0	118407.494	1.0
434.5178	26.02	-2.92	199603.610	4.0	222611.160	5.0
434.5250	23.00	-4.03	14548.830	2.5	37556.000	3.5
434.5287	26.01	-2.30	77742.780	2.5	100749.750	2.5
434.5320	41.00	-1.90	0.000	0.0	23013.265	0.0
434.5384	26.02	-4.60	93412.930	2.0	116419.390	2.0
434.5469	23.00	-3.61	8715.720	3.5	31721.730	4.5
434.5557	8.01	-.71	232753.860	3.5	255759.400	3.5
434.5567	8.01	-.29	185340.680	1.5	208346.170	.5
434.5591	25.01	-2.38	43536.900	4.0	66542.260	5.0
434.5633	29.01	-4.32	116326.160	3.0	139331.300	3.0
434.5820	25.02	-.81	194971.150	2.5	217975.300	2.5
434.5830	58.01	-.26	9517.587	0.0	32528.151	0.0
434.5840	74.00	-.81	18873.860	0.0	41884.371	0.0
434.5860	62.01	-1.49	806.575	0.0	23816.980	0.0
434.5867	23.00	-2.47	13810.900	.5	36814.800	1.5
434.5895	18.01	-2.15	161089.310	.5	184093.060	.5
434.5924	17.01	-3.10	161654.800	1.0	184658.400	2.0
434.5943	27.01	-5.41	25147.200	4.0	48150.700	3.0
434.5948	28.01	-3.61	99844.130	3.5	122847.600	3.5
434.6052	22.00	-3.82	15156.787	4.0	38159.710	3.0
434.6104	22.00	-.74	18037.225	4.0	41039.874	5.0
434.6107	27.01	-4.30	63344.100	3.0	86346.730	3.0
434.6120	41.00	-1.23	8630.355	0.0	31639.384	0.0
434.6162	25.02	-.73	195112.810	3.5	218115.150	3.5
434.6162	23.00	-2.20	17116.920	3.5	40119.260	2.5
434.6187	26.02	-3.07	199603.610	4.0	222605.820	4.0
434.6188	25.00	-1.69	37737.220	3.5	60739.420	3.5
434.6189	26.00	-2.68	26224.961	3.0	49227.160	3.0
434.6235	10.01	.03	305566.940	1.5	328568.890	1.5
434.6237	10.01	-.67	305566.940	1.5	328568.880	.5
434.6237	8.01	-2.12	232753.860	3.5	255755.800	2.5
434.6296	26.02	-4.32	199603.610	4.0	222605.240	3.0
434.6326	25.00	-3.42	18402.460	2.5	41403.930	2.5
434.6455	25.01	-1.82	52718.800	0.0	75719.590	1.0
434.6460	64.00	.20	967.890	0.0	23975.119	0.0
434.6472	13.01	-3.87	125706.200	1.0	148706.900	0.0
434.6480	44.00	-1.30	7985.094	0.0	30992.217	0.0
434.6490	62.01	-1.86	4355.506	0.0	27362.576	0.0
434.6500	26.01	-4.22	50142.930	2.5	73143.480	3.5
434.6504	14.02	-2.24	234415.070	0.0	257415.600	1.0
434.6520	40.00	-.42	14034.408	0.0	37041.319	0.0
434.6557	26.00	-3.16	26627.612	4.0	49627.861	4.0
434.6572	22.00	-1.34	17369.590	1.0	40369.760	0.0
434.6612	29.01	-2.99	123556.640	2.0	146556.600	3.0
434.6620	64.00	-.27	161.315	0.0	23167.697	0.0
434.6702	7.00	-2.19	93581.520	.5	116581.000	.5
434.6702	7.00	-4.66	93581.520	.5	116581.000	1.5
434.6755	24.00	-2.12	24056.110	5.0	47055.310	5.0
434.6831	24.00	-.64	24056.110	5.0	47054.910	4.0
434.6869	13.01	-1.02	123415.900	2.0	146414.500	3.0
434.6888	23.01	-3.16	13490.840	2.0	36489.340	1.0
434.6914	28.01	-2.97	99442.860	4.5	122441.220	4.5
434.6933	26.02	-2.50	199700.830	4.0	222699.090	5.0
434.6995	20.02	-3.09	359800.570	3.0	382798.500	4.0
434.7000	74.00	-.43	19115.832	0.0	42120.203	0.0
434.7039	25.02	-2.07	192665.800	4.5	215663.500	3.5
434.7084	23.00	-2.70	19023.470	4.5	42020.930	3.5
434.7137	8.02	-3.77	306584.800	2.0	329581.980	1.0
434.7190	8.01	-.89	206971.300	2.5	229968.200	1.5
434.7190	92.01	-1.88	887.233	0.0	23890.598	0.0
434.7220	40.00	-2.38	564.603	0.0	23567.810	0.0
434.7235	26.00	-5.69	0.000	4.0	22996.661	4.0
434.7266	13.01	-2.08	123418.000	3.0	146414.500	3.0
434.7266	13.01	-1.10	123418.000	3.0	146414.500	4.0
434.7266	13.01	-1.33	123418.000	3.0	146414.500	4.0
434.7310	41.00	-.64	13389.148	0.0	36391.878	0.0
434.7310	64.01	-.41	10485.478	0.0	33488.208	0.0
434.7379	8.01	.02	206972.300	1.5	229968.200	1.5
434.7417	30.02	-1.76	215340.500	2.0	238336.200	2.0
434.7427	18.01	-3.46	187589.230	2.5	210584.880	1.5
434.7442	25.02	-1.70	192880.160	3.5	215875.730	2.5
434.7490	59.01	-.95	3387.616	0.0	26389.394	0.0
434.7504	24.00	-1.30	24093.160	2.0	47088.400	1.0
434.7510	74.00	-.77	19115.832	0.0	42117.504	0.0
434.7600	58.01	-1.04	8065.752	0.0	31066.948	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
434.7610	25.00	-2.56	35165.050	1.5	58159.730	2.5
434.7614	20.02	-2.17	341349.190	1.0	364343.850	1.0
434.7627	23.00	-2.11	19026.340	2.5	42020.930	3.5
434.7795	13.01	-3.88	123420.800	4.0	146414.500	3.0
434.7795	13.01	-2.31	123420.800	4.0	146414.500	4.0
434.7795	13.01	-2.45	123420.800	4.0	146414.500	4.0
434.7795	13.01	-.79	123420.800	4.0	146414.500	5.0
434.7800	62.01	-.93	2984.328	0.0	25984.466	0.0
434.7831	26.00	-2.31	29056.312	3.0	52049.820	2.0
434.7890	28.01	-4.04	99844.130	3.5	122837.330	4.5
434.7890	40.00	.04	7985.094	0.0	30984.756	0.0
434.7931	28.01	-2.92	107142.210	1.5	130135.190	1.5
434.7992	26.01	-3.91	38164.240	2.5	61156.900	3.5
434.8064	18.01	.47	134241.650	2.5	157233.930	3.5
434.8079	25.02	-1.41	195315.780	2.5	218307.980	2.5
434.8088	25.01	-4.72	78475.430	7.0	101467.580	6.0
434.8120	74.00	-.48	20890.298	0.0	43888.743	0.0
434.8306	26.00	-2.29	32133.977	2.0	55124.974	3.0
434.8319	20.02	-2.45	359800.570	3.0	382791.500	3.0
434.8355	9.02	-1.02	443865.310	1.5	466856.050	2.5
434.8364	28.00	-2.62	35639.148	3.0	58629.840	2.0
434.8419	28.00	-3.15	35639.148	3.0	58629.550	3.0
434.8446	25.01	-1.77	43696.190	3.0	66686.450	3.0
434.8518	21.00	-.32	18515.770	1.5	41505.650	2.5
434.8519	25.00	-4.24	25281.040	2.5	48270.910	2.5
434.8536	27.00	-3.48	31871.150	3.5	54860.930	4.5
434.8555	26.01	-4.91	62689.960	2.5	85679.640	2.5
434.8650	41.00	-1.67	645.260	0.0	23640.902	0.0
434.8741	30.02	-1.59	260613.100	5.0	283601.800	4.0
434.8767	28.01	-3.66	106283.160	2.5	129271.720	3.5
434.8790	39.00	.59	16131.504	0.0	39126.406	0.0
434.8807	26.02	-2.26	105929.160	3.0	128917.510	2.0
434.8930	40.00	-1.77	5484.711	0.0	28478.873	0.0
434.8940	26.00	-2.22	24118.815	4.0	47106.463	4.0
434.8951	28.01	-2.78	99132.780	5.5	122120.370	5.5
434.8965	6.00	-2.11	64089.850	1.0	87077.360	0.0
434.8988	9.02	.23	443868.680	2.5	466856.070	3.5
434.8992	9.02	-.27	443868.680	2.5	466856.050	2.5
434.9024	14.02	-2.84	234428.400	1.0	257415.600	1.0
434.9024	14.02	-2.37	234428.400	1.0	257415.600	2.0
434.9030	41.00	-.34	12259.943	0.0	35253.576	0.0
434.9070	90.00	-1.33	4920.109	0.0	27913.531	0.0
434.9134	10.01	-.64	305582.270	.5	328568.890	1.5
434.9136	10.01	-.39	305582.270	.5	328568.880	.5
434.9272	25.00	-2.99	44978.980	1.5	67964.870	2.5
434.9276	26.01	-4.18	50157.610	4.5	73143.480	3.5
434.9339	28.01	-4.08	113407.310	2.5	136392.850	3.5
434.9433	8.01	.13	185499.200	2.5	208484.240	2.5
434.9522	26.01	-4.04	61726.090	3.5	84710.660	3.5
434.9605	20.02	-3.65	359800.570	3.0	382784.700	3.0
434.9628	23.00	-3.89	14514.750	1.5	37498.760	2.5
434.9700	44.00	-.07	13873.093	0.0	36863.184	0.0
434.9708	23.00	-4.57	19026.340	2.5	42009.930	2.5
434.9740	72.00	.06	24600.544	0.0	47590.424	0.0
434.9778	27.00	-3.83	31699.690	4.5	54682.910	4.5
434.9787	25.00	-3.76	25287.740	3.5	48270.910	2.5
434.9790	58.01	-.42	4194.191	0.0	27183.807	0.0
434.9901	24.01	-2.73	66355.130	1.5	89337.700	1.5
434.9954	28.01	-3.47	95332.530	2.5	118314.820	2.5
434.9959	23.01	-2.67	16421.510	4.0	39403.770	4.0
435.0021	22.00	-4.88	25537.276	1.0	48519.210	2.0
435.0065	17.02	-4.85	216524.600	2.5	239506.300	1.5
435.0283	9.02	-3.18	443913.330	4.5	466893.880	4.5
435.0285	24.00	-3.31	24833.860	3.0	47814.400	3.0
435.0300	41.00	-1.22	8711.012	0.0	31697.932	0.0
435.0317	25.01	-1.96	43696.190	3.0	66676.560	2.0
435.0326	9.02	-3.55	443913.330	4.5	466893.650	5.5
435.0330	56.00	-.07	12636.000	0.0	35622.762	0.0
435.0340	42.00	-1.02	11372.710	0.0	34359.419	0.0
435.0419	27.01	-2.31	63366.900	2.0	86346.730	3.0
435.0460	62.01	-1.12	3871.561	0.0	26857.636	0.0
435.0510	72.01	.34	22987.393	0.0	45973.204	0.0
435.0601	26.01	-4.28	50076.100	1.5	73054.970	2.5
435.0633	30.02	-3.16	260623.100	4.0	283601.800	4.0
435.0633	30.02	-1.69	260623.100	4.0	283601.800	3.0
435.0643	27.00	-2.98	23207.760	1.5	46186.410	1.5
435.0645	27.00	-2.29	25739.930	2.5	48718.570	2.5
435.0811	23.00	-2.17	2153.200	1.5	25130.960	2.5
435.0820	62.00	-1.41	1451.835	0.0	24436.008	0.0
435.0832	22.01	-3.11	16625.250	1.5	39602.900	1.5
435.0836	23.01	-3.78	13511.710	1.0	36489.340	1.0
435.0895	24.00	-1.93	24940.610	2.0	47917.930	2.0
435.0904	29.01	-3.51	108335.430	2.0	131312.700	3.0
435.0914	9.02	-.39	443913.330	4.5	466890.550	4.5
435.0972	26.00	-4.29	29320.050	1.0	52296.960	2.0
435.0995	26.00	-4.24	26627.612	4.0	49604.402	5.0
435.1054	24.00	-1.43	7810.820	1.0	30787.300	1.0
435.1099	26.02	-4.95	199634.920	6.0	222611.160	5.0
435.1107	30.02	1.10	257796.000	5.0	280772.200	6.0
435.1180	69.01	-1.76	8711.012	0.0	31693.283	0.0
435.1184	24.00	-4.60	25038.610	5.0	48014.400	4.0
435.1273	24.01	-2.76	67875.680	3.5	90851.000	4.5
435.1277	8.01	.22	206971.300	2.5	229946.600	2.5
435.1290	60.01	-1.21	1451.835	0.0	24433.525	0.0
435.1300	77.00	-1.06	18389.915	0.0	41371.553	0.0
435.1308	28.00	-3.29	31786.210	3.0	54761.346	4.0
435.1334	23.01	-4.69	14556.090	4.0	37531.090	4.0
435.1359	26.00	-2.31	27559.568	2.0	50534.435	3.0
435.1467	8.01	-1.01	206972.300	1.5	229946.600	2.5
435.1530	76.00	-.40	18793.202	0.0	41773.625	0.0
435.1546	26.00	-1.69	24118.815	4.0	47092.693	3.0
435.1570	41.00	-.34	8711.012	0.0	31691.224	0.0
435.1573	24.00	-4.00	31355.210	2.0	54328.950	3.0
435.1573	25.02	-1.59	192741.670	.5	215715.410	1.5
435.1614	25.01	-3.32	83912.380	5.0	106885.900	4.0
435.1633	14.02	-2.37	234442.180	2.0	257415.600	2.0
435.1633	14.02	-1.62	234442.180	2.0	257415.600	3.0
435.1633	14.02	-3.54	234442.180	2.0	257415.600	1.0
435.1675	13.01	-1.87	125700.500	0.0	148673.700	1.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
435.1754	24.00	-.48	8307.570	4.0	31280.350	5.0
435.1758	23.00	-2.76	19026.340	2.5	41999.100	1.5
435.1762	26.01	-2.21	21812.040	1.5	44784.780	2.5
435.1850	59.01	-.78	1693.808	0.0	24672.541	0.0
435.1906	12.00	-1.72	35051.264	1.0	58023.246	2.0
435.1963	23.02	-4.14	161027.320	4.5	183999.000	3.5
435.2048	26.00	-4.43	22249.430	3.0	45220.662	3.0
435.2067	24.00	-2.42	23933.900	4.0	46905.030	4.0
435.2103	25.00	-2.35	37789.930	2.5	60760.870	1.5
435.2124	21.00	-.34	18504.050	.5	41474.880	1.5
435.2145	28.01	-4.93	115870.280	2.5	138841.000	3.5
435.2204	18.01	-1.02	132737.610	.5	155708.020	.5
435.2315	26.00	-4.09	29798.960	4.0	52768.780	4.0
435.2319	17.01	-1.50	147605.700	3.0	170575.500	3.0
435.2330	39.00	-.89	11211.395	0.0	34187.594	0.0
435.2484	24.00	-3.03	24897.550	4.0	47866.480	4.0
435.2560	77.00	-1.00	18954.517	0.0	41929.502	0.0
435.2570	72.00	-1.50	8872.327	0.0	31847.259	0.0
435.2577	26.02	-2.97	66522.950	2.0	89491.390	1.0
435.2580	26.00	-3.24	35856.386	2.0	58824.810	2.0
435.2645	24.01	-3.66	31531.620	1.5	54499.700	1.5
435.2690	22.00	-1.70	18287.560	4.0	41255.400	4.0
435.2694	26.01	-4.44	75600.930	3.5	98568.750	3.5
435.2700	39.00	-.24	16454.134	0.0	39428.380	0.0
435.2710	58.01	-.45	4758.794	0.0	27732.987	0.0
435.2737	26.00	-1.32	17927.378	1.0	40894.972	2.0
435.2740	26.02	-3.95	199634.920	6.0	222602.500	6.0
435.2754	13.01	-1.40	125706.200	1.0	148673.700	1.0
435.2884	23.00	-.73	553.020	4.5	23519.840	4.5
435.2920	28.01	-3.36	112686.300	2.5	135652.930	1.5
435.2950	9.02	-1.01	443927.410	3.5	466893.880	4.5
435.3075	25.01	-4.25	44899.820	3.0	67865.630	4.0
435.3123	28.01	-3.28	99154.810	4.5	122120.370	5.5
435.3270	41.00	-1.99	967.890	0.0	23939.128	0.0
435.3301	24.00	-3.62	31364.330	3.0	54328.950	3.0
435.3310	42.00	-.43	20164.380	0.0	43135.407	0.0
435.3320	23.01	-4.03	14556.090	4.0	37520.610	3.0
435.3340	72.00	-.69	16050.847	0.0	39021.715	0.0
435.3343	27.01	-3.83	24074.600	2.0	47039.000	3.0
435.3361	27.01	-5.76	22414.500	3.0	45378.800	4.0
435.3380	28.01	-4.72	98276.700	4.5	121240.900	3.5
435.3390	90.01	-1.32	10566.135	0.0	33536.740	0.0
435.3521	25.01	-1.94	79739.880	5.0	102703.340	4.0
435.3525	25.02	-.00	192948.290	1.5	215911.730	1.5
435.3581	9.02	-1.95	443927.410	3.5	466890.550	4.5
435.3583	8.01	.22	232796.270	2.5	255759.400	3.5
435.3625	9.02	-.44	443927.410	3.5	466890.320	3.5
435.3672	23.00	-5.33	8578.520	2.5	31541.180	3.5
435.3720	24.01	-3.70	47354.630	2.5	70317.040	2.5
435.3740	17.02	-4.87	178369.700	.5	201332.000	1.5
435.3775	27.00	-4.55	32027.500	3.5	54989.620	3.5
435.3780	18.01	-3.11	172335.520	2.5	195297.610	1.5
435.3798	27.01	-4.53	24886.500	2.0	47848.500	1.0
435.3807	25.00	-4.04	45754.270	3.5	68716.220	4.5
435.3820	23.00	-1.95	13801.530	1.5	36763.410	2.5
435.3930	17.02	-1.05	182076.000	1.5	205037.300	1.5
435.3978	24.00	-.84	27223.050	2.0	50184.100	2.0
435.4039	22.00	-.87	17423.853	2.0	40384.580	1.0
435.4130	44.00	-.48	7985.094	0.0	30951.795	0.0
435.4190	41.00	-1.07	10969.423	0.0	33935.807	0.0
435.4198	29.01	-2.88	116371.410	4.0	139331.300	3.0
435.4266	8.01	-4.19	232796.270	2.5	255755.800	2.5
435.4267	26.00	-2.64	31307.235	4.0	54266.760	5.0
435.4346	21.00	-.84	18515.770	1.5	41474.880	1.5
435.4353	26.01	-1.95	61726.090	3.5	84685.160	3.5
435.4400	57.01	-.82	7339.834	0.0	30305.111	0.0
435.4408	28.01	-3.55	100475.820	3.5	123434.600	4.5
435.4422	14.00	-4.36	39760.285	1.0	62718.990	0.0
435.4460	76.00	-1.64	10082.190	0.0	33047.150	0.0
435.4467	25.02	-.11	194849.100	1.5	217807.570	1.5
435.4476	28.01	-3.66	71770.830	2.5	94729.250	2.5
435.4528	12.00	-2.42	35051.264	1.0	58009.410	0.0
435.4566	16.02	-1.44	147690.990	2.0	170648.940	3.0
435.4604	21.01	-1.62	4883.420	3.0	27841.170	4.0
435.4740	29.00	-1.55	42264.541	0.0	65228.024	0.0
435.4800	44.00	-.87	10566.135	0.0	33529.302	0.0
435.4800	57.00	-.23	9114.300	0.0	32077.467	0.0
435.4837	23.01	-4.16	49723.680	4.0	72680.200	5.0
435.4917	18.01	-4.67	183675.570	3.5	206631.670	2.5
435.4947	26.02	-4.48	199634.920	6.0	222590.860	7.0
435.4973	23.00	-.56	15264.830	5.5	38220.630	5.5
435.5038	24.01	-3.40	53923.570	4.5	76879.030	3.5
435.5065	28.01	-3.25	109269.830	1.5	132225.150	1.5
435.5065	24.00	-3.56	24093.160	2.0	47048.480	3.0
435.5079	20.00	-1.16	21849.634	2.0	44804.878	3.0
435.5087	25.03	-2.58	152858.200	3.0	175813.400	4.0
435.5090	63.01	.63	26052.379	0.0	49014.017	0.0
435.5140	73.00	.18	22584.106	0.0	45545.480	0.0
435.5151	22.00	-2.12	20126.055	3.0	43080.920	2.0
435.5160	74.00	-1.11	12098.628	0.0	35059.897	0.0
435.5169	26.02	-4.32	93512.640	4.0	116467.410	4.0
435.5182	13.01	-1.17	125719.000	2.0	148673.700	1.0
435.5243	25.02	.32	195112.810	3.5	218067.190	2.5
435.5302	22.00	-1.94	16458.710	6.0	39412.780	5.0
435.5320	90.01	-1.52	7904.437	0.0	30864.862	0.0
435.5391	17.02	-1.59	194959.500	2.5	217913.100	1.5
435.5406	6.00	-3.33	61981.820	1.0	84935.340	1.0
435.5548	25.02	.21	195752.480	2.5	218705.250	2.5
435.5649	24.00	-4.16	24833.860	3.0	47786.100	2.0
435.5659	18.01	-4.54	179592.130	2.5	202544.320	2.5
435.5725	8.00	-4.69	106785.213	4.0	129737.052	3.0
435.5750	92.00	-.56	564.603	0.0	23522.762	0.0
435.5802	22.00	-3.50	25107.417	2.0	48058.850	1.0
435.5824	25.00	-2.24	45013.550	2.5	67964.870	2.5
435.5886	24.00	-4.12	31377.960	4.0	54328.950	3.0
435.5897	28.00	.25	29320.782	3.0	52271.716	2.0
435.5934	23.01	-3.77	49731.320	2.0	72682.060	2.0
435.5945	23.00	-1.81	137.380	2.5	23086.060	1.5
435.5960	30.02	-2.04	238336.200	2.0	261286.800	1.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
435.6013	26.02	-4.94	199660.840	5.0	222611.160	5.0
435.6087	23.00	-4.48	14548.830	2.5	37498.760	2.5
435.6171	25.00	-1.74	37789.930	2.5	60739.420	3.5
435.6260	28.00	-2.59	35639.148	3.0	58588.168	3.0
435.6317	23.00	-3.60	19189.280	1.5	42138.000	2.5
435.6330	72.00	-1.54	4516.821	0.0	27471.923	0.0
435.6411	18.01	-3.30	183675.570	3.5	206623.800	3.5
435.6602	28.01	-4.90	111120.540	1.5	134067.760	1.5
435.6609	25.00	-.98	38008.700	5.5	60955.880	4.5
435.6615	24.00	-2.00	25038.610	5.0	47985.760	5.0
435.6678	25.01	-2.32	43696.190	3.0	66643.010	4.0
435.6695	23.00	-2.78	18805.050	.5	41751.780	.5
435.6695	23.00	-2.78	18805.050	.5	41751.780	1.5
435.6746	24.00	-1.59	24282.340	4.0	47228.800	5.0
435.6750	58.01	-1.36	7178.519	0.0	30131.408	0.0
435.6757	13.01	-1.31	123468.100	3.0	146414.500	4.0
435.6757	13.01	-1.08	123468.100	3.0	146414.500	4.0
435.6757	13.01	-4.72	123468.100	3.0	146414.500	3.0
435.6775	23.00	-.84	17054.870	2.5	40001.180	3.5
435.6780	28.01	-3.45	99844.130	3.5	122790.410	4.5
435.6850	41.00	-.83	12905.203	0.0	35857.565	0.0
435.6900	27.00	-1.15	29216.370	2.5	52162.020	3.5
435.6928	23.03	-1.02	263111.400	4.0	286056.900	3.0
435.6990	72.00	-2.06	5565.369	0.0	28516.994	0.0
435.7020	23.00	-1.91	17054.870	2.5	39999.890	2.5
435.7078	24.00	-4.81	23933.900	4.0	46878.610	3.0
435.7102	22.00	-4.87	25643.695	3.0	48588.280	3.0
435.7158	24.01	-2.65	47372.750	1.5	70317.040	2.5
435.7234	8.01	-1.62	232747.510	2.5	255691.400	3.5
435.7249	23.00	-3.13	17181.980	4.5	40125.790	3.5
435.7251	25.02	-.09	192576.420	2.5	215520.220	2.5
435.7285	8.01	-1.77	232745.980	1.5	255689.600	2.5
435.7295	10.00	-3.11	150315.861	2.0	173259.430	1.0
435.7340	42.00	-.17	24358.571	0.0	47308.352	0.0
435.7346	23.00	-3.50	9824.580	2.5	32767.880	1.5
435.7409	21.00	-1.05	18504.050	.5	41447.020	.5
435.7411	23.01	-3.38	49731.320	2.0	72674.280	2.0
435.7445	23.00	-.63	19078.150	3.5	42020.930	3.5
435.7451	23.00	-1.90	14514.750	1.5	37457.500	1.5
435.7452	9.02	-1.37	443913.330	4.5	466856.070	3.5
435.7502	28.01	-2.10	112906.930	1.5	135849.410	2.5
435.7515	26.00	-3.19	31937.308	1.0	54879.720	2.0
435.7529	24.00	-1.09	27163.200	0.0	50105.540	1.0
435.7568	13.02	-1.07	178433.430	.5	201375.560	1.5
435.7570	26.01	-2.14	49101.090	.5	72043.210	1.5
435.7576	8.01	-1.36	232747.510	2.5	255689.600	2.5
435.7610	90.01	-2.62	1451.835	0.0	24400.194	0.0
435.7658	26.02	-4.38	199660.840	5.0	222602.500	6.0
435.7730	39.00	.09	16696.107	0.0	39643.834	0.0
435.7849	28.00	-2.70	34163.294	2.0	57103.946	3.0
435.7850	26.01	-4.57	61587.240	5.5	84527.890	4.5
435.7867	25.00	-3.68	25285.430	4.5	48225.990	3.5
435.7900	62.00	-1.21	3064.986	0.0	26011.818	0.0
435.7933	25.01	-4.07	79739.880	5.0	102680.090	5.0
435.7939	26.00	-2.72	29356.780	2.0	52296.960	2.0
435.7980	76.00	-1.18	15324.929	0.0	38271.340	0.0
435.8057	29.01	-2.99	123556.640	2.0	146496.200	3.0
435.8125	12.02	-1.78	561798.700	3.0	584737.900	2.0
435.8125	12.02	-1.78	561798.700	3.0	584737.900	2.0
435.8140	76.00	.57	30327.228	0.0	53272.797	0.0
435.8170	60.01	-.98	2500.383	0.0	25445.794	0.0
435.8254	28.01	-3.96	76402.030	2.5	99340.550	3.5
435.8305	25.00	-3.87	25287.740	3.5	48225.990	3.5
435.8350	80.00	1.39	39199.555	0.0	62144.018	0.0
435.8366	20.02	.28	327962.110	1.0	350900.040	2.0
435.8378	18.01	-2.20	187589.230	2.5	210527.100	2.5
435.8440	8.01	-.81	232753.860	3.5	255691.400	3.5
435.8460	66.01	-1.83	806.575	0.0	23750.459	0.0
435.8486	18.01	-1.88	161048.640	1.5	183985.940	1.5
435.8504	26.00	-1.42	23783.617	5.0	46720.824	4.0
435.8554	24.00	-1.32	24940.610	2.0	47877.550	1.0
435.8649	21.00	-1.81	16022.720	2.5	38959.160	3.5
435.8688	26.00	-2.52	24335.764	2.0	47271.999	1.0
435.8690	75.00	-1.08	11534.025	0.0	34476.698	0.0
435.8700	60.01	-1.75	4436.164	0.0	27378.785	0.0
435.8730	39.01	-1.61	806.575	0.0	23749.038	0.0
435.8740	40.00	-1.64	4113.534	0.0	27055.944	0.0
435.8783	8.01	-1.86	232753.860	3.5	255689.600	2.5
435.8813	24.00	-2.88	36552.130	3.0	59487.710	4.0
435.8915	25.02	.01	193756.790	4.5	216691.830	5.5
435.8939	26.00	-2.64	31322.603	3.0	54257.520	2.0
435.8948	27.00	-4.15	20500.710	1.5	43435.580	.5
435.8980	12.02	-1.18	561798.700	3.0	584733.400	3.0
435.8980	12.02	-1.18	561798.700	3.0	584733.400	3.0
435.9066	21.00	.10	18571.400	2.5	41505.650	2.5
435.9150	64.01	-1.76	4436.164	0.0	27376.416	0.0
435.9178	26.01	-4.66	61332.820	1.5	84266.480	2.5
435.9250	60.01	-1.84	4436.164	0.0	27375.890	0.0
435.9254	9.02	-2.74	468605.940	4.5	491539.200	5.5
435.9330	28.01	-3.49	94729.250	2.5	117662.110	1.5
435.9358	22.01	-3.95	39476.870	2.5	62409.580	3.5
435.9396	28.01	-4.47	111120.540	1.5	134053.050	2.5
435.9398	30.02	-.71	260613.100	5.0	283545.600	5.0
435.9398	30.02	1.11	260613.100	5.0	283545.600	6.0
435.9427	27.00	-1.91	25269.250	3.5	48201.600	3.5
435.9512	23.01	-4.32	13741.610	3.0	36673.510	2.0
435.9535	23.00	-3.64	19078.150	3.5	42009.930	2.5
435.9572	28.00	-.91	27414.893	2.0	50346.477	2.0
435.9617	24.00	-1.29	7927.470	2.0	30858.820	2.0
435.9620	42.00	-.11	26294.352	0.0	49232.131	0.0
435.9632	25.00	-1.31	37737.220	3.5	60668.490	4.5
435.9636	21.00	-.36	18515.770	1.5	41447.020	.5
435.9640	64.01	-1.39	9775.615	0.0	32213.289	0.0
435.9664	30.02	.58	260584.100	1.0	283515.200	2.0
435.9740	40.01	-.40	9920.875	0.0	32858.023	0.0
435.9769	26.01	-2.83	50212.930	2.5	73143.480	3.5
435.9800	59.01	-.82	5000.766	0.0	27937.598	0.0
435.9809	29.01	-4.55	108014.660	3.0	130945.000	2.0
435.9822	25.00	-1.87	38008.700	5.5	60938.970	4.5

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
435.9850	41.00	-.95	8952.985	0.0	31889.554	0.0
435.9880	26.00	-3.46	31307.235	4.0	54237.200	4.0
435.9919	24.00	-2.44	24056.110	5.0	46985.870	5.0
435.9930	69.00	-.55	0.000	0.0	22936.148	0.0
435.9988	17.01	-.76	147605.700	3.0	170535.100	2.0
436.0003	24.00	-.84	27176.220	1.0	50105.540	1.0
436.0016	26.02	-4.94	128605.650	1.0	151534.900	2.0
436.0026	26.01	-4.48	38164.240	2.5	61093.440	2.5
436.0129	9.02	-1.52	443927.410	3.5	466856.070	3.5
436.0133	9.02	-2.59	443927.410	3.5	466856.050	2.5
436.0142	24.00	-2.67	24093.160	2.0	47021.750	1.0
436.0165	25.02	-1.96	192989.050	5.5	215917.520	4.5
436.0180	58.01	-1.00	6452.602	0.0	29387.435	0.0
436.0216	26.01	-3.77	62244.570	1.5	85172.770	.5
436.0277	26.02	-4.10	93388.750	4.0	116316.630	5.0
436.0355	25.02	.31	193235.430	2.5	216162.900	1.5
436.0360	25.02	-.44	192948.290	1.5	215875.730	2.5
436.0440	58.01	-1.42	4274.849	0.0	27208.314	0.0
436.0487	22.00	-.70	17540.205	3.0	40466.979	2.0
436.0494	22.00	-1.54	25797.600	3.0	48724.340	2.0
436.0587	23.00	-1.16	14548.830	2.5	37475.080	3.5
436.0691	26.02	-4.89	159493.000	3.0	182418.700	4.0
436.0720	62.01	-1.36	1935.780	0.0	24867.773	0.0
436.0744	9.02	-4.90	444057.440	1.5	466982.860	2.5
436.0785	28.01	-3.23	106369.300	1.5	129294.510	2.5
436.0805	26.00	-2.17	29371.860	3.0	52296.960	2.0
436.0810	40.00	-.97	4113.534	0.0	27045.054	0.0
436.0819	25.00	-3.55	38008.700	5.5	60933.730	5.5
436.0825	27.00	-3.37	20500.710	1.5	43425.710	2.5
436.0830	73.00	-1.67	10566.135	0.0	33497.549	0.0
436.0900	4.01	.49	96498.000	0.0	119429.046	0.0
436.0904	9.02	-1.64	443865.310	1.5	466789.890	1.5
436.0920	64.01	-1.42	3387.616	0.0	26318.557	0.0
436.0963	24.00	-2.77	27703.840	4.0	50628.110	3.0
436.0965	9.02	.29	443865.310	1.5	466789.570	2.5
436.1013	23.00	-.83	19026.340	2.5	41950.350	2.5
436.1024	27.00	-5.10	1809.330	1.5	24733.280	2.5
436.1070	62.01	-1.47	4355.506	0.0	27285.658	0.0
436.1128	22.00	-1.15	11776.806	4.0	34700.212	5.0
436.1210	44.00	-.58	6452.602	0.0	29382.018	0.0
436.1224	26.01	-3.67	62125.660	1.5	85048.560	1.5
436.1253	26.01	-2.62	49506.990	1.5	72429.740	.5
436.1300	30.02	1.02	260623.100	4.0	283545.600	5.0
436.1369	23.00	-2.47	15688.800	2.5	38610.940	3.5
436.1382	27.00	-1.26	28345.860	4.5	51267.930	4.5
436.1390	23.00	-.71	17116.920	3.5	40038.950	4.5
436.1416	23.00	-3.96	8476.200	1.5	31398.090	2.5
436.1526	16.02	-.35	147146.000	2.0	170067.310	2.0
436.1526	16.02	-1.42	147146.000	2.0	170067.310	2.0
436.1545	9.02	-1.36	443868.680	2.5	466789.890	1.5
436.1567	22.00	-3.81	18593.990	3.0	41515.090	4.0
436.1606	9.02	-.55	443868.680	2.5	466789.570	2.5
436.1650	41.00	-1.75	4920.109	0.0	27847.212	0.0
436.1660	58.01	-1.17	4194.191	0.0	27121.242	0.0
436.1684	7.00	-2.02	93581.520	.5	116502.000	.5
436.1684	7.00	-1.81	93581.520	.5	116502.000	1.5
436.1710	38.00	-1.12	14437.696	0.0	37364.484	0.0
436.1820	74.00	-2.03	6129.972	0.0	29056.182	0.0
436.1890	27.00	-4.24	32027.500	3.5	54946.900	2.5
436.1915	27.00	-5.70	1406.840	2.5	24326.110	3.5
436.1947	38.01	-.85	55769.700	0.0	78695.242	0.0
436.1974	26.01	-4.15	60807.280	4.5	83726.240	3.5
436.1985	9.01	-2.62	246654.740	0.0	269573.640	1.0
436.2020	42.00	-.90	18389.915	0.0	41315.074	0.0
436.2040	62.01	-.96	3871.561	0.0	26796.614	0.0
436.2044	24.00	-1.89	31009.000	3.0	53927.590	4.0
436.2050	92.00	-.64	0.000	0.0	22925.001	0.0
436.2065	18.01	-1.49	150474.900	1.5	173393.380	2.5
436.2099	28.01	-2.71	32499.530	4.5	55417.830	3.5
436.2260	92.01	-1.89	0.000	0.0	22923.897	0.0
436.2275	24.00	-1.68	35807.900	2.0	58725.280	1.0
436.2328	26.00	-4.01	32873.623	4.0	55790.720	3.0
436.2375	24.00	-4.35	24897.550	4.0	47814.400	3.0
436.2389	25.02	-3.93	195752.480	2.5	218669.260	1.5
436.2554	26.02	-4.39	159493.000	3.0	182408.910	3.0
436.2663	6.00	-2.14	64086.920	3.0	87002.260	3.0
436.2690	28.01	-4.94	106369.300	1.5	129284.500	2.5
436.2693	26.00	-3.21	34782.406	5.0	57697.590	4.0
436.2710	42.00	-1.71	11775.998	0.0	34697.531	0.0
436.2775	24.01	-3.24	66355.130	1.5	89269.880	.5
436.2804	26.00	-4.07	31322.603	3.0	54237.200	4.0
436.2811	24.00	-2.78	35813.730	3.0	58728.290	4.0
436.2910	62.00	-.32	0.000	0.0	22920.482	0.0
436.2930	92.01	-1.78	4516.821	0.0	27437.198	0.0
436.2937	24.01	-2.05	45669.540	1.5	68583.440	2.5
436.2939	25.02	-.17	193235.430	2.5	216149.320	3.5
436.2952	24.00	-1.86	23163.270	0.0	46077.090	1.0
436.2956	19.01	-.78	189661.700	2.0	212575.500	2.0
436.2958	25.02	.37	193756.790	4.5	216670.580	4.5
436.2986	28.00	-3.54	31786.210	3.0	54699.852	3.0
436.2987	28.01	-4.80	98276.700	4.5	121190.340	4.5
436.3002	23.00	-5.97	9824.580	2.5	32738.140	1.5
436.3124	22.00	-1.50	25926.820	4.0	48839.740	3.0
436.3133	24.00	-1.28	23933.900	4.0	46846.770	3.0
436.3148	25.02	-1.99	194894.780	1.5	217807.570	1.5
436.3268	17.00	-1.21	72488.568	1.5	95400.731	2.5
436.3291	26.01	-4.37	50142.930	2.5	73054.970	2.5
436.3310	24.01	-3.40	55023.300	2.5	77935.240	2.5
436.3312	25.01	-2.07	44899.820	3.0	67811.750	3.0
436.3316	23.00	-1.90	9544.540	.5	32456.450	1.5
436.3370	9.01	-3.03	246662.010	1.0	269573.640	1.0
436.3390	58.01	-1.33	5726.684	0.0	28644.645	0.0
436.3431	6.00	-3.04	64090.950	2.0	87002.260	3.0
436.3450	62.01	-1.82	1451.835	0.0	24369.480	0.0
436.3522	23.00	-2.06	2220.130	2.5	25130.960	2.5
436.3539	25.02	-1.89	195462.260	.5	218373.000	1.5
436.3617	26.02	-2.47	199700.830	4.0	222611.160	5.0
436.3672	26.00	-2.50	26224.961	3.0	49135.003	3.0
436.3684	24.00	-2.04	36577.730	4.0	59487.710	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
436.3764	9.02	-1.07	468682.910	3.5	491592.470	2.5
436.3792	18.00	-2.58	93750.639	1.0	116660.054	1.0
436.3863	9.02	-1.22	468683.430	2.5	491592.470	1.5
436.3863	9.02	-2.42	468683.430	2.5	491592.470	2.5
436.3925	28.01	-4.74	114052.040	3.5	136960.750	2.5
436.3933	23.00	-4.77	14548.830	2.5	37457.500	1.5
436.3948	22.01	-2.85	45673.750	4.5	68582.340	5.5
436.3952	26.00	-2.09	35611.608	3.0	58520.180	4.0
436.4048	18.01	-3.85	186340.480	1.5	209248.550	2.5
436.4049	24.00	-3.29	25106.340	3.0	48014.400	4.0
436.4076	27.00	-1.56	29948.760	2.5	52856.680	3.5
436.4095	28.01	-4.16	114052.040	3.5	136959.860	2.5
436.4150	24.00	-2.05	24282.340	4.0	47189.870	4.0
436.4194	23.00	-.39	17054.870	2.5	39962.170	2.5
436.4198	23.01	-4.74	14461.730	3.0	37369.010	2.0
436.4470	42.00	.30	26133.037	0.0	49045.326	0.0
436.4481	20.02	-.69	348051.860	4.0	370957.650	5.0
436.4482	25.02	.27	193498.070	3.5	216403.860	2.5
436.4537	9.02	-.61	443913.330	4.5	466818.830	5.5
436.4586	13.02	-1.77	178470.320	1.5	201375.560	1.5
436.4634	26.02	-3.73	199700.830	4.0	222605.820	4.0
436.4655	13.02	-.82	178470.320	1.5	201375.200	2.5
436.4660	58.01	-.35	3952.218	0.0	26863.510	0.0
436.4661	25.01	-2.03	79800.520	4.0	102705.370	3.0
436.4670	57.01	-1.78	5162.081	0.0	28073.321	0.0
436.4745	26.02	-4.34	199700.830	4.0	222605.240	3.0
436.4746	16.02	-.68	147744.540	3.0	170648.940	3.0
436.4784	17.02	-.85	183042.700	2.5	205946.900	2.5
436.4790	74.00	-2.20	3306.958	0.0	26217.568	0.0
436.4811	25.00	-4.67	45060.810	3.5	67964.870	2.5
436.4851	28.01	-3.53	98276.700	4.5	121180.550	5.5
436.4871	26.01	-4.40	50187.950	3.5	73091.700	4.5
436.4884	24.00	-1.85	25038.610	5.0	47942.290	6.0
436.4922	21.00	-.28	18571.400	2.5	41474.880	1.5
436.4956	28.01	-4.69	113172.960	4.5	136076.260	4.5
436.5048	25.01	-3.83	79800.520	4.0	102703.340	4.0
436.5153	25.00	-4.74	25265.740	5.5	48168.010	4.5
436.5219	9.01	-2.36	246662.010	1.0	269563.930	2.0
436.5286	25.01	-1.62	53017.160	1.0	75918.730	2.0
436.5317	29.01	-1.63	121981.680	2.0	144883.090	2.0
436.5370	72.00	-.90	14357.039	0.0	37264.605	0.0
436.5629	24.00	-4.22	31352.420	1.0	54252.190	2.0
436.5637	10.01	-1.77	280700.770	3.5	303600.500	2.5
436.5641	26.02	-3.51	66591.680	1.0	89491.390	1.0
436.5654	27.00	-1.63	30443.630	1.5	53343.270	1.5
436.5670	76.00	-.80	12905.203	0.0	35811.195	0.0
436.5728	23.00	-1.25	13801.530	1.5	36700.780	2.5
436.5745	10.01	-.36	280700.770	3.5	303599.930	3.5
436.5844	22.00	-3.89	18141.229	5.0	41039.874	5.0
436.5899	26.00	-1.83	24118.815	4.0	47017.170	3.0
436.5950	62.00	-1.22	806.575	0.0	23711.097	0.0
436.5960	74.00	.53	28230.132	0.0	51134.602	0.0
436.6030	39.00	-.58	11292.053	0.0	34196.156	0.0
436.6039	25.00	-4.36	27201.540	2.5	50099.160	1.5
436.6079	25.00	-1.27	34463.370	1.5	57360.780	1.5
436.6100	27.01	-3.06	27484.300	3.0	50381.600	3.0
436.6161	24.00	-3.85	31355.210	2.0	54252.190	2.0
436.6167	26.01	-4.03	62151.610	2.5	85048.560	1.5
436.6171	27.00	-1.98	29563.170	1.5	52460.100	2.5
436.6199	25.02	-1.35	192576.420	2.5	215473.200	1.5
436.6218	27.00	-1.71	24627.790	4.5	47524.470	4.5
436.6297	24.00	-2.05	24897.550	4.0	47793.820	5.0
436.6377	24.00	-2.12	33906.650	1.0	56802.500	0.0
436.6386	17.02	-4.09	183042.700	2.5	205938.500	1.5
436.6450	40.00	-.08	10969.423	0.0	33871.323	0.0
436.6514	8.01	-.92	232796.270	2.5	255691.400	3.5
436.6540	42.00	-.43	20245.038	0.0	43146.466	0.0
436.6583	23.00	-3.92	19023.470	4.5	41918.240	5.5
436.6613	23.01	-4.29	13594.730	2.0	36489.340	1.0
436.6615	24.00	-2.96	35398.020	4.0	58292.620	4.0
436.6628	28.01	-3.97	115120.000	2.5	138014.530	2.5
436.6674	28.01	-4.71	32523.540	3.5	55417.830	3.5
436.6712	24.01	-2.47	66727.160	2.5	89621.250	3.5
436.6737	23.00	-2.89	13801.530	1.5	36695.490	.5
436.6858	8.01	-2.07	232796.270	2.5	255689.600	2.5
436.6905	23.01	-2.74	16340.970	3.0	39234.050	3.0
436.6907	8.01	-.29	185499.200	2.5	208392.270	1.5
436.6922	25.02	-4.88	172569.270	1.5	195462.260	.5
436.6924	28.01	-2.39	70635.460	2.5	93528.440	3.5
436.7000	58.01	-.46	10969.423	0.0	33868.438	0.0
436.7044	26.02	-4.06	201166.350	3.0	224058.700	4.0
436.7052	26.00	-3.89	35379.189	5.0	58271.500	5.0
436.7056	27.00	-2.40	29269.730	4.5	52162.020	3.5
436.7092	27.01	-4.79	40694.900	4.0	63587.000	3.0
436.7157	24.00	-2.89	35862.820	4.0	58754.580	5.0
436.7199	9.01	-3.39	246682.100	2.0	269573.640	1.0
436.7206	23.01	-7.42	26839.820	3.0	49731.320	2.0
436.7206	28.00	-2.89	32982.280	1.0	55873.780	2.0
436.7263	28.00	-2.40	35639.148	3.0	58530.350	3.0
436.7269	26.00	-4.55	26406.490	1.0	49297.660	1.0
436.7275	29.01	-4.53	116326.160	3.0	139217.300	2.0
436.7300	23.01	-4.46	49898.220	2.0	72789.230	3.0
436.7309	24.00	-1.52	35884.400	5.0	58775.360	6.0
436.7322	28.00	-2.39	27943.543	1.0	50834.435	2.0
436.7359	17.02	-.46	194959.500	2.5	217850.200	2.5
436.7560	58.01	-.94	8227.067	0.0	31123.146	0.0
436.7580	75.00	-.81	16212.162	0.0	39108.136	0.0
436.7581	26.00	-1.29	24118.815	4.0	47008.351	5.0
436.7662	22.01	-.68	20891.880	3.5	43780.990	4.5
436.7772	18.01	-1.53	187589.230	2.5	210477.770	3.5
436.7811	22.00	-3.56	25699.950	2.0	48588.280	3.0
436.7900	72.01	-.97	13389.148	0.0	36283.445	0.0
436.7901	24.00	-4.10	31364.330	3.0	54252.190	2.0
436.7906	26.00	-2.53	12968.552	2.0	35856.386	2.0
436.7920	23.02	.78	161588.040	3.5	184475.800	4.5
436.7970	41.01	-.70	13550.463	0.0	36444.393	0.0
436.8030	62.01	-1.28	2984.328	0.0	25877.944	0.0
436.8038	23.00	-1.67	323.420	3.5	23210.560	2.5
436.8117	27.00	-1.84	29269.730	4.5	52156.460	4.5
436.8168	24.01	-3.43	31531.620	1.5	54418.080	.5
436.8195	8.00	-2.54	76794.990	1.0	99681.309	0.0
436.8225	9.02	-1.03	468605.940	4.5	491492.100	3.5
436.8230	58.01	-.98	7259.177	0.0	30151.744	0.0
436.8244	8.00	-1.84	76794.990	1.0	99681.049	2.0
436.8246	9.02	-1.14	468606.050	3.5	491492.100	2.5
436.8246	9.02	-2.55	468606.050	3.5	491492.100	3.5
436.8260	8.00	-2.07	76794.990	1.0	99680.968	1.0
436.8269	24.00	-1.68	24303.940	3.0	47189.870	4.0
436.8302	28.00	-1.67	27580.411	5.0	50466.172	4.0
436.8304	28.01	-3.61	93390.060	2.5	116275.810	3.5
436.8326	20.02	-2.82	363021.270	2.0	385906.900	2.0
436.8330	59.01	-.96	0.000	0.0	22892.043	0.0
436.8355	7.00	-2.87	93581.520	.5	116467.000	.5
436.8355	7.00	-2.57	93581.520	.5	116467.000	1.5
436.8393	26.02	-3.77	201166.350	3.0	224051.630	3.0
436.8430	41.00	-.42	9275.615	0.0	32167.134	0.0
436.8441	9.01	-.69	266338.700	0.0	289223.730	1.0
436.8489	28.01	-3.48	114052.040	3.5	136936.820	3.5
436.8525	23.00	-3.69	13810.900	.5	36695.490	.5
436.8565	26.02	-3.69	114325.350	5.0	137209.730	4.0
436.8588	23.00	-.26	17116.920	3.5	40001.180	3.5
436.8593	11.01	-.28	308864.540	0.0	331748.770	1.0
436.8593	11.01	-.28	308864.540	0.0	331748.770	1.0
436.8624	28.01	-4.36	114858.880	5.5	137742.950	5.5
436.8628	24.00	-1.53	35870.530	4.0	58754.580	5.0
436.8638	28.01	-2.47	92325.850	3.5	115209.850	3.5
436.8640	60.01	-1.64	483.945	0.0	23374.364	0.0
436.8654	26.00	-3.51	26224.961	3.0	49108.876	4.0
436.8664	23.01	-3.75	26839.820	3.0	49723.680	4.0
436.8702	26.00	-4.73	21038.987	2.0	43922.652	3.0
436.8719	14.00	-3.61	56780.427	1.0	79664.000	1.0
436.8739	22.00	-3.61	25635.740	1.0	48519.210	2.0
436.8794	8.02	-2.66	306584.800	2.0	329467.980	2.0
436.8834	23.00	-3.98	17116.920	3.5	39999.890	2.5
436.8871	25.00	-1.16	38008.700	5.5	60891.480	6.5
436.8884	28.01	-2.64	106620.530	3.5	129503.240	4.5
436.8909	25.00	-4.06	25285.430	4.5	48168.010	4.5
436.8926	24.00	-2.22	27223.050	2.0	50105.540	1.0
436.8935	22.00	-.47	18287.560	4.0	41170.003	3.0
436.9004	25.01	-4.27	59537.400	4.0	82419.480	3.0
436.9040	42.00	-.97	11775.998	0.0	34664.321	0.0
436.9052	9.01	-2.83	246682.100	2.0	269563.930	2.0
436.9058	23.00	-.89	17181.980	4.5	40063.780	5.5
436.9073	28.00	-3.79	31786.210	3.0	54667.928	4.0
436.9136	24.00	-2.65	27176.220	1.0	50057.610	2.0
436.9268	20.02	-1.61	341349.190	1.0	364229.890	0.0
436.9283	26.00	-.61	37046.000	4.0	59926.620	5.0
436.9300	90.01	-1.61	8307.725	0.0	31194.686	0.0
436.9350	73.00	-1.33	12743.888	0.0	35630.587	0.0
436.9363	22.00	-3.43	25227.217	3.0	48107.420	2.0
436.9363	23.00	-4.56	17054.870	2.5	39935.070	1.5
436.9365	28.01	-4.89	56075.260	2.5	78955.450	1.5
436.9398	26.01	-4.11	22409.820	.5	45289.840	1.5
436.9466	16.01	-4.63	133268.530	.5	156148.190	.5
436.9484	25.01	-4.76	79800.520	4.0	102680.090	5.0
436.9491	27.00	-2.97	23152.570	3.5	46032.100	4.5
436.9495	28.01	-4.86	113321.950	4.5	136201.460	3.5
436.9498	17.00	-1.56	72827.038	.5	95706.534	1.5
436.9574	22.00	-1.92	17423.853	2.0	40302.950	3.0
436.9592	17.02	-1.21	198983.900	1.5	221862.900	.5
436.9594	24.00	-1.37	27223.050	2.0	50102.040	3.0
436.9598	24.00	-1.93	39158.630	4.0	62037.600	5.0
436.9600	28.00	-2.07	35639.148	3.0	58518.110	4.0
436.9620	41.00	-2.42	645.260	0.0	23530.545	0.0
436.9648	22.00	.37	20795.599	5.0	43674.310	4.0
436.9663	27.00	-.90	29216.370	2.5	52095.000	3.5
436.9682	6.00	-2.69	64086.920	3.0	86965.450	2.0
436.9720	26.00	-2.06	31805.059	3.0	54683.390	4.0
436.9770	64.01	-1.19	3064.986	0.0	25949.486	0.0
436.9774	26.00	-1.23	24574.655	4.0	47452.702	4.0
436.9820	25.00	-3.84	45013.550	2.5	67891.360	3.5
436.9864	10.01	.14	280947.100	1.5	303824.680	2.5
436.9871	26.01	-4.71	38164.240	2.5	61041.780	2.5
436.9881	27.00	-2.69	32027.500	3.5	54904.990	2.5
436.9920	62.01	-1.71	2661.698	0.0	25545.412	0.0
437.0032	28.00	-.15	29320.782	3.0	52197.482	3.0
437.0101	28.01	-3.87	114858.880	5.5	137735.220	6.5
437.0180	64.00	-.17	6452.602	0.0	29334.955	0.0
437.0242	6.00	-3.19	64089.850	1.0	86965.450	2.0
437.0269	23.01	-3.13	14655.630	5.0	37531.090	4.0
437.0345	22.00	-3.16	25797.600	3.0	48672.660	4.0
437.0355	18.01	-4.25	179592.130	2.5	202467.140	1.5
437.0359	20.02	-2.94	348028.130	3.0	370903.120	3.0
437.0360	41.00	-1.78	2742.356	0.0	25623.766	0.0
437.0393	28.01	-3.93	111783.790	3.5	134658.600	4.5
437.0414	30.02	.66	257962.500	2.0	280837.200	3.0
437.0420	44.00	-1.82	7985.094	0.0	30866.190	0.0
437.0433	30.02	.37	257908.200	1.0	280782.800	2.0
437.0444	24.00	-2.37	24093.160	2.0	46967.700	2.0
437.0452	6.00	-2.59	64090.950	2.0	86965.450	2.0
437.0452	17.01	-3.20	159574.200	2.0	182448.700	2.0
437.0480	62.01	-2.06	5242.739	0.0	28123.521	0.0
437.0596	20.02	-1.63	348028.130	3.0	370901.880	2.0
437.0660	76.00	-.79	15324.929	0.0	38204.769	0.0
437.0662	26.01	-4.58	50142.930	2.5	73016.330	3.5
437.0752	18.01	-.49	150474.900	1.5	173347.830	1.5
437.0764	24.00	-.10	32097.360	6.0	54970.230	7.0
437.0765	25.02	-3.16	115762.600	1.5	138635.460	2.5
437.0854	17.02	-1.83	179495.200	2.5	202367.600	3.5
437.0874	25.00	-3.14	18531.640	3.5	41403.930	2.5
437.0884	24.00	-1.46	31055.350	5.0	53927.590	4.0
437.0892	23.00	-1.99	19078.150	3.5	41950.350	2.5
437.0899	26.01	-4.94	54870.620	2.5	77742.780	2.5
437.0950	40.01	-.77	9678.902	0.0	32557.224	0.0
437.0950	40.01	-.77	9678.902	0.0	32557.224	0.0
437.0970	72.01	-.94	12017.970	0.0	34896.187	0.0
437.0985	26.00	-4.19	17550.180	3.0	40421.890	4.0
437.1020	26.02	-4.50	183456.690	3.0	206328.220	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
437.1108	26.02	-2.85	183457.150	4.0	206328.220	3.0
437.1121	27.00	-2.11	16778.160	2.5	39649.160	3.5
437.1129	29.01	-4.81	123556.640	2.0	146427.600	1.0
437.1165	23.01	-5.21	16533.000	5.0	39403.770	4.0
437.1200	44.00	-.43	16938.079	0.0	39815.092	0.0
437.1211	28.01	-4.19	110573.360	2.5	133443.890	2.5
437.1247	28.01	-3.26	97273.830	2.5	120144.170	2.5
437.1264	24.00	-1.28	8095.210	3.0	30965.460	3.0
437.1278	24.00	-.03	35884.400	5.0	58754.580	5.0
437.1286	8.01	-1.62	232959.260	3.5	255829.400	3.5
437.1333	18.01	-.69	132481.140	2.5	155351.030	1.5
437.1337	26.02	-3.10	66464.640	3.0	89334.510	2.0
437.1354	26.02	-4.36	114339.950	4.0	137209.730	4.0
437.1368	6.00	-2.29	61981.820	1.0	84851.530	1.0
437.1544	17.00	-2.05	71958.363	2.5	94827.150	2.5
437.1593	25.02	-1.29	195948.440	3.5	218816.970	2.5
437.1630	8.01	-.62	232959.260	3.5	255827.600	4.5
437.1645	23.00	-3.85	16728.750	4.5	39597.010	4.5
437.1656	26.02	-3.37	183456.690	3.0	206324.890	2.0
437.1658	24.00	-2.15	25106.340	3.0	47974.530	3.0
437.1759	27.00	-2.66	30102.960	2.5	52970.620	2.5
437.1760	92.00	-.31	8065.752	0.0	30939.835	0.0
437.1788	23.00	-5.58	9824.580	2.5	32692.090	3.5
437.1790	27.00	-1.92	29294.520	3.5	52162.020	3.5
437.1882	26.01	-4.96	50187.950	3.5	73054.970	2.5
437.1910	9.01	-2.08	246682.100	2.0	269548.970	3.0
437.1945	25.01	-3.14	44899.820	3.0	67766.510	2.0
437.2017	6.00	-3.12	64089.850	1.0	86956.160	1.0
437.2038	26.02	.57	184777.300	1.0	207643.500	2.0
437.2092	18.01	-1.70	161048.640	1.5	183914.560	.5
437.2096	26.02	.02	184777.600	2.0	207643.500	2.0
437.2134	26.02	.71	184777.600	2.0	207643.300	3.0
437.2178	24.00	-4.28	35862.820	4.0	58728.290	4.0
437.2210	44.00	-.03	7420.492	0.0	30292.220	0.0
437.2220	26.01	-4.44	21581.640	4.5	44446.890	3.5
437.2227	6.00	-2.84	64090.950	2.0	86956.160	1.0
437.2245	25.02	-.83	195315.780	2.5	218180.900	1.5
437.2268	30.02	-2.62	215340.500	2.0	238205.500	1.0
437.2268	26.02	-1.16	184778.500	3.0	207643.500	2.0
437.2291	24.00	-2.59	36552.130	3.0	59417.010	3.0
437.2306	26.02	.85	184778.500	3.0	207643.300	4.0
437.2306	26.02	.18	184778.500	3.0	207643.300	3.0
437.2306	17.01	-3.50	131754.800	1.0	154619.600	2.0
437.2354	25.02	-1.64	172451.230	1.5	195315.780	2.5
437.2400	58.01	-1.28	4274.849	0.0	27145.584	0.0
437.2434	20.02	-1.75	362893.470	2.0	385757.600	3.0
437.2490	18.01	-1.85	158730.210	2.5	181594.050	2.5
437.2497	26.02	.19	184779.500	4.0	207643.300	4.0
437.2497	26.02	-1.11	184779.500	4.0	207643.300	3.0
437.2530	74.00	-2.20	3306.958	0.0	26177.013	0.0
437.2536	26.02	.98	184779.500	4.0	207643.100	5.0
437.2570	92.01	-1.85	887.233	0.0	23757.078	0.0
437.2631	24.02	-4.58	71166.100	2.0	94029.200	3.0
437.2650	17.01	-2.72	131754.800	1.0	154617.800	1.0
437.2746	26.02	-1.38	184780.800	5.0	207643.300	4.0
437.2748	25.02	-1.94	195112.810	3.5	217975.300	2.5
437.2760	92.00	-1.45	0.000	0.0	22868.852	0.0
437.2767	25.01	-4.13	82193.040	2.0	105055.430	2.0
437.2784	26.02	.03	184780.800	5.0	207643.100	5.0
437.2805	26.01	-4.42	62322.500	3.5	85184.690	4.5
437.2811	9.02	-2.47	443927.410	3.5	466789.570	2.5
437.2823	26.02	1.10	184780.800	5.0	207642.900	6.0
437.2853	27.00	-1.37	29294.520	3.5	52156.460	4.5
437.2854	14.00	-2.13	39683.163	0.0	62545.100	1.0
437.2861	17.01	-2.87	131754.800	1.0	154616.700	0.0
437.2876	23.01	-6.22	12621.570	5.0	35483.390	6.0
437.2945	25.02	-3.00	115774.000	3.5	138635.460	2.5
437.2966	26.02	-2.44	182810.660	5.0	205672.010	4.0
437.2988	26.00	-3.63	24335.764	2.0	47197.000	2.0
437.3014	22.00	-3.44	18695.230	4.0	41556.330	5.0
437.3040	45.00	-1.48	10888.765	0.0	33756.152	0.0
437.3070	40.00	-1.74	5807.341	0.0	28674.572	0.0
437.3077	26.00	-2.75	29320.050	1.0	52180.820	1.0
437.3129	28.01	-1.43	112719.750	3.5	135580.250	4.5
437.3220	58.01	-1.44	5404.054	0.0	28270.500	0.0
437.3257	24.00	-2.33	7927.470	2.0	30787.300	1.0
437.3320	42.00	-.27	23955.283	0.0	46821.206	0.0
437.3324	7.00	-2.97	93581.520	.5	116441.000	.5
437.3324	7.00	-3.28	93581.520	.5	116441.000	1.5
437.3404	29.01	-2.68	123556.640	2.0	146415.700	2.0
437.3410	92.01	-1.92	1693.808	0.0	24559.261	0.0
437.3429	23.00	-2.23	15264.830	5.5	38123.760	4.5
437.3460	62.01	-1.28	3468.273	0.0	26333.464	0.0
437.3469	26.01	-4.24	50157.610	4.5	73016.330	3.5
437.3519	24.00	-3.81	36558.550	2.0	59417.010	3.0
437.3535	26.00	-3.98	20641.110	4.0	43499.485	4.0
437.3550	28.01	-3.94	111783.790	3.5	134642.090	3.5
437.3562	26.00	-1.79	24338.766	3.0	47197.000	2.0
437.3588	19.01	-3.16	190134.800	1.0	212992.900	1.0
437.3628	27.00	-.35	28345.860	4.5	51203.750	5.5
437.3638	28.01	-3.45	98467.250	3.5	121325.090	2.5
437.3649	18.01	-4.99	187589.230	2.5	210447.010	3.5
437.3653	24.00	-.09	35870.530	4.0	58728.290	4.0
437.3712	24.01	-2.92	67868.050	2.5	90725.500	3.5
437.3804	23.00	-.13	17181.980	4.5	40038.950	4.5
437.3820	58.01	-1.70	4436.164	0.0	27299.473	0.0
437.3830	64.00	-.21	483.945	0.0	23347.202	0.0
437.3886	9.02	-1.54	466637.990	4.5	489494.530	3.5
437.3900	90.01	-1.44	9678.902	0.0	32541.793	0.0
437.3908	26.00	-3.11	29356.780	2.0	52213.207	3.0
437.3990	23.03	-2.01	265271.600	3.0	288127.600	4.0
437.4009	24.00	-2.14	21810.840	1.0	44666.740	1.0
437.4066	24.00	-2.01	27163.200	0.0	50018.800	1.0
437.4130	90.00	-1.77	0.000	0.0	22861.689	0.0
437.4137	25.02	-2.51	115780.230	2.5	138635.460	2.5
437.4166	24.00	-.49	24200.230	6.0	47055.310	5.0
437.4210	73.00	-1.63	12743.888	0.0	35605.159	0.0
437.4240	66.01	-1.73	0.000	0.0	22861.114	0.0
437.4248	24.00	-3.43	24833.860	3.0	47688.510	4.0
437.4258	17.01	-2.32	131768.000	2.0	154622.600	3.0
437.4281	7.00	-2.90	93581.520	.5	116436.000	1.5
437.4383	26.00	-3.53	31307.235	4.0	54161.182	3.0
437.4403	8.01	-1.50	232959.260	3.5	255813.100	2.5
437.4422	28.01	-2.61	106620.530	3.5	129474.270	3.5
437.4426	27.00	-2.15	28345.860	4.5	51199.580	3.5
437.4426	24.00	-4.67	27703.840	4.0	50557.560	4.0
437.4429	26.00	-2.54	35856.386	2.0	58710.090	3.0
437.4443	27.00	-1.14	29216.370	2.5	52070.000	2.5
437.4449	29.01	-4.21	116388.000	2.0	139241.600	1.0
437.4463	21.01	-.44	4987.640	4.0	27841.170	4.0
437.4589	22.00	-2.09	20006.032	2.0	42858.900	3.0
437.4621	24.01	-3.62	45730.740	2.5	68583.440	2.5
437.4654	9.02	-.98	443625.310	2.5	466477.840	2.5
437.4664	9.02	-1.86	443625.310	2.5	466477.790	3.5
437.4756	17.01	-4.73	149798.300	2.0	172650.300	3.0
437.4780	41.00	-2.26	322.630	0.0	23180.922	0.0
437.4800	45.00	-.18	5646.026	0.0	28504.214	0.0
437.4828	22.01	-1.56	16625.250	1.5	39476.870	2.5
437.4832	17.01	-2.26	131768.000	2.0	154619.600	2.0
437.4855	27.00	-4.11	29269.730	4.5	52121.210	4.5
437.4859	18.01	-.80	160239.350	1.5	183090.810	1.5
437.4862	28.01	-4.29	99418.610	3.5	122270.050	3.5
437.4868	26.02	-3.01	201207.290	4.0	224058.700	4.0
437.4890	42.00	-.07	25407.119	0.0	48264.837	0.0
437.4897	20.02	-1.50	348051.860	4.0	370903.120	3.0
437.4907	27.00	-1.13	23855.620	4.5	46706.830	3.5
437.4916	25.00	-3.63	27248.000	1.5	50099.160	1.5
437.4930	60.01	-1.38	1451.835	0.0	24309.344	0.0
437.4940	39.01	-.14	3226.301	0.0	26083.757	0.0
437.4947	25.00	.03	38934.940	2.5	61785.940	3.5
437.4980	62.01	-1.80	322.630	0.0	23179.877	0.0
437.4985	7.01	-2.50	164610.760	1.0	187461.560	2.0
437.5010	42.00	.36	27584.872	0.0	50441.963	0.0
437.5062	17.01	-3.78	131767.400	0.0	154617.800	1.0
437.5088	27.00	-4.81	23152.570	3.5	46002.830	2.5
437.5113	25.01	-3.40	59537.400	4.0	82387.530	3.0
437.5140	73.00	-1.03	15808.874	0.0	38665.285	0.0
437.5170	58.01	-1.24	7017.204	0.0	29873.459	0.0
437.5173	21.00	-2.35	16021.780	1.5	38871.600	2.5
437.5173	24.01	-4.06	67875.680	3.5	90725.500	3.5
437.5177	17.01	-2.72	131768.000	2.0	154617.800	1.0
437.5250	41.00	-1.18	10162.848	0.0	33018.685	0.0
437.5319	18.01	-3.81	186074.350	2.5	208923.410	2.5
437.5345	24.00	-1.47	24056.110	5.0	46905.030	4.0
437.5351	22.01	-2.60	20891.880	3.5	43740.770	3.5
437.5353	21.00	-3.22	16022.720	2.5	38871.600	2.5
437.5437	22.00	-1.26	17995.750	0.0	40844.190	1.0
437.5454	10.01	-1.79	290803.820	.5	313652.170	1.5
437.5481	26.00	-2.62	28819.966	5.0	51668.175	4.0
437.5610	39.00	.22	17018.737	0.0	39872.693	0.0
437.5656	22.00	-1.93	18192.577	6.0	41039.874	5.0
437.5735	9.02	-1.97	443630.960	3.5	466477.840	2.5
437.5741	18.01	-4.80	186074.350	2.5	208921.200	1.5
437.5745	9.02	-.73	443630.960	3.5	466477.790	3.5
437.5917	20.02	-1.65	363021.270	2.0	385867.200	3.0
437.5920	58.01	-.58	3952.218	0.0	26804.555	0.0
437.5932	26.00	-3.12	0.000	4.0	22845.856	5.0
437.5941	24.00	-3.91	31352.420	1.0	54198.230	1.0
437.5950	18.01	-.72	138243.550	1.5	161089.310	.5
437.5989	26.00	-1.94	24574.655	4.0	47420.215	5.0
437.6002	24.00	-3.97	24940.610	2.0	47786.100	2.0
437.6048	23.00	-1.09	17116.920	3.5	39962.170	2.5
437.6070	64.00	-.50	6694.574	0.0	29546.128	0.0
437.6113	22.00	-2.98	25926.820	4.0	48771.730	5.0
437.6222	26.02	-2.62	201207.290	4.0	224051.630	3.0
437.6228	26.01	-4.04	75600.930	3.5	98445.240	4.5
437.6253	27.00	-1.27	29269.730	4.5	52113.910	5.5
437.6308	24.00	-1.58	35884.400	5.0	58728.290	4.0
437.6410	24.00	-3.19	24282.340	4.0	47125.700	3.0
437.6475	24.00	-4.24	31355.210	2.0	54198.230	1.0
437.6559	24.00	-2.18	27176.220	1.0	50018.800	1.0
437.6575	23.00	-3.46	14910.040	3.5	37752.540	2.5
437.6663	26.01	-4.06	50212.930	2.5	73054.970	2.5
437.6732	25.01	-4.26	49465.130	3.0	72306.810	2.0
437.6743	28.01	-4.03	100592.980	3.5	123434.600	4.5
437.6777	26.00	-2.31	24335.764	2.0	47177.210	1.0
437.6796	26.00	-2.37	29371.860	3.0	52213.207	3.0
437.6797	24.00	.05	35934.020	6.0	58775.360	6.0
437.6824	28.00	-1.91	30912.838	1.0	53754.036	2.0
437.6900	76.00	.65	37586.404	0.0	60433.625	0.0
437.6969	14.01	-2.39	103556.290	3.5	126396.730	3.5
437.6969	14.01	-.84	103556.290	3.5	126396.730	4.5
437.6985	26.01	-3.45	54902.420	1.5	77742.780	2.5
437.6994	14.01	-.96	103556.420	2.5	126396.730	3.5
437.7012	23.00	-4.33	15770.720	4.5	38610.940	3.5
437.7015	13.01	-1.35	125866.700	1.0	148706.900	0.0
437.7192	24.00	-2.47	36577.730	4.0	59417.010	3.0
437.7207	28.01	-2.15	112906.930	1.5	135746.130	1.5
437.7207	25.02	-.37	192741.670	.5	215580.870	.5
437.7236	28.01	-2.72	112719.750	3.5	135558.800	4.5
437.7274	27.00	-4.50	14036.280	1.5	36875.130	1.5
437.7326	26.00	-3.02	31322.603	3.0	54161.182	3.0
437.7383	26.01	-2.95	54904.500	3.5	77742.780	2.5
437.7431	9.02	-1.91	443630.960	3.5	466468.990	4.5
437.7533	24.00	-2.01	23512.000	1.0	46349.500	2.0
437.7543	23.01	-6.00	11908.270	2.0	34745.720	3.0
437.7560	27.01	-2.86	63509.370	4.0	86346.730	3.0
437.7623	25.00	-2.03	38120.180	4.5	60957.210	3.5
437.7623	26.02	-3.56	166187.500	6.0	189024.530	5.0
437.7623	14.02	-.99	204828.060	3.0	227665.090	2.0
437.7627	24.00	-2.84	25177.390	4.0	48014.400	4.0
437.7740	25.02	.18	194971.150	2.5	217807.570	1.5
437.7784	26.00	-2.35	26406.490	1.0	49242.680	2.0
437.7814	14.00	-4.86	39760.285	1.0	62596.320	2.0
437.7815	25.01	-2.39	43850.420	2.0	66686.450	3.0
437.7878	25.00	-4.33	38120.180	4.5	60955.880	4.5
437.7882	23.00	-2.06	9824.580	2.5	32660.260	2.5
437.7960	41.00	-.29	11937.313	0.0	34779.002	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
437.7980	73.00	-.16	24842.516	0.0	47684.100	0.0
437.7984	10.01	-.36	280989.530	1.5	303824.680	2.5
437.8097	24.00	-4.04	27223.050	2.0	50057.610	2.0
437.8100	57.01	-.67	14276.381	0.0	37117.339	0.0
437.8145	18.01	-3.16	183797.360	2.5	206631.670	2.5
437.8180	90.00	-1.59	2823.013	0.0	25663.554	0.0
437.8200	29.00	-.53	40086.787	0.0	62927.224	0.0
437.8240	62.01	-.76	5242.739	0.0	28082.967	0.0
437.8313	27.00	-4.51	32027.500	3.5	54860.930	4.5
437.8325	8.01	.41	253046.230	1.5	275879.600	2.5
437.8345	26.00	-3.85	26627.612	4.0	49460.876	5.0
437.8348	29.01	-2.81	121981.660	2.0	144814.930	3.0
437.8359	23.02	.63	161165.810	2.5	183999.000	3.5
437.8490	74.00	-1.91	4758.794	0.0	27597.718	0.0
437.8560	64.00	-.05	7501.149	0.0	30339.708	0.0
437.8588	12.02	-2.41	562634.200	1.0	585466.200	1.0
437.8588	12.02	-2.41	562634.200	1.0	585466.200	1.0
437.8624	24.00	-3.11	33113.270	4.0	55945.080	5.0
437.8647	24.00	-3.86	24940.610	2.0	47772.300	1.0
437.8695	26.02	-3.57	201207.290	4.0	224038.730	5.0
437.8732	8.01	-.74	253048.350	2.5	275879.600	2.5
437.8732	8.01	.56	253048.350	2.5	275879.600	3.5
437.8741	23.03	-1.30	264902.200	3.0	287733.400	2.0
437.8820	73.00	-2.16	3871.561	0.0	26708.764	0.0
437.8866	25.00	-1.95	45060.810	3.5	67891.360	3.5
437.8961	26.02	-2.54	183431.280	5.0	206261.330	4.0
437.9010	12.02	-2.40	561798.700	3.0	584628.500	2.0
437.9010	12.02	-2.40	561798.700	3.0	584628.500	2.0
437.9055	23.00	-3.98	17054.870	2.5	39884.430	1.5
437.9105	29.01	-3.42	116388.000	2.0	139217.300	2.0
437.9217	18.01	-1.22	159393.310	1.5	182222.030	1.5
437.9232	23.00	.61	2424.890	4.5	25253.530	5.5
437.9255	28.01	-2.90	114052.040	3.5	136880.560	4.5
437.9258	7.02	1.01	320287.500	3.5	343116.000	4.5
437.9258	7.02	-.54	320287.500	3.5	343116.000	3.5
437.9274	27.00	-1.15	28345.860	4.5	51174.280	5.5
437.9330	39.00	-.80	10969.423	0.0	33803.966	0.0
437.9366	27.00	-3.50	26250.490	.5	49078.430	1.5
437.9372	23.00	-1.75	14514.750	1.5	37342.660	2.5
437.9380	24.00	-3.50	25038.610	5.0	47866.480	4.0
437.9400	10.01	-.82	280700.770	3.5	303528.530	3.5
437.9426	25.01	-4.09	82193.040	2.0	105020.670	1.0
437.9493	26.01	-3.90	38214.500	1.5	61041.780	2.5
437.9502	18.01	-2.54	190106.230	1.5	212933.460	2.5
437.9520	41.00	-.92	9275.615	0.0	32109.168	0.0
437.9552	10.01	.78	280700.770	3.5	303527.740	4.5
437.9577	28.01	-4.08	94067.140	1.5	116893.980	2.5
437.9585	7.01	-1.93	164610.760	1.0	187437.560	1.0
437.9604	25.02	-.69	193235.430	2.5	216062.130	2.5
437.9606	27.00	-4.05	29294.520	3.5	52121.210	4.5
437.9619	28.01	-2.90	112686.300	2.5	135512.920	2.5
437.9654	18.01	-1.58	183797.360	2.5	206623.800	3.5
437.9665	18.01	-.17	135601.650	.5	158428.030	.5
437.9685	23.00	-3.81	16572.540	3.5	39398.820	3.5
437.9712	25.01	-2.55	43850.420	2.0	66676.560	2.0
437.9721	18.01	-3.00	190106.230	1.5	212932.320	1.5
437.9738	27.02	-3.58	83938.900	3.5	106764.900	4.5
437.9775	24.00	-1.71	24299.890	2.0	47125.700	3.0
437.9780	40.01	-.19	12259.943	0.0	35092.140	0.0
437.9780	40.01	-.19	12259.943	0.0	35092.140	0.0
437.9792	26.02	-4.88	200504.990	3.0	223330.710	3.0
437.9842	23.00	-5.97	8715.720	3.5	31541.180	3.5
437.9879	27.00	-3.06	29269.730	4.5	52095.000	3.5
437.9882	18.01	-.64	161089.310	.5	183914.560	.5
437.9895	17.00	-1.95	72488.568	1.5	95313.749	1.5
437.9920	45.00	-1.40	9114.300	0.0	31945.767	0.0
437.9970	6.02	-1.24	321411.000	0.0	344242.207	0.0
437.9970	6.02	-2.41	321411.000	0.0	344242.207	0.0
437.9970	6.02	-1.11	321411.000	0.0	344242.207	0.0
438.0022	22.00	-4.05	16961.420	3.0	39785.940	4.0
438.0060	58.01	-1.14	4920.109	0.0	27750.846	0.0
438.0068	27.00	-.39	28345.860	4.5	51170.140	4.5
438.0115	26.00	-4.74	29356.780	2.0	52180.820	1.0
438.0203	28.01	-4.59	111783.790	3.5	134607.370	4.5
438.0211	27.00	-3.17	29948.760	2.5	52772.300	2.5
438.0290	42.00	-1.11	12259.943	0.0	35089.482	0.0
438.0312	6.00	-3.04	64089.850	1.0	86912.860	1.0
438.0337	26.02	-4.16	200504.990	3.0	223327.870	2.0
438.0420	62.00	-.07	1451.835	0.0	24280.696	0.0
438.0523	6.00	-3.82	64090.950	2.0	86912.860	1.0
438.0550	26.02	-3.84	200504.990	3.0	223326.760	4.0
438.0552	24.00	-2.01	24303.940	3.0	47125.700	3.0
438.0558	23.00	.00	17242.050	5.5	40063.780	5.5
438.0590	42.00	-1.19	16534.792	0.0	39362.767	0.0
438.0640	64.01	-.76	9275.615	0.0	32103.330	0.0
438.0723	26.01	-3.90	38214.500	1.5	61035.370	.5
438.0765	23.00	-3.86	19189.280	1.5	42009.930	2.5
438.0783	24.00	-1.67	35934.020	6.0	58754.580	5.0
438.0787	22.00	-3.82	25388.334	4.0	48208.870	3.0
438.0832	30.02	-.97	257962.500	2.0	280782.800	3.0
438.0832	30.02	.17	257962.500	2.0	280782.800	2.0
438.0878	25.01	-3.59	49427.320	4.0	72247.380	3.0
438.0917	22.00	-3.83	18695.230	4.0	41515.090	4.0
438.0969	23.00	-2.35	2311.370	3.5	25130.960	2.5
438.0973	23.00	-4.47	8578.520	2.5	31398.090	2.5
438.0988	23.00	-1.85	9636.960	1.5	32456.450	1.5
438.1032	22.00	-3.97	25699.950	2.0	48519.210	2.0
438.1044	23.00	-.93	17181.980	4.5	40001.180	3.5
438.1109	24.00	-1.46	21847.880	2.0	44666.740	1.0
438.1122	25.00	-2.69	38120.180	4.5	60938.970	4.5
438.1130	41.00	-.65	13389.148	0.0	36214.310	0.0
438.1140	30.02	.08	257908.200	1.0	280726.900	2.0
438.1140	30.02	-.65	257908.200	1.0	280726.900	1.0
438.1155	27.00	-3.97	23152.570	3.5	45971.190	3.5
438.1159	27.00	-4.24	23184.230	2.5	46002.830	2.5
438.1178	27.02	-4.80	83773.400	1.5	106591.900	1.5
438.1197	24.02	-4.44	131267.300	4.0	154085.700	3.0
438.1220	10.00	-2.45	149657.042	3.0	172475.323	2.0
438.1222	24.01	-4.42	50667.330	3.5	73485.600	3.5

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
438.1251	21.00	-.03	16141.040	2.5	38959.160	3.5
438.1270	44.00	-.84	16050.847	0.0	38875.279	0.0
438.1299	24.00	-2.25	39158.630	4.0	61976.500	4.0
438.1406	25.00	-3.51	27281.850	.5	50099.160	1.5
438.1487	27.00	-1.31	29216.370	2.5	52033.260	1.5
438.1610	26.02	-3.21	200514.460	4.0	223330.710	3.0
438.1640	42.00	.54	16696.107	0.0	39518.612	0.0
438.1668	24.00	-2.08	33906.650	1.0	56722.600	1.0
438.1696	22.01	-4.69	42068.850	1.5	64884.650	2.5
438.1708	25.00	-.17	38669.600	3.5	61485.340	4.5
438.1737	23.00	-1.28	14949.300	4.5	37764.890	5.5
438.1780	58.01	-1.04	5726.684	0.0	28548.460	0.0
438.1785	28.01	-2.75	100619.260	4.5	123434.600	4.5
438.1787	26.01	-7.03	15844.710	4.5	38660.040	3.5
438.1794	26.02	-2.57	182379.860	5.0	205195.150	5.0
438.1814	21.00	.43	15756.510	2.5	38571.700	3.5
438.1854	27.00	-2.75	31699.690	4.5	54514.670	3.5
438.1860	90.01	-.64	6613.917	0.0	29435.276	0.0
438.1865	27.00	-1.78	29948.760	2.5	52763.680	3.5
438.1880	73.00	-.69	21051.613	0.0	43872.868	0.0
438.1952	27.01	-4.84	40694.900	4.0	63509.370	4.0
438.2021	26.00	-3.72	29798.960	4.0	52613.072	5.0
438.2060	64.01	-1.52	4436.164	0.0	27256.481	0.0
438.2129	25.00	-1.87	38120.180	4.5	60933.730	5.5
438.2170	58.01	-.17	5484.711	0.0	28304.456	0.0
438.2196	15.01	-3.55	107361.100	3.0	130174.300	2.0
438.2323	23.01	-5.10	16421.510	4.0	39234.050	3.0
438.2369	26.02	-3.90	200514.460	4.0	223326.760	4.0
438.2403	24.00	-4.19	31987.060	4.0	54799.180	5.0
438.2410	42.00	-.46	20003.065	0.0	42821.560	0.0
438.2472	27.00	-4.86	31871.150	3.5	54682.910	4.5
438.2490	41.00	-1.01	12179.286	0.0	34997.364	0.0
438.2505	24.00	-1.32	25106.340	3.0	47917.930	2.0
438.2511	26.02	-3.13	66522.950	2.0	89334.510	2.0
438.2553	24.00	-3.88	24277.060	0.0	47088.400	1.0
438.2619	25.00	-.17	38669.600	3.5	61480.600	3.5
438.2620	25.00	-3.06	27201.540	2.5	50012.530	2.5
438.2697	28.00	-4.27	27943.543	1.0	50754.137	2.0
438.2740	60.01	-1.79	2984.328	0.0	25801.105	0.0
438.2757	23.00	-1.45	13801.530	1.5	36611.810	2.5
438.2760	26.00	-1.67	28819.966	5.0	51630.230	5.0
438.2840	41.00	-2.17	1532.493	0.0	24348.749	0.0
438.2845	23.00	-2.76	19189.280	1.5	41999.100	1.5
438.2871	28.00	-1.88	31441.665	2.0	54251.353	3.0
438.2886	25.00	-1.33	37586.030	1.5	60395.640	1.5
438.2929	26.00	-3.84	26623.726	2.0	49433.108	2.0
438.2961	25.02	-.38	193498.070	3.5	216307.290	4.5
438.2967	9.02	-1.18	468682.910	3.5	491492.100	2.5
438.2967	9.02	.25	468682.910	3.5	491492.100	3.5
438.2994	20.02	-.92	328090.990	2.0	350900.040	2.0
438.3050	10.01	-2.04	280700.770	3.5	303509.520	2.5
438.3066	9.02	.12	468683.430	2.5	491492.100	2.5
438.3066	9.02	-1.16	468683.430	2.5	491492.100	3.5
438.3120	64.01	-.75	9356.272	0.0	32171.071	0.0
438.3124	24.00	-2.43	25177.390	4.0	47985.760	5.0
438.3141	10.01	-1.84	290371.950	2.5	313180.230	1.5
438.3170	63.01	.17	26697.639	0.0	49512.177	0.0
438.3240	6.02	-.76	321427.000	0.0	344241.174	0.0
438.3240	6.02	-1.24	321427.000	0.0	344241.174	0.0
438.3270	92.00	-1.09	3710.246	0.0	26524.264	0.0
438.3360	44.00	-1.04	10566.135	0.0	33379.684	0.0
438.3387	13.01	-3.93	125866.700	1.0	148673.700	1.0
438.3394	22.00	-2.81	18037.225	4.0	40844.190	3.0
438.3395	28.01	-3.61	112686.300	2.5	135493.260	1.5
438.3440	57.01	-.29	14034.408	0.0	36847.541	0.0
438.3510	25.02	-2.06	195308.790	4.5	218115.150	3.5
438.3521	13.01	-2.77	123468.100	3.0	146274.400	2.0
438.3547	26.00	-.09	11976.239	4.0	34782.406	5.0
438.3624	24.00	-3.26	36552.130	3.0	59357.900	2.0
438.3664	23.00	-2.03	15724.220	3.5	38529.780	4.5
438.3754	18.01	-1.40	138243.550	1.5	161048.640	1.5
438.3822	26.00	-3.41	31686.342	2.0	54491.080	3.0
438.3831	25.01	-3.52	85367.850	2.0	108172.540	1.0
438.3841	26.02	-4.25	183456.690	3.0	206261.330	4.0
438.3897	23.00	-1.90	9544.540	.5	32348.890	.5
438.3929	26.02	-4.34	183457.150	4.0	206261.330	4.0
438.3966	26.01	-4.07	62244.570	1.5	85048.560	1.5
438.4079	26.01	-2.65	50212.930	2.5	73016.330	3.5
438.4110	10.01	-.47	280797.260	2.5	303600.500	2.5
438.4127	25.01	-4.00	62564.700	1.0	85367.850	2.0
438.4185	9.02	-1.39	468605.940	4.5	491408.790	3.5
438.4187	23.00	-2.06	2112.320	.5	24915.160	1.5
438.4206	9.02	.16	468606.050	3.5	491408.790	3.5
438.4219	10.01	-.15	280797.260	2.5	303599.930	3.5
438.4225	26.02	-4.41	200524.120	5.0	223326.760	4.0
438.4285	26.02	-3.57	166222.200	4.0	189024.530	5.0
438.4290	62.01	-1.35	4355.506	0.0	27164.216	0.0
438.4304	24.00	-4.44	33113.270	4.0	55915.500	4.0
438.4325	26.01	-3.61	21430.390	5.5	44232.510	4.5
438.4368	27.01	-3.34	28111.900	2.0	50913.800	2.0
438.4375	24.00	-3.50	24286.540	1.0	47088.400	1.0
438.4385	9.02	.26	468605.940	4.5	491407.750	4.5
438.4387	30.02	-4.19	238205.500	1.0	261007.300	2.0
438.4406	9.02	-1.38	468606.050	3.5	491407.750	4.5
438.4420	25.00	-1.61	38669.600	3.5	61471.230	2.5
438.4483	8.01	-3.99	232480.100	.5	255281.400	.5
438.4531	28.00	-.98	27943.543	1.0	50744.593	1.0
438.4620	25.02	.09	193756.790	4.5	216557.380	3.5
438.4637	12.01	-.79	80619.500	.5	103420.000	1.5
438.4641	27.00	-3.23	29294.520	3.5	52095.000	3.5
438.4650	90.01	-1.26	15002.299	0.0	37809.136	0.0
438.4676	26.00	-2.50	24335.764	2.0	47136.058	2.0
438.4706	8.01	-2.34	232959.260	3.5	255759.400	3.5
438.4708	23.00	.44	2311.370	3.5	25111.500	4.5
438.4710	28.01	-3.28	32499.530	4.5	55299.650	4.5
438.4720	23.00	-1.76	553.020	4.5	23353.090	3.5
438.4816	21.01	-1.61	4802.750	2.0	27602.320	3.0
438.4854	25.02	-3.66	195315.780	2.5	218115.150	3.5
438.4858	24.00	-3.56	36558.550	2.0	59357.900	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
438.4860	41.00	-.55	12259.943	0.0	35065.688	0.0
438.4860	74.00	-.65	15324.929	0.0	38130.674	0.0
438.4916	28.01	-4.07	106620.530	3.5	129419.580	4.5
438.4964	24.00	-1.45	8307.570	4.0	31106.370	4.0
438.4975	10.01	-2.84	281025.940	2.5	303824.680	2.5
438.5000	9.02	.35	444057.440	1.5	466856.050	2.5
438.5062	10.01	-1.83	281025.940	2.5	303824.230	3.5
438.5098	17.01	-1.53	159574.200	2.0	182372.300	1.0
438.5161	22.00	-4.58	25388.334	4.0	48186.110	4.0
438.5200	57.01	-.71	14276.381	0.0	37080.358	0.0
438.5254	26.00	-2.75	24338.766	3.0	47136.058	2.0
438.5283	24.00	-1.15	25177.390	4.0	47974.530	3.0
438.5329	23.00	-1.04	17242.050	5.5	40038.950	4.5
438.5373	26.01	-2.63	22409.820	.5	45206.490	.5
438.5385	15.01	-.51	101636.490	1.0	124433.100	1.0
438.5390	44.00	-.48	7420.492	0.0	30223.481	0.0
438.5399	8.01	-4.46	232959.260	3.5	255755.800	2.5
438.5445	23.01	-4.10	14556.090	4.0	37352.390	5.0
438.5480	39.00	-1.19	11292.053	0.0	34094.574	0.0
438.5522	30.02	.75	260805.900	2.0	283601.800	3.0
438.5533	24.00	-2.94	31009.000	3.0	53804.840	3.0
438.5550	24.00	-3.03	27223.050	2.0	50018.800	1.0
438.5570	25.01	-4.63	62572.200	2.0	85367.850	2.0
438.5604	27.00	-4.82	32654.500	2.5	55449.970	2.5
438.5650	44.00	-.11	8952.985	0.0	31754.622	0.0
438.5660	60.01	-1.18	1613.150	0.0	24414.735	0.0
438.5681	27.00	-4.56	23207.760	1.5	46002.830	2.5
438.5712	26.02	-4.16	200514.460	4.0	223309.370	5.0
438.5733	30.02	-.63	258075.700	3.0	280870.500	4.0
438.5814	22.01	-4.19	39476.870	2.5	62271.250	2.5
438.5818	25.01	-3.26	43850.420	2.0	66644.780	1.0
438.5858	28.01	-2.11	92325.850	3.5	115120.000	2.5
438.5881	26.02	-4.70	167002.000	2.0	189796.030	1.0
438.5890	42.00	-1.97	11372.710	0.0	34173.099	0.0
438.5920	23.00	-3.77	14548.830	2.5	37342.660	2.5
438.6022	9.02	-2.73	443625.310	2.5	466418.610	3.5
438.6047	28.01	-4.14	112719.750	3.5	135512.920	2.5
438.6070	73.00	-1.74	5968.656	0.0	28768.110	0.0
438.6090	8.01	-4.50	253048.350	2.5	275841.300	3.5
438.6160	26.01	-4.31	38164.240	2.5	60956.820	3.5
438.6172	25.00	-1.40	38934.940	2.5	61727.460	2.5
438.6201	23.00	-2.74	17054.870	2.5	39847.240	1.5
438.6214	27.02	-4.44	83799.600	2.5	106591.900	1.5
438.6220	62.00	-.63	2258.411	0.0	25057.085	0.0
438.6270	44.00	-.53	14760.326	0.0	37558.740	0.0
438.6350	58.01	-1.08	7097.862	0.0	29895.860	0.0
438.6370	23.00	-4.23	16449.850	2.5	39241.340	2.5
438.6395	24.00	-3.67	35501.260	3.0	58292.620	4.0
438.6430	69.00	-.86	0.000	0.0	22797.583	0.0
438.6453	28.00	-.14	30912.838	1.0	53703.899	1.0
438.6472	24.00	-2.35	24897.550	4.0	47688.510	4.0
438.6490	21.00	-4.68	14926.240	2.5	37717.110	3.5
438.6511	28.01	-4.31	94283.940	4.5	117074.700	3.5
438.6526	22.00	-3.72	25797.600	3.0	48588.280	3.0
438.6568	26.01	-5.05	20830.520	2.5	43620.980	1.5
438.6607	25.01	-4.82	44138.960	1.0	66929.220	2.0
438.6659	25.01	-2.66	79913.350	4.0	102703.340	4.0
438.6700	58.01	-1.03	4436.164	0.0	27232.343	0.0
438.6726	26.02	-4.03	166222.200	4.0	189011.840	4.0
438.6731	9.02	-.68	468605.940	4.5	491395.560	4.5
438.6731	9.02	1.05	468605.940	4.5	491395.560	5.5
438.6752	9.02	.96	468606.050	3.5	491395.560	4.5
438.6761	24.00	-4.75	32097.360	6.0	54886.820	6.0
438.6840	58.01	-.73	1855.123	0.0	24650.575	0.0
438.6849	22.01	-.79	20951.770	2.5	43740.770	3.5
438.6944	24.00	-3.41	24299.890	2.0	47088.400	1.0
438.6992	26.00	-4.20	26140.164	3.0	48928.423	2.0
438.7013	20.02	-4.15	363118.750	3.0	385906.900	2.0
438.7109	9.02	-.97	443630.960	3.5	466418.610	3.5
438.7125	27.00	-4.21	32733.070	3.5	55520.640	3.5
438.7148	24.00	-2.37	24833.860	3.0	47621.310	3.0
438.7171	20.02	-1.60	359800.570	3.0	382587.900	4.0
438.7200	23.00	-1.71	8412.940	.5	31200.120	1.5
438.7203	9.02	-1.01	443630.960	3.5	466418.120	4.5
438.7242	27.00	-3.71	23184.230	2.5	45971.190	3.5
438.7244	24.00	-3.51	33935.650	2.0	56722.600	1.0
438.7304	24.00	-3.40	23933.900	4.0	46720.540	4.0
438.7327	23.01	-3.35	49731.320	2.0	72517.840	1.0
438.7365	24.00	-3.16	23512.000	1.0	46298.320	1.0
438.7379	22.00	-2.24	19937.859	1.0	42724.110	2.0
438.7446	22.00	-1.59	18695.230	4.0	41481.130	5.0
438.7496	24.00	-1.97	24200.230	6.0	46985.870	5.0
438.7521	25.02	-.75	193498.070	3.5	216283.580	3.5
438.7527	7.00	-3.43	93581.520	.5	116367.000	.5
438.7527	7.00	-2.75	93581.520	.5	116367.000	1.5
438.7533	24.00	-2.28	24093.160	2.0	46878.610	3.0
438.7543	24.02	-4.53	70980.200	1.0	93765.600	2.0
438.7558	17.00	-2.78	72827.038	.5	95612.357	1.5
438.7571	26.02	-3.76	200524.120	5.0	223309.370	5.0
438.7655	14.00	-1.98	39760.285	1.0	62545.100	1.0
438.7670	64.01	-1.37	3387.616	0.0	26178.756	0.0
438.7706	25.01	-4.31	81051.620	3.0	103836.170	2.0
438.7740	41.00	-1.45	4920.109	0.0	27710.885	0.0
438.7843	23.01	-3.68	49898.220	2.0	72682.060	2.0
438.7880	63.00	-.08	13147.176	0.0	35937.225	0.0
438.7896	26.00	-1.31	24772.019	1.0	47555.584	1.0
438.7910	27.00	-1.07	28777.270	3.5	51560.760	2.5
438.7930	2.00	-.88	171135.000	0.0	193924.789	0.0
438.7939	25.02	-.15	192880.160	3.5	215663.500	3.5
438.8010	58.01	-.46	6936.547	0.0	29725.921	0.0
438.8072	22.00	-.84	18061.540	1.0	40844.190	1.0
438.8078	25.00	-2.37	38120.180	4.5	60902.800	3.5
438.8101	26.02	-3.94	182412.650	4.0	205195.150	5.0
438.8109	28.01	-4.61	111120.540	1.5	133903.000	1.5
438.8122	23.00	-1.77	19078.150	3.5	41860.540	4.5
438.8151	28.01	-2.28	92325.850	3.5	115108.090	2.5
438.8159	19.01	-.39	166461.500	1.0	189243.700	1.0
438.8232	25.01	-4.94	81054.350	2.0	103836.170	2.0
438.8240	6.02	-.49	321450.000	0.0	344238.179	0.0
438.8360	41.00	-1.15	5242.739	0.0	28030.295	0.0
438.8365	28.01	-4.74	113172.960	4.5	135954.090	3.5
438.8396	26.00	-.25	29056.312	3.0	51837.279	3.0
438.8407	25.02	-.98	195592.090	1.5	218373.000	1.5
438.8515	25.01	-4.02	62587.500	3.0	85367.850	2.0
438.8583	13.01	-2.85	124792.000	2.0	147572.000	1.0
438.8588	26.01	-3.62	62083.170	4.5	84863.140	5.5
438.8789	23.00	-1.88	13801.530	1.5	36580.460	1.5
438.8860	28.01	-1.98	112686.300	2.5	135464.860	3.5
438.8916	18.01	-4.04	186470.280	1.5	209248.550	2.5
438.8949	8.03	.48	552029.600	1.5	574807.700	2.5
438.8990	44.00	-.15	22261.476	0.0	45045.761	0.0
438.9087	27.00	-2.58	31699.690	4.5	54477.070	3.5
438.9114	23.01	-4.49	12706.150	6.0	35483.390	6.0
438.9234	26.02	-3.10	183456.690	3.0	206233.310	2.0
438.9247	26.00	-4.57	415.932	3.0	23192.486	2.0
438.9255	24.00	-2.12	31028.330	2.0	53804.840	3.0
438.9263	21.00	.55	15881.760	3.5	38658.230	4.5
438.9342	23.01	-4.03	49898.220	2.0	72674.280	2.0
438.9346	25.00	-1.61	38934.940	2.5	61710.980	3.5
438.9454	27.00	-2.12	29294.520	3.5	52070.000	2.5
438.9469	8.03	.64	552032.300	2.5	574807.700	3.5
438.9469	8.03	-.66	552032.300	2.5	574807.700	2.5
438.9498	28.01	-2.38	112686.300	2.5	135461.550	2.5
438.9571	22.00	-2.30	18593.990	3.0	41368.860	4.0
438.9596	21.00	-.18	16096.860	1.5	38871.600	2.5
438.9751	17.00	-1.28	71958.363	2.5	94732.300	3.5
438.9758	28.01	-4.42	92792.080	3.5	115565.980	2.5
438.9804	28.00	-4.86	33500.854	3.0	56274.516	2.0
438.9808	25.01	-4.67	44521.520	4.0	67295.160	4.0
438.9840	74.00	-.64	19680.435	0.0	42460.309	0.0
438.9858	28.00	-2.85	27943.543	1.0	50716.927	1.0
438.9870	57.00	-.17	9598.245	0.0	32377.963	0.0
438.9880	64.00	-.14	7017.204	0.0	29796.870	0.0
438.9910	23.00	-3.39	19145.130	5.5	41918.240	5.5
438.9937	24.00	-1.60	24282.340	4.0	47055.310	5.0
438.9966	26.01	-4.52	62689.960	2.5	85462.780	3.5
438.9980	23.00	.24	2220.130	2.5	24992.880	3.5
439.0015	24.00	-2.65	24282.340	4.0	47054.910	4.0
439.0023	11.00	-2.03	16956.172	.5	39728.700	1.5
439.0104	9.02	-4.34	466722.420	2.5	489494.530	3.5
439.0105	24.00	-.53	37233.500	5.0	60005.600	5.0
439.0228	22.00	-3.81	8602.340	2.0	31373.801	3.0
439.0236	24.00	-1.67	39158.630	4.0	61930.050	3.0
439.0280	58.01	-.14	11614.683	0.0	34392.273	0.0
439.0302	24.00	-4.42	23933.900	4.0	46704.980	5.0
439.0312	28.00	-.18	29500.690	1.0	52271.716	2.0
439.0403	17.00	-1.61	72827.038	.5	95597.593	.5
439.0440	44.00	-.04	8469.040	0.0	31245.800	0.0
439.0450	26.00	-2.90	24118.815	4.0	46889.126	4.0
439.0514	12.01	-1.49	80650.020	1.5	103420.000	1.5
439.0515	22.00	-1.93	25438.898	2.0	48208.870	3.0
439.0533	25.00	-3.40	30354.210	3.5	53124.090	3.5
439.0535	24.00	-2.52	35398.020	4.0	58167.890	4.0
439.0572	12.01	-.53	80650.020	1.5	103419.700	2.5
439.0595	23.00	-2.88	13810.900	.5	36580.460	1.5
439.0611	7.00	-3.15	93581.520	.5	116351.000	.5
439.0611	7.00	-4.06	93581.520	.5	116351.000	1.5
439.0622	26.01	-4.99	60956.820	3.5	83726.240	3.5
439.0682	26.01	-4.33	61527.590	6.5	84296.700	5.5
439.0683	13.01	-3.54	123415.900	2.0	146185.000	2.0
439.0683	13.01	-2.81	123415.900	2.0	146185.000	1.0
439.0714	24.01	-4.58	50667.330	3.5	73436.270	2.5
439.0755	22.01	-3.73	42208.840	2.5	64977.570	3.5
439.0860	62.01	-.97	1451.835	0.0	24226.417	0.0
439.0907	27.00	-2.86	29948.760	2.5	52716.700	3.5
439.0909	25.02	-4.85	172547.850	2.5	195315.780	2.5
439.0950	64.01	-1.45	3387.616	0.0	26161.731	0.0
439.0954	26.00	-1.47	24338.766	3.0	47106.463	4.0
439.1030	44.00	-1.48	7420.492	0.0	30194.192	0.0
439.1042	14.00	-2.86	39683.163	0.0	62450.400	1.0
439.1050	22.01	-1.23	9930.740	1.5	32697.940	2.5
439.1065	25.02	-1.10	192948.290	1.5	215715.410	1.5
439.1080	76.00	-.43	18954.517	0.0	41727.958	0.0
439.1088	13.01	-2.64	123418.000	3.0	146185.000	2.0
439.1088	13.01	-3.54	123418.000	3.0	146185.000	3.0
439.1089	23.00	-4.87	20202.490	2.5	42969.490	1.5
439.1100	60.01	-2.09	2500.383	0.0	25273.720	0.0
439.1110	90.01	-.96	4436.164	0.0	27209.449	0.0
439.1160	29.01	-4.66	116375.470	3.0	139142.100	2.0
439.1254	24.00	-3.56	24282.340	4.0	47048.480	3.0
439.1322	22.00	-3.95	16875.190	2.0	39640.980	3.0
439.1340	75.00	-1.51	11695.340	0.0	34467.432	0.0
439.1401	29.01	-3.71	114000.000	3.0	136765.380	4.0
439.1440	64.01	-1.12	9033.642	0.0	31805.216	0.0
439.1488	25.00	-2.12	34463.370	1.5	57228.300	.5
439.1532	30.02	-1.09	214878.000	3.0	237642.700	3.0
439.1540	42.00	.03	23955.283	0.0	46726.338	0.0
439.1563	27.00	-1.01	24326.110	3.5	47090.650	2.5
439.1565	25.00	-3.71	27248.000	1.5	50012.530	2.5
439.1590	30.02	-1.95	257962.500	2.0	280726.900	2.0
439.1590	30.02	-.98	257962.500	2.0	280726.900	1.0
439.1628	13.01	-2.48	123420.800	4.0	146185.000	3.0
439.1658	23.00	-.50	15000.840	5.5	37764.890	5.5
439.1660	58.01	-.26	2581.041	0.0	25351.474	0.0
439.1692	28.01	-3.79	98561.220	2.5	121325.090	2.5
439.1696	21.00	-1.49	18711.030	.5	41474.880	1.5
439.1743	24.00	-2.38	8095.210	3.0	30858.820	2.0
439.1752	28.01	-2.63	112906.930	1.5	135670.490	.5
439.1821	16.01	-.55	128233.070	2.5	150996.270	2.5
439.1826	29.01	-4.87	115639.020	2.0	138402.200	3.0
439.1830	78.00	-.73	21858.188	0.0	44627.740	0.0
439.1844	22.00	-.59	19421.576	3.0	42184.660	4.0
439.1853	24.01	-2.67	44307.440	.5	67070.480	1.5
439.1863	26.00	-3.20	31686.342	2.0	54449.330	1.0
439.1887	27.00	-2.14	20500.710	1.5	43263.570	1.5
439.1909	22.00	-1.34	17540.205	3.0	40302.950	3.0
439.1991	10.01	.92	280173.010	4.5	302935.330	5.5
439.1995	10.01	-.81	280173.010	4.5	302935.310	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
439.2018	25.01	-2.85	44138.960	1.0	66901.140	2.0
439.2040	28.00	-3.56	33500.854	3.0	56262.920	3.0
439.2060	64.00	.09	7420.492	0.0	30188.851	0.0
439.2061	23.00	-2.51	2153.200	1.5	24915.160	1.5
439.2120	42.00	.18	25487.776	0.0	48255.824	0.0
439.2150	30.02	.76	258075.700	3.0	280837.200	4.0
439.2150	30.02	-.28	258075.700	3.0	280837.200	3.0
439.2163	24.00	-1.60	37244.170	4.0	60005.600	5.0
439.2167	28.00	-1.60	33112.368	3.0	55873.780	2.0
439.2233	23.00	-2.76	19189.280	1.5	41950.350	2.5
439.2260	24.00	-2.13	24286.540	1.0	47047.470	2.0
439.2294	16.01	-3.06	133268.530	.5	156029.280	1.5
439.2306	26.00	-4.49	28604.610	2.0	51365.300	3.0
439.2412	24.00	-3.10	25106.340	3.0	47866.480	4.0
439.2416	28.01	-3.29	107082.210	2.5	129842.330	2.5
439.2450	75.00	-1.46	14518.354	0.0	37284.692	0.0
439.2491	27.01	-2.92	63587.000	3.0	86346.730	3.0
439.2518	28.01	-3.65	99040.750	1.5	121800.340	1.5
439.2560	14.00	-1.92	39760.285	1.0	62519.660	2.0
439.2567	26.00	-1.99	31307.235	4.0	54066.570	4.0
439.2590	77.00	-1.32	16454.134	0.0	39219.746	0.0
439.2600	62.01	-3.05	0.000	0.0	22765.560	0.0
439.2621	23.00	-3.53	15770.720	4.5	38529.780	4.5
439.2690	41.00	-.54	9275.615	0.0	32040.709	0.0
439.2756	25.00	-3.02	45060.810	3.5	67819.170	4.5
439.2859	26.00	-2.98	26351.049	5.0	49108.876	4.0
439.3016	28.01	-4.03	94067.140	1.5	116824.150	2.5
439.3032	26.00	-3.52	24335.764	2.0	47092.693	3.0
439.3055	28.01	-3.83	99418.610	3.5	122175.420	2.5
439.3055	25.02	.16	195948.440	3.5	218705.250	2.5
439.3070	23.00	-.68	15078.250	.5	37834.980	1.5
439.3078	28.01	-4.26	115739.150	4.5	138495.840	4.5
439.3099	20.02	-1.00	324660.470	3.0	347417.050	3.0
439.3190	58.01	-.89	5887.999	0.0	28650.502	0.0
439.3271	25.00	-3.42	25265.740	5.5	48021.430	5.5
439.3292	28.01	-4.45	111783.790	3.5	134539.370	2.5
439.3340	11.00	-1.78	16973.368	1.5	39728.700	2.5
439.3340	11.00	-2.73	16973.368	1.5	39728.700	1.5
439.3350	62.00	-.48	1451.835	0.0	24213.509	0.0
439.3364	24.00	-2.37	25038.610	5.0	47793.820	5.0
439.3404	25.00	-2.98	30354.210	3.5	53109.210	2.5
439.3437	25.01	-2.50	44138.960	1.0	66893.790	1.0
439.3462	8.01	-4.28	232526.700	1.5	255281.400	.5
439.3482	28.01	-2.72	70635.460	2.5	93390.060	2.5
439.3532	24.00	-2.82	23933.900	4.0	46688.240	3.0
439.3597	27.00	-2.91	29948.760	2.5	52702.760	1.5
439.3600	92.00	-.78	0.000	0.0	22760.379	0.0
439.3611	26.00	-3.86	24338.766	3.0	47092.693	3.0
439.3615	25.02	-.25	195752.480	2.5	218506.390	3.5
439.3651	27.00	-2.33	30102.960	2.5	52856.680	3.5
439.3671	28.01	-4.63	115000.250	3.5	137753.870	4.5
439.3713	38.02	-.40	260878.800	3.0	283632.200	4.0
439.3760	70.00	-.25	24923.174	0.0	47682.724	0.0
439.3760	90.00	-1.33	7420.492	0.0	30180.042	0.0
439.3833	23.00	-1.51	8476.200	1.5	31228.980	2.5
439.3847	7.01	-3.13	166582.450	2.0	189335.160	3.0
439.3868	27.00	-3.52	32654.500	2.5	55407.100	1.5
439.3923	22.00	.31	18287.560	4.0	41039.874	5.0
439.4010	39.00	-1.20	11211.395	0.0	33969.650	0.0
439.4018	25.01	-3.79	81051.620	3.0	103803.440	3.0
439.4059	22.01	-1.71	9850.900	.5	32602.510	1.5
439.4080	74.00	-.67	17986.627	0.0	40744.519	0.0
439.4098	25.02	-.03	195315.780	2.5	218067.190	2.5
439.4183	24.00	-1.76	24303.940	3.0	47054.910	4.0
439.4197	9.03	-1.80	469644.200	2.0	492395.100	2.0
439.4308	28.01	-3.99	70778.120	3.5	93528.440	3.5
439.4320	42.00	.18	27262.242	0.0	50018.891	0.0
439.4380	75.00	-.61	15647.559	0.0	38403.898	0.0
439.4382	18.01	-3.08	186171.260	.5	208921.200	1.5
439.4420	24.00	-3.69	35398.020	4.0	58147.760	3.0
439.4420	69.00	-1.69	0.000	0.0	22756.132	0.0
439.4468	24.00	-3.66	31987.060	4.0	54736.550	4.0
439.4470	42.00	-.51	20809.640	0.0	43565.513	0.0
439.4500	40.00	-2.39	564.603	0.0	23320.320	0.0
439.4513	26.01	-2.61	77742.780	2.5	100492.040	3.5
439.4519	27.00	-5.81	3482.820	4.5	26232.050	3.5
439.4617	18.01	-1.98	161048.640	1.5	183797.360	2.5
439.4642	24.00	-2.78	24299.890	2.0	47048.480	3.0
439.4669	20.02	-2.79	363118.750	3.0	385867.200	3.0
439.4670	39.00	-.53	16696.107	0.0	39450.944	0.0
439.4684	16.01	-4.93	133399.820	1.5	156148.190	.5
439.4687	21.00	-4.21	16210.800	3.5	38959.160	3.5
439.4720	64.01	-1.82	6533.259	0.0	29287.837	0.0
439.4768	26.02	-2.91	200524.120	5.0	223272.060	6.0
439.4772	24.01	-2.47	66727.160	2.5	89475.080	2.5
439.4780	58.01	-1.02	7017.204	0.0	29771.472	0.0
439.4818	23.00	-1.52	10892.500	3.5	33640.180	4.5
439.4837	24.00	-2.26	24299.890	2.0	47047.470	2.0
439.4860	76.00	-.62	11292.053	0.0	34045.906	0.0
439.4872	22.00	-2.83	8436.618	0.0	31184.021	1.0
439.4878	28.01	-4.07	93528.440	3.5	116275.810	3.5
439.4900	90.01	-1.59	8549.697	0.0	31303.343	0.0
439.4940	40.00	-.53	10808.108	0.0	33561.547	0.0
439.4960	44.00	-.92	15405.586	0.0	38158.922	0.0
439.5036	28.01	-4.64	92373.450	2.5	115120.000	2.5
439.5036	22.01	-.55	8744.270	2.5	31490.820	3.5
439.5044	25.02	-4.08	172569.270	1.5	195315.780	2.5
439.5143	28.01	-2.65	112906.930	1.5	135652.930	1.5
439.5174	22.00	-3.84	25926.820	4.0	48672.660	4.0
439.5192	26.00	-3.17	32133.977	2.0	54879.720	2.0
439.5210	40.00	-1.45	4355.506	0.0	27107.547	0.0
439.5234	23.00	-.01	2153.200	1.5	24898.730	2.5
439.5274	26.00	-2.06	29469.010	2.0	52214.330	1.0
439.5315	28.01	-3.32	112719.750	3.5	135464.860	3.5
439.5396	24.00	-1.61	24277.060	0.0	47021.750	1.0
439.5425	24.00	-2.84	24303.940	3.0	47048.480	3.0
439.5469	22.00	-2.04	15108.121	3.0	37852.434	4.0
439.5487	26.00	-1.91	31322.603	3.0	54066.821	2.0
439.5523	29.01	-3.61	116375.470	3.0	139119.500	3.0
439.5536	26.00	-2.58	31322.603	3.0	54066.570	4.0
439.5620	24.00	-3.01	24303.940	3.0	47047.470	2.0
439.5668	23.01	-5.27	14461.730	3.0	37205.010	3.0
439.5755	26.02	-2.71	66591.680	1.0	89334.510	2.0
439.5790	59.01	-1.39	3387.616	0.0	26136.655	0.0
439.5840	20.02	-1.54	341601.460	2.0	364343.850	1.0
439.5862	22.01	-1.37	10024.740	2.5	32767.020	3.5
439.5869	27.00	-2.39	20500.710	1.5	43242.950	2.5
439.5954	28.01	-3.41	112719.750	3.5	135461.550	2.5
439.6026	28.01	-4.85	95573.390	3.5	118314.820	2.5
439.6032	22.03	-1.21	236125.300	2.5	258866.700	2.5
439.6102	22.00	-3.20	25317.813	1.0	48058.850	1.0
439.6171	24.00	-3.87	27816.880	5.0	50557.560	4.0
439.6310	10.01	-.55	280768.520	.5	303508.480	1.5
439.6413	29.01	-2.67	115662.770	4.0	138402.200	3.0
439.6459	23.00	-2.89	19189.280	1.5	41928.470	.5
439.6480	90.01	-1.61	8952.985	0.0	31698.454	0.0
439.6490	69.00	-.79	8711.012	0.0	31456.429	0.0
439.6573	23.03	-.61	264482.800	2.0	287221.400	2.0
439.6580	58.01	-1.10	6936.547	0.0	29681.499	0.0
439.6660	42.00	-.61	16696.107	0.0	39440.645	0.0
439.6800	75.00	-1.32	16212.162	0.0	38955.976	0.0
439.6907	28.00	-2.23	28569.210	2.0	51306.085	3.0
439.6929	26.01	-4.61	60989.480	4.5	83726.240	3.5
439.7012	20.02	-4.12	363021.270	2.0	385757.600	3.0
439.7040	41.00	-.59	12017.970	0.0	34760.542	0.0
439.7045	18.01	-2.83	190196.160	.5	212932.320	1.5
439.7076	25.00	-4.65	25285.430	4.5	48021.430	5.5
439.7078	21.00	-2.09	18711.030	.5	41447.020	.5
439.7193	10.00	-3.40	150121.592	1.0	172856.990	1.0
439.7229	24.00	-1.23	24286.540	1.0	47021.750	1.0
439.7260	76.00	-.81	13953.751	0.0	36695.185	0.0
439.7269	26.01	-6.22	21711.890	3.5	44446.890	3.5
439.7281	23.00	-3.97	19023.470	4.5	41758.410	3.5
439.7290	42.00	-.40	18147.942	0.0	40889.221	0.0
439.7339	28.01	-4.74	92373.450	2.5	115108.090	2.5
439.7340	62.00	-.41	806.575	0.0	23547.596	0.0
439.7385	25.01	-3.87	85367.850	2.0	108102.250	3.0
439.7391	23.00	-1.46	14910.040	3.5	37644.410	4.5
439.7424	22.03	.09	236132.500	3.5	258866.700	2.5
439.7566	9.02	.43	444056.420	.5	466789.890	1.5
439.7686	22.00	-.91	20126.055	3.0	42858.900	3.0
439.7763	9.02	-.08	444057.440	1.5	466789.890	1.5
439.7796	18.01	-.41	192333.430	.5	215065.710	.5
439.7800	44.00	-.98	9033.642	0.0	31772.284	0.0
439.7823	8.01	-.97	232959.260	3.5	255691.400	3.5
439.7825	9.02	.26	444057.440	1.5	466789.570	2.5
439.7836	23.00	-2.12	19026.340	2.5	41758.410	3.5
439.7919	26.01	-3.85	49506.990	1.5	72238.630	2.5
439.7941	25.02	.31	192741.670	.5	215473.200	1.5
439.7991	10.01	.16	280797.260	2.5	303528.530	3.5
439.8020	39.01	-1.25	967.890	0.0	23705.395	0.0
439.8079	22.00	-2.88	7255.369	2.0	29986.185	3.0
439.8095	27.01	-2.40	63616.000	2.0	86346.730	3.0
439.8128	21.00	-1.32	16141.040	2.5	38871.600	2.5
439.8133	10.00	-3.08	150121.592	1.0	172852.130	0.0
439.8144	7.00	-3.88	93581.520	.5	116312.000	.5
439.8144	7.00	-4.18	93581.520	.5	116312.000	1.5
439.8171	8.01	-4.62	232959.260	3.5	255689.600	2.5
439.8288	22.00	-.73	19322.988	2.0	42052.720	3.0
439.8306	22.01	-1.88	9872.870	.5	32602.510	1.5
439.8424	28.01	-3.69	97273.830	2.5	120002.860	3.5
439.8450	73.00	-2.36	1935.780	0.0	24671.062	0.0
439.8502	23.01	-2.65	26839.820	3.0	49568.450	3.0
439.8616	28.00	-1.98	28578.046	3.0	51306.085	3.0
439.8650	10.01	-4.94	282680.650	.5	305408.510	.5
439.8790	58.01	-.97	4436.164	0.0	27169.688	0.0
439.8838	28.01	-4.26	98467.250	3.5	121194.140	2.5
439.8933	11.02	-2.47	443261.600	.5	465988.000	.5
439.9034	9.02	-.61	468682.910	3.5	491408.790	3.5
439.9046	24.00	-1.56	42025.600	3.0	64751.420	4.0
439.9119	23.00	-3.34	19026.340	2.5	41751.780	1.5
439.9127	17.01	-0.00	138623.000	1.0	161348.400	1.0
439.9134	9.02	.82	468683.430	2.5	491408.790	3.5
439.9191	28.01	-3.64	98467.250	3.5	121192.320	3.5
439.9200	58.01	-.78	2581.041	0.0	25312.447	0.0
439.9220	27.00	-2.05	29735.180	3.5	52460.100	2.5
439.9235	9.02	.93	468682.910	3.5	491407.750	4.5
439.9247	9.02	-.58	443753.060	2.5	466477.840	2.5
439.9256	9.02	-.22	443753.060	2.5	466477.790	3.5
439.9258	28.01	-3.16	112719.750	3.5	135444.470	3.5
439.9274	26.00	-4.04	22838.320	2.0	45562.959	3.0
439.9338	24.01	-4.93	50687.630	2.5	73411.940	1.5
439.9413	23.00	-2.11	8476.200	1.5	31200.120	1.5
439.9452	26.02	-4.22	183456.690	3.0	206180.410	3.0
439.9456	28.01	-3.78	112906.930	1.5	135630.630	2.5
439.9470	77.00	-.37	16454.134	0.0	39184.145	0.0
439.9498	7.00	-4.25	93581.520	.5	116305.000	.5
439.9498	7.00	-3.74	93581.520	.5	116305.000	1.5
439.9541	26.02	-2.79	183457.150	4.0	206180.410	3.0
439.9570	28.01	-4.19	98969.440	5.5	121692.550	4.5
439.9582	24.01	-4.69	67868.050	2.5	90591.100	2.5
439.9584	20.02	.76	324660.470	3.0	347383.510	4.0
439.9590	44.00	-1.58	9517.587	0.0	32246.978	0.0
439.9591	30.02	-1.05	260878.800	3.0	283601.800	3.0
439.9591	30.02	.87	260878.800	3.0	283601.800	4.0
439.9593	28.00	.39	31031.042	3.0	53754.036	2.0
439.9628	9.02	-3.27	466771.720	3.5	489494.530	3.5
439.9733	24.00	-1.69	42079.810	4.0	64802.080	5.0
439.9766	28.01	-3.42	99418.610	3.5	122140.710	4.5
439.9781	22.01	-1.32	9975.920	1.5	32697.940	2.5
439.9812	24.00	-1.32	24299.890	2.0	47021.750	1.0
439.9857	26.01	-6.35	20516.980	2.5	43238.610	2.5
439.9861	22.00	-4.74	25797.600	3.0	48519.210	2.0
439.9880	16.01	-3.08	133399.820	1.5	156121.330	2.5
439.9880	62.01	-1.88	4355.506	0.0	27083.399	0.0
440.0006	10.01	-1.70	280268.960	2.5	302989.820	1.5
440.0021	28.01	-4.84	95573.390	3.5	118294.170	3.5
440.0056	24.01	-3.10	67870.500	1.5	90591.100	2.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
440.0085	27.00	-3.51	23184.230	2.5	45904.680	1.5
440.0099	18.01	-.88	132630.650	1.5	155351.030	1.5
440.0153	29.01	-3.59	118484.000	3.0	141204.100	3.0
440.0180	64.01	-1.41	9275.615	0.0	32001.958	0.0
440.0214	28.00	-2.51	29320.782	3.0	52040.568	2.0
440.0240	40.00	-1.32	5807.341	0.0	28533.374	0.0
440.0322	26.01	-3.31	62151.610	2.5	84870.840	2.5
440.0350	41.00	-.30	16776.764	0.0	39502.229	0.0
440.0386	21.01	-.57	4883.420	3.0	27602.320	3.0
440.0436	25.02	-.12	195462.260	.5	218180.900	1.5
440.0540	58.01	-1.64	2581.041	0.0	25305.525	0.0
440.0545	22.00	-1.18	20006.032	2.0	42724.110	2.0
440.0580	76.00	.59	32504.981	0.0	55229.258	0.0
440.0587	23.00	-.37	2112.320	.5	24830.180	1.5
440.0628	22.01	-5.68	16515.790	.5	39233.440	1.5
440.0680	26.01	-4.17	62962.260	1.5	85679.640	2.5
440.0760	64.00	-.42	7420.492	0.0	30143.840	0.0
440.0773	27.00	-4.90	32733.070	3.5	55449.970	2.5
440.0819	28.01	-3.80	112906.930	1.5	135623.590	1.5
440.0830	41.00	-.65	12017.970	0.0	34740.956	0.0
440.0830	60.01	-1.44	483.945	0.0	23206.931	0.0
440.0858	28.00	.48	29481.020	4.0	52197.482	3.0
440.0870	58.01	-1.34	5081.424	0.0	27804.204	0.0
440.0947	15.04	-.85	445814.000	2.5	468530.000	2.5
440.0947	15.04	.46	445814.000	2.5	468530.000	3.5
440.0947	15.04	.30	445814.000	1.5	468530.000	2.5
440.0969	25.02	-.21	195592.090	1.5	218307.980	2.5
440.0988	18.01	-.39	132327.280	3.5	155043.070	2.5
440.1042	28.01	-1.20	112719.750	3.5	135435.260	4.5
440.1060	24.01	-4.77	67875.680	3.5	90591.100	2.5
440.1062	23.00	-4.34	19145.130	5.5	41860.540	4.5
440.1065	27.00	-4.56	18389.570	1.5	41104.960	2.5
440.1083	28.01	-2.31	113407.310	2.5	136122.610	2.5
440.1112	22.00	-3.71	25493.722	2.0	48208.870	3.0
440.1170	62.00	.02	3064.986	0.0	25786.217	0.0
440.1263	28.01	-1.64	112686.300	2.5	135400.670	3.5
440.1283	26.00	-1.47	29056.312	3.0	51770.577	3.0
440.1354	28.01	-2.88	113408.710	1.5	136122.610	2.5
440.1393	23.03	-3.06	265019.700	1.0	287733.400	2.0
440.1446	26.00	-2.14	22838.320	2.0	45551.748	1.0
440.1472	28.01	-2.24	98467.250	3.5	121180.540	4.5
440.1532	28.01	-4.28	112906.930	1.5	135619.910	1.5
440.1538	28.00	.06	25753.578	4.0	48466.530	5.0
440.1580	90.00	-1.34	4920.109	0.0	27639.223	0.0
440.1593	26.02	-1.34	182379.860	5.0	205092.530	4.0
440.1635	29.01	-2.91	118532.150	2.0	141244.600	1.0
440.1672	10.01	-1.27	280797.260	2.5	303509.520	2.5
440.1736	23.00	-2.70	9636.960	1.5	32348.890	.5
440.1762	18.01	-1.58	160239.350	1.5	182951.150	.5
440.1781	27.01	-7.31	24074.600	2.0	46786.300	1.0
440.1856	28.01	-3.11	98467.250	3.5	121178.560	3.5
440.1860	64.00	.08	1693.808	0.0	24411.477	0.0
440.1874	10.01	-1.70	280797.260	2.5	303508.480	1.5
440.1887	28.01	-4.05	112906.930	1.5	135618.080	2.5
440.1988	22.00	-3.29	17075.310	4.0	39785.940	4.0
440.2052	26.02	-3.03	105895.350	1.0	128605.650	1.0
440.2096	15.01	-.60	105224.830	0.0	127934.900	1.0
440.2168	22.00	-4.35	16817.190	1.0	39526.890	2.0
440.2246	30.02	-.20	260805.900	2.0	283515.200	2.0
440.2246	30.02	-1.35	260805.900	2.0	283515.200	3.0
440.2459	13.01	-1.76	124792.000	2.0	147500.200	3.0
440.2490	42.00	.06	27584.872	0.0	50299.290	0.0
440.2500	73.00	-1.28	9194.957	0.0	31909.324	0.0
440.2520	17.00	-2.53	72827.038	.5	95534.923	.5
440.2540	56.00	.01	12636.000	0.0	35350.160	0.0
440.2600	75.00	-1.35	14921.641	0.0	37635.492	0.0
440.2604	9.02	-3.23	466787.080	4.5	489494.530	3.5
440.2620	18.01	-1.74	182222.030	1.5	204929.400	.5
440.2650	57.00	-.34	8952.985	0.0	31666.578	0.0
440.2668	27.00	-.66	28345.860	4.5	51052.980	3.5
440.2672	30.02	.30	258075.700	3.0	280782.800	3.0
440.2672	30.02	-.81	258075.700	3.0	280782.800	2.0
440.2690	28.01	-4.22	115000.250	3.5	137707.260	3.5
440.2703	9.02	-1.95	443770.900	3.5	466477.840	2.5
440.2713	9.02	-.31	443770.900	3.5	466477.790	3.5
440.2740	76.00	.80	28149.475	0.0	50862.604	0.0
440.2796	28.01	-4.16	115000.250	3.5	137706.710	2.5
440.2848	16.01	-1.26	127824.930	.5	150531.120	1.5
440.2864	26.01	-2.45	49506.990	1.5	72213.100	.5
440.2899	9.02	-3.87	466788.600	2.5	489494.530	3.5
440.2900	42.00	.06	24358.571	0.0	47070.874	0.0
440.2950	40.00	-1.65	4113.534	0.0	26825.579	0.0
440.3020	17.00	-1.30	71958.363	2.5	94663.670	1.5
440.3060	62.01	-1.27	1451.835	0.0	24163.313	0.0
440.3089	26.01	-3.65	62158.190	4.5	84863.140	5.5
440.3140	64.00	.41	7904.437	0.0	30615.502	0.0
440.3180	25.00	-3.49	30419.610	2.5	53124.090	3.5
440.3300	58.01	-.67	11292.053	0.0	34002.293	0.0
440.3331	17.02	-4.87	178369.700	.5	201073.400	.5
440.3340	40.01	-1.11	9436.930	0.0	32146.964	0.0
440.3360	62.01	-1.56	1451.835	0.0	24161.766	0.0
440.3365	24.00	-1.10	24282.340	4.0	46985.870	5.0
440.3487	24.00	-3.17	32097.360	6.0	54800.260	6.0
440.3578	25.01	-2.10	53017.160	1.0	75719.590	1.0
440.3610	59.01	-1.21	5000.766	0.0	27709.407	0.0
440.3654	29.01	-4.40	116326.160	3.0	139028.200	2.0
440.3671	23.00	-1.60	15062.940	6.5	37764.890	5.5
440.3679	25.02	-3.93	172613.870	2.5	195315.780	2.5
440.3681	22.03	-.06	236125.300	2.5	258827.200	1.5
440.3696	24.00	-4.28	32097.360	6.0	54799.180	5.0
440.3700	28.01	-3.27	113177.610	3.5	135879.410	3.5
440.3733	14.03	-1.33	313914.920	2.5	336616.550	2.5
440.3733	14.03	-.02	313914.920	2.5	336616.550	3.5
440.3733	14.03	-.18	313914.920	1.5	336616.550	2.5
440.3780	24.00	-4.23	35501.260	3.0	58202.650	3.0
440.3780	77.00	-1.31	12098.628	0.0	34806.393	0.0
440.3793	27.00	-1.88	29563.170	1.5	52264.490	1.5
440.3805	29.01	-4.97	114511.440	1.0	137212.700	1.0
440.3830	14.02	-.37	227665.090	2.0	250366.220	3.0
440.4016	24.00	-2.02	31377.960	4.0	54078.130	5.0
440.4026	28.01	-2.71	107142.210	1.5	129842.330	2.5
440.4085	26.00	-2.10	31686.342	2.0	54386.160	1.0
440.4162	26.02	-2.54	105906.230	2.0	128605.650	1.0
440.4166	26.02	-4.94	167085.120	3.0	189784.520	2.0
440.4185	30.02	-1.41	258171.200	5.0	280870.500	4.0
440.4185	30.02	.34	258171.200	5.0	280870.500	5.0
440.4210	76.00	-1.12	15082.956	0.0	37788.504	0.0
440.4255	27.00	-4.91	20500.710	1.5	43199.650	2.5
440.4284	22.00	-1.85	18145.400	2.0	40844.190	3.0
440.4284	22.00	-.82	18145.400	2.0	40844.190	1.0
440.4397	22.00	-2.38	8492.421	1.0	31190.631	2.0
440.4420	9.02	-.86	443770.900	3.5	466468.990	4.5
440.4459	20.01	-3.96	68056.910	2.5	90754.800	2.5
440.4459	20.01	-2.66	68056.910	3.5	90754.800	2.5
440.4550	42.00	-1.25	16615.449	0.0	39319.244	0.0
440.4630	20.01	-2.81	68056.910	2.5	90753.920	1.5
440.4647	27.00	-2.73	23207.760	1.5	45904.680	1.5
440.4678	23.01	-2.66	14655.630	5.0	37352.390	5.0
440.4753	26.00	-.57	12560.933	3.0	35257.309	4.0
440.4781	28.01	-3.65	112686.300	2.5	135382.530	1.5
440.4820	44.00	-.74	16938.079	0.0	39640.482	0.0
440.4894	22.00	-.65	15156.787	4.0	37852.434	4.0
440.4903	18.01	-2.05	172335.520	2.5	195031.120	2.5
440.4930	27.00	-2.22	21215.900	.5	43911.360	1.5
440.4959	28.01	-4.81	116145.690	3.5	138841.000	3.5
440.4998	23.00	-.50	14949.300	4.5	37644.410	4.5
440.5014	23.00	-2.00	2220.130	2.5	24915.160	1.5
440.5021	26.00	-5.48	415.932	3.0	23110.925	3.0
440.5107	28.01	-4.49	114836.630	3.5	137531.180	4.5
440.5192	56.01	-1.64	50011.220	0.0	72711.706	0.0
440.5270	63.01	-1.54	16776.764	0.0	39476.848	0.0
440.5352	14.02	-.43	227081.190	1.0	249774.480	2.0
440.5389	26.00	-3.00	31686.342	2.0	54379.440	3.0
440.5418	18.01	-3.36	191974.530	1.5	214667.480	2.5
440.5470	58.01	-1.34	5081.424	0.0	27780.478	0.0
440.5525	8.01	-4.22	232480.100	.5	255172.500	1.5
440.5563	30.02	-.73	258178.300	4.0	280870.500	4.0
440.5563	30.02	.93	258178.300	4.0	280870.500	5.0
440.5588	28.01	-4.46	112906.930	1.5	135599.000	.5
440.5670	62.01	-2.37	3468.273	0.0	26166.296	0.0
440.5680	22.00	-3.06	8492.421	1.0	31184.021	1.0
440.5709	25.00	-4.62	30411.740	.5	53103.190	1.5
440.5762	9.02	-4.28	444202.700	5.5	466893.880	4.5
440.5806	9.02	-1.40	444202.700	5.5	466893.650	5.5
440.5850	59.01	-.89	4355.506	0.0	27052.602	0.0
440.5895	14.02	-.26	227084.210	2.0	249774.700	3.0
440.5920	24.01	-4.66	55023.300	2.5	77713.660	1.5
440.5937	14.02	-1.16	227084.210	2.0	249774.480	2.0
440.5968	14.00	-3.91	39760.285	1.0	62450.400	1.0
440.6002	21.00	-.37	15881.760	3.5	38571.700	3.5
440.6010	30.02	-.79	258171.200	5.0	280861.100	5.0
440.6010	30.02	1.05	258171.200	5.0	280861.100	6.0
440.6062	23.00	-1.33	8578.520	2.5	31268.150	3.5
440.6068	25.00	-3.33	30419.610	2.5	53109.210	2.5
440.6068	27.02	-3.56	83799.600	2.5	106489.200	3.5
440.6072	25.00	-3.79	30411.740	.5	53101.320	.5
440.6084	27.00	-2.47	28470.510	1.5	51160.030	2.5
440.6111	26.00	-4.43	31686.342	2.0	54375.719	2.0
440.6138	23.00	-.59	15270.420	1.5	37959.660	2.5
440.6167	24.00	-3.94	25177.390	4.0	47866.480	4.0
440.6183	25.00	-1.84	45130.160	4.5	67819.170	4.5
440.6184	17.02	-4.10	179076.100	1.5	201765.100	2.5
440.6216	23.01	-4.56	14461.730	3.0	37150.570	4.0
440.6280	24.00	-2.10	24897.550	4.0	47586.060	5.0
440.6285	20.02	-2.25	328090.990	2.0	350779.470	3.0
440.6309	25.01	-4.44	84268.060	1.0	106956.420	0.0
440.6357	24.00	-1.52	42252.170	6.0	64940.280	7.0
440.6381	24.01	-4.56	66649.710	1.5	89337.700	1.5
440.6400	75.00	-1.06	16212.162	0.0	38906.425	0.0
440.6408	9.02	-1.20	444202.700	5.5	466890.550	4.5
440.6550	41.00	-1.64	5887.999	0.0	28581.489	0.0
440.6596	28.01	-4.35	114836.630	3.5	137523.510	3.5
440.6649	23.00	-.20	2424.890	4.5	25111.500	4.5
440.6662	25.00	-3.87	27201.540	2.5	49888.080	3.5
440.6670	64.01	-.24	11372.710	0.0	34065.582	0.0
440.6682	24.00	-.16	42025.600	3.0	64712.040	3.0
440.6697	24.00	-4.09	33762.740	6.0	56449.100	6.0
440.6716	14.02	-.10	227088.720	3.0	249774.980	4.0
440.6763	26.00	-2.65	31805.059	3.0	54491.080	3.0
440.6771	14.02	-1.16	227088.720	3.0	249774.700	3.0
440.6814	14.02	-2.71	227088.720	3.0	249774.480	2.0
440.6817	14.00	-4.24	56978.256	1.0	79664.000	1.0
440.6850	56.00	-.83	13514.000	0.0	36205.945	0.0
440.6867	22.00	-1.12	19421.576	3.0	42107.060	4.0
440.6870	42.00	.20	29843.282	0.0	52535.125	0.0
440.6917	24.00	-2.90	33906.650	1.0	56591.880	2.0
440.6933	26.00	-2.46	33412.706	3.0	56097.850	3.0
440.6939	22.00	-2.35	25643.695	3.0	48328.810	4.0
440.6993	26.00	-4.08	20641.110	4.0	43325.946	3.0
440.6998	10.01	-3.53	306011.070	.5	328695.880	1.5
440.7014	24.00	-2.10	31393.400	5.0	54078.130	5.0
440.7068	23.01	-6.66	11908.270	2.0	34592.720	2.0
440.7223	26.00	-2.99	29056.312	3.0	51739.964	2.0
440.7237	25.00	-2.89	30419.610	2.5	53103.190	1.5
440.7253	25.00	-4.75	30425.710	1.5	53109.210	2.5
440.7280	58.01	-.89	5565.369	0.0	28255.101	0.0
440.7294	28.01	-2.31	70706.770	1.5	93390.060	2.5
440.7417	28.00	-2.68	33500.854	3.0	56183.510	4.0
440.7428	28.01	-4.59	114836.630	3.5	137519.230	2.5
440.7436	24.00	-2.82	42153.740	5.0	64836.300	6.0
440.7472	23.00	-6.18	8715.720	3.5	31398.090	2.5
440.7520	62.01	-2.35	1935.780	0.0	24624.276	0.0
440.7640	23.00	-.04	2311.370	3.5	24992.880	3.5
440.7645	22.01	-2.53	9850.900	.5	32532.380	.5
440.7708	24.00	-1.89	24286.540	1.0	46967.700	2.0
440.7713	26.00	-1.93	17550.180	3.0	40231.312	2.0
440.7754	28.01	-2.13	112719.750	3.5	135400.670	3.5
440.7797	24.00	-2.46	24940.610	2.0	47621.310	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
440.7882	23.00	-2.75	19078.150	3.5	41758.410	3.5
440.7910	4.00	-1.58	42565.000	0.0	65251.489	0.0
440.7956	26.02	-1.89	182412.650	4.0	205092.530	4.0
440.7960	23.00	-2.70	16917.150	5.5	39597.010	4.5
440.7980	24.00	-3.46	25106.340	3.0	47786.100	2.0
440.7985	28.01	-4.40	98467.250	3.5	121146.980	2.5
440.8019	22.00	-3.33	16961.420	3.0	39640.980	3.0
440.8085	25.00	-.69	37148.660	5.5	59827.880	5.5
440.8129	23.00	-.73	15078.250	.5	37757.240	.5
440.8205	23.00	-.04	2220.130	2.5	24898.730	2.5
440.8243	26.00	-3.60	24338.766	3.0	47017.170	3.0
440.8250	64.01	-1.10	4436.164	0.0	27120.903	0.0
440.8280	74.00	.70	26536.324	0.0	49220.908	0.0
440.8283	23.03	-2.15	263608.300	3.0	286286.500	4.0
440.8415	24.00	-3.60	21856.940	3.0	44534.460	4.0
440.8417	28.01	-4.58	99442.860	4.5	122120.370	5.5
440.8418	26.00	-1.67	17726.985	2.0	40404.492	1.0
440.8423	25.00	-3.66	30425.710	1.5	53103.190	1.5
440.8423	7.00	-2.95	93581.520	.5	116259.000	.5
440.8423	7.00	-4.01	93581.520	.5	116259.000	1.5
440.8442	28.01	-4.09	106620.530	3.5	129297.910	3.5
440.8442	23.00	-3.29	16449.850	2.5	39127.230	1.5
440.8442	27.01	-4.84	25317.720	1.0	47995.100	0.0
440.8499	23.01	-1.24	32040.760	2.0	54717.850	1.0
440.8508	23.00	-.28	2112.320	.5	24789.360	.5
440.8520	23.00	-.12	2153.200	1.5	24830.180	1.5
440.8652	25.02	-1.03	193235.430	2.5	215911.730	1.5
440.8668	23.00	-3.64	13801.530	1.5	36477.750	.5
440.8748	22.01	-4.80	42208.840	2.5	64884.650	2.5
440.8786	25.00	-3.14	30425.710	1.5	53101.320	.5
440.8840	59.01	-.84	0.000	0.0	22681.703	0.0
440.8870	58.01	-.93	7178.519	0.0	29860.068	0.0
440.8880	21.00	-3.39	15041.980	3.5	37717.110	3.5
440.8880	90.00	-1.33	3629.588	0.0	26311.085	0.0
440.8930	23.01	-1.19	32040.760	2.0	54715.630	2.0
440.9112	26.00	-2.23	26623.726	2.0	49297.660	1.0
440.9133	26.02	-2.71	182418.700	4.0	205092.530	4.0
440.9142	22.01	-1.05	45908.560	5.5	68582.340	5.5
440.9154	22.00	-1.64	19937.859	1.0	42611.580	1.0
440.9171	22.00	-3.24	18695.230	4.0	41368.860	4.0
440.9250	64.00	.10	8388.382	0.0	31067.976	0.0
440.9255	22.01	-2.09	10024.740	2.5	32697.940	2.5
440.9298	10.01	.80	280262.330	3.5	302935.310	4.5
440.9330	62.01	-1.32	2661.698	0.0	25340.881	0.0
440.9331	9.02	-2.48	466821.720	3.5	489494.530	3.5
440.9498	29.01	-4.62	118532.150	2.0	141204.100	3.0
440.9518	28.00	-4.06	33500.854	3.0	56172.704	3.0
440.9527	28.01	-4.77	113177.610	3.5	135849.410	2.5
440.9533	22.01	-1.69	9930.740	1.5	32602.510	1.5
440.9564	24.00	-.08	42079.810	4.0	64751.420	4.0
440.9663	30.02	-2.51	238336.200	2.0	261007.300	2.0
440.9663	30.02	-3.67	238336.200	2.0	261007.300	2.0
440.9776	10.01	-1.20	280173.010	4.5	302843.530	3.5
440.9864	23.00	-2.69	16728.750	4.5	39398.820	3.5
440.9950	42.00	.10	24681.201	0.0	47357.195	0.0
441.0004	22.00	-3.10	18525.070	2.0	41194.420	3.0
441.0006	27.00	-1.85	30102.960	2.5	52772.300	2.5
441.0030	44.00	0.00	9114.300	0.0	31789.883	0.0
441.0111	23.00	-2.89	16572.540	3.5	39241.340	2.5
441.0126	28.01	-4.91	115827.120	3.5	138495.840	4.5
441.0165	22.00	-2.51	25438.898	2.0	48107.420	2.0
441.0210	41.00	-.78	4920.109	0.0	27594.766	0.0
441.0272	28.01	-3.63	99418.610	3.5	122086.580	3.5
441.0286	25.01	-3.00	82387.530	3.0	105055.430	2.0
441.0303	24.00	-1.20	24299.890	2.0	46967.700	2.0
441.0317	27.00	-4.23	31699.690	4.5	54367.430	5.5
441.0411	24.00	-4.82	27597.220	3.0	50264.480	3.0
441.0481	25.00	-1.85	34845.260	.5	57512.160	1.5
441.0490	23.00	-5.12	13810.900	.5	36477.750	.5
441.0512	28.00	-2.58	26665.903	3.0	49332.643	4.0
441.0533	24.00	-3.90	35501.260	3.0	58167.890	4.0
441.0640	58.01	.06	10808.108	0.0	33480.555	0.0
441.0655	23.03	-1.83	265067.400	2.0	287733.400	2.0
441.0656	30.02	-.82	258171.200	5.0	280837.200	4.0
441.0743	9.02	.84	443753.060	2.5	466418.610	3.5
441.0760	58.01	-.35	7420.492	0.0	30092.322	0.0
441.0772	22.00	-1.21	19322.988	2.0	41988.390	3.0
441.0786	25.02	-1.16	195462.260	.5	218127.590	.5
441.0891	29.01	-3.99	116576.810	0.0	139241.600	1.0
441.0961	24.00	-2.20	24056.110	5.0	46720.540	4.0
441.1051	28.01	-4.38	106620.530	3.5	129284.500	2.5
441.1060	60.01	-1.36	1451.835	0.0	24122.123	0.0
441.1078	22.01	-.78	24961.340	1.5	47625.170	2.5
441.1092	24.00	-.96	24303.940	3.0	46967.700	2.0
441.1117	25.00	-2.27	37164.250	6.5	59827.880	5.5
441.1123	28.00	-3.77	33610.916	2.0	56274.516	2.0
441.1130	76.00	-1.16	16131.504	0.0	38801.432	0.0
441.1160	64.00	-.50	483.945	0.0	23153.719	0.0
441.1210	57.01	.57	28391.447	0.0	51060.964	0.0
441.1403	26.01	-4.51	49506.990	1.5	72169.150	1.5
441.1446	28.00	-3.29	26665.903	3.0	49327.845	2.0
441.1516	24.00	-4.10	35501.260	3.0	58162.840	2.0
441.1520	41.00	-.67	10162.848	0.0	32830.772	0.0
441.1539	18.01	-4.12	179592.130	2.5	202253.590	1.5
441.1570	42.00	.65	16696.107	0.0	39363.774	0.0
441.1580	62.00	-.33	1451.835	0.0	24119.451	0.0
441.1606	23.00	-3.07	15103.770	4.5	37764.890	5.5
441.1635	18.01	-3.99	172335.520	2.5	194996.490	1.5
441.1652	14.03	-1.67	299676.950	.5	322337.830	1.5
441.1683	27.00	-4.27	30102.960	2.5	52763.680	3.5
441.1716	27.00	-6.05	7442.410	3.5	30102.960	2.5
441.1824	27.01	-7.30	25147.200	4.0	47807.200	4.0
441.1824	23.03	-2.00	234121.800	0.0	256781.800	1.0
441.1830	62.01	-2.02	2177.753	0.0	24844.084	0.0
441.1864	25.00	.07	38008.700	5.5	60668.490	4.5
441.1876	23.00	-2.08	13801.530	1.5	36461.260	2.5
441.1917	25.02	-2.06	195315.780	2.5	217975.300	2.5
441.1919	22.01	-1.93	9872.870	.5	32532.380	.5
441.1950	22.00	-2.85	7255.369	2.0	29914.720	3.0
441.2007	29.01	-2.91	123556.640	2.0	146215.700	1.0
441.2020	58.01	-1.02	5646.026	0.0	28311.381	0.0
441.2038	30.02	-1.17	258178.300	4.0	280837.200	3.0
441.2038	30.02	.38	258178.300	4.0	280837.200	4.0
441.2120	7.00	-2.75	93581.520	.5	116240.000	1.5
441.2155	23.00	-2.78	2112.320	.5	24770.620	.5
441.2160	59.01	-1.80	2984.328	0.0	25648.964	0.0
441.2180	41.00	-1.44	8711.012	0.0	31375.545	0.0
441.2182	10.01	-1.42	280173.010	4.5	302831.170	3.5
441.2200	74.00	-2.30	3306.958	0.0	25971.388	0.0
441.2234	24.00	-2.73	8307.570	4.0	30965.460	3.0
441.2270	60.01	-2.05	483.945	0.0	23148.016	0.0
441.2284	10.00	-2.86	149824.221	2.0	172481.860	1.0
441.2310	26.02	-3.72	179676.890	2.0	202334.390	1.0
441.2408	24.00	-2.75	33934.880	3.0	56591.880	2.0
441.2419	26.00	-3.91	17550.180	3.0	40207.120	3.0
441.2429	22.00	-2.17	7255.369	2.0	29912.262	3.0
441.2454	27.00	-4.74	31699.690	4.5	54356.450	4.5
441.2457	20.02	-1.51	363118.750	3.0	385775.500	4.0
441.2495	28.01	-4.32	115120.000	2.5	137776.550	3.5
441.2502	7.01	-4.36	166678.640	3.0	189335.160	3.0
441.2552	26.02	-4.26	97041.380	3.0	119697.640	2.0
441.2558	24.00	-1.76	33935.650	2.0	56591.880	2.0
441.2592	17.00	-3.62	72488.568	1.5	95144.623	2.5
441.2593	10.01	.05	280173.010	4.5	302829.060	4.5
441.2612	20.00	-1.25	23652.304	1.0	46308.257	2.0
441.2643	25.01	-3.54	81147.650	2.0	103803.440	3.0
441.2679	9.02	-.17	444238.270	4.5	466893.880	4.5
441.2708	27.00	-2.85	26063.110	1.5	48718.570	2.5
441.2717	27.00	-3.86	32027.500	3.5	54682.910	4.5
441.2724	9.02	.95	444238.270	4.5	466893.650	5.5
441.2727	28.01	-3.29	113321.950	4.5	135977.310	4.5
441.2740	90.01	-1.49	6129.972	0.0	28791.629	0.0
441.2758	22.01	-1.16	45673.750	4.5	68328.950	4.5
441.2770	42.00	-.54	18228.600	0.0	40890.103	0.0
441.2905	18.01	-4.51	147875.860	2.5	170530.310	3.5
441.3000	24.00	.17	38537.680	5.0	61191.640	6.0
441.3040	40.00	-.34	11130.738	0.0	33790.854	0.0
441.3082	26.01	-3.88	75915.210	2.5	98568.750	3.5
441.3109	10.01	-.70	280947.100	1.5	303600.500	2.5
441.3109	8.01	-.73	233430.100	.5	256083.500	1.5
441.3129	10.01	-.72	281171.380	2.5	303824.680	2.5
441.3217	10.01	.52	281171.380	2.5	303824.230	3.5
441.3267	24.01	-3.39	67859.910	.5	90514.500	1.5
441.3328	9.02	-.71	444238.270	4.5	466890.550	4.5
441.3372	9.02	-1.78	444238.270	4.5	466890.320	3.5
441.3381	28.00	-1.48	33610.916	2.0	56262.920	3.0
441.3390	26.00	-2.17	32873.623	4.0	55525.580	5.0
441.3400	22.00	-4.04	7255.369	2.0	29907.273	2.0
441.3440	22.00	-3.63	16875.190	2.0	39526.890	2.0
441.3440	64.00	-.99	6936.547	0.0	29594.610	0.0
441.3489	26.02	-3.67	179682.940	1.0	202334.390	1.0
441.3509	20.00	-2.07	23652.304	1.0	46303.649	2.0
441.3528	25.02	-2.63	193498.070	3.5	216149.320	3.5
441.3538	30.02	-.81	258075.700	3.0	280726.900	2.0
441.3538	25.02	-2.67	115711.600	4.5	138362.800	3.5
441.3540	28.01	-3.14	106620.530	3.5	129271.720	3.5
441.3556	10.00	-3.14	149824.221	2.0	172475.323	2.0
441.3602	26.01	-4.08	21581.640	4.5	44232.510	4.5
441.3621	24.00	-2.66	37233.500	5.0	59884.270	6.0
441.3655	27.01	-4.05	24886.500	2.0	47537.100	2.0
441.3682	23.00	-2.00	8578.520	2.5	31228.980	2.5
441.3713	30.02	.87	260981.900	3.0	283632.200	4.0
441.3732	20.02	.67	328090.990	2.0	350741.190	3.0
441.3734	9.02	-3.74	443625.310	2.5	466275.500	2.5
441.3770	59.01	-1.25	1693.808	0.0	24350.177	0.0
441.3793	21.00	-1.26	18855.760	1.5	41505.650	2.5
441.3800	58.01	-1.08	7178.519	0.0	29834.734	0.0
441.3863	28.01	-4.96	116191.470	2.5	138841.000	3.5
441.3865	24.00	-.50	28637.000	3.0	51286.520	2.0
441.3982	23.01	-4.01	14556.090	4.0	37205.010	3.0
441.3992	24.00	-3.04	24056.110	5.0	46704.980	5.0
441.3994	23.02	-.89	161588.040	3.5	184236.900	4.5
441.4017	26.00	-4.24	29056.312	3.0	51705.052	2.0
441.4095	24.00	-.02	42153.740	5.0	64802.080	5.0
441.4140	40.00	-2.32	1209.863	0.0	23864.333	0.0
441.4160	64.00	.70	8388.382	0.0	31042.749	0.0
441.4165	23.01	-6.45	12545.150	4.0	35193.130	5.0
441.4165	26.00	-2.32	24772.019	1.0	47420.000	2.0
441.4177	25.02	-.02	195752.480	2.5	218400.400	3.5
441.4194	26.02	-3.88	182444.700	3.0	205092.530	4.0
441.4217	9.02	-.73	443770.900	3.5	466418.610	3.5
441.4276	15.01	-.21	105303.190	1.0	127950.600	2.0
441.4313	9.02	.93	443770.900	3.5	466418.120	4.5
441.4333	24.00	-3.52	31280.350	5.0	53927.470	6.0
441.4440	60.01	-2.35	483.945	0.0	23136.875	0.0
441.4454	24.00	-3.30	35501.260	3.0	58147.760	3.0
441.4475	22.01	-2.68	40798.370	3.5	63444.760	3.5
441.4479	24.00	-3.16	27176.220	1.0	49822.590	2.0
441.4540	40.01	-1.06	9920.875	0.0	32573.292	0.0
441.4559	23.00	-.65	14910.040	3.5	37556.000	3.5
441.4590	8.01	-3.50	232526.700	1.5	255172.500	1.5
441.4604	18.01	-1.90	183985.940	1.5	206631.670	2.5
441.4719	20.02	-2.48	360207.160	2.0	382852.300	2.0
441.4730	64.00	-.31	967.890	0.0	23619.332	0.0
441.4758	24.01	-3.07	42898.120	2.5	65543.060	3.5
441.4765	17.02	-.66	195268.200	1.5	217913.100	1.5
441.4843	38.01	-.69	56057.900	0.0	78708.762	0.0
441.4873	28.01	-4.79	114874.880	2.5	137519.230	2.5
441.4880	41.00	-1.34	8952.985	0.0	31603.657	0.0
441.4884	8.01	.26	189068.370	1.5	211712.660	2.5
441.4890	25.00	-.57	23296.670	3.5	45940.930	2.5
441.4918	26.00	-2.95	31322.603	3.0	53966.720	2.0
441.4980	30.02	.99	260988.400	4.0	283632.200	5.0
441.4980	30.02	-.65	260988.400	4.0	283632.200	4.0
441.5025	23.00	-2.06	15000.840	5.5	37644.410	4.5
441.5035	27.00	-3.96	31871.150	3.5	54514.670	3.5
441.5080	74.00	-.92	18147.942	0.0	40797.588	0.0
441.5125	26.00	-1.12	12968.552	2.0	35611.608	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
441.5128	25.01	-4.89	84307.200	4.0	106950.240	3.0
441.5240	92.01	-2.05	0.000	0.0	22648.825	0.0
441.5370	16.01	-1.08	130641.000	1.5	153282.800	2.5
441.5464	10.01	-3.20	280262.330	3.5	302903.650	2.5
441.5474	14.00	-2.35	39955.053	2.0	62596.320	2.0
441.5540	29.00	-.90	40974.020	0.0	63621.307	0.0
441.5546	21.01	-.70	4802.750	2.0	27443.650	2.0
441.5663	25.02	-.72	193235.430	2.5	215875.730	2.5
441.5709	25.02	-1.41	192880.160	3.5	215520.220	2.5
441.5740	73.00	-1.81	5968.656	0.0	28614.917	0.0
441.5752	26.00	-4.93	18378.187	2.0	41018.029	2.0
441.5820	75.00	-1.00	14921.641	0.0	37567.492	0.0
441.5946	20.02	-2.97	363118.750	3.0	385757.600	3.0
441.5971	28.01	-4.92	76402.030	2.5	99040.750	1.5
441.6086	28.01	-4.29	113321.950	4.5	135960.080	4.5
441.6099	25.00	-3.49	25265.740	5.5	47903.800	4.5
441.6230	90.01	-1.35	10485.478	0.0	33129.226	0.0
441.6304	24.00	-3.84	25177.390	4.0	47814.400	3.0
441.6410	41.00	-1.05	11937.313	0.0	34580.138	0.0
441.6423	30.02	-1.54	260878.800	3.0	283515.200	2.0
441.6423	30.02	-.06	260878.800	3.0	283515.200	3.0
441.6455	23.00	-4.83	19023.470	4.5	41659.710	5.5
441.6464	24.01	-3.08	45669.540	1.5	68305.730	1.5
441.6470	23.00	-.83	2153.200	1.5	24789.360	.5
441.6478	27.00	-2.77	22475.360	4.5	45111.480	4.5
441.6506	14.03	-1.97	299676.950	.5	322312.930	.5
441.6511	25.01	-2.20	82419.480	3.0	105055.430	2.0
441.6523	28.01	-3.34	97273.830	2.5	119909.720	1.5
441.6538	22.00	-.65	15108.121	3.0	37743.933	3.0
441.6595	22.00	-.22	19322.988	2.0	41958.510	2.0
441.6623	8.01	-3.38	238626.320	.5	261261.700	1.5
441.6669	23.00	-1.17	10892.500	3.5	33527.640	2.5
441.6757	10.01	-.59	280268.960	2.5	302903.650	2.5
441.6815	26.01	-2.62	22409.820	.5	45044.210	1.5
441.6840	90.00	-1.06	9759.560	0.0	32400.181	0.0
441.6845	23.00	-.81	15770.720	4.5	38404.960	5.5
441.6880	28.01	-2.76	113321.950	4.5	135956.010	5.5
441.6900	58.01	-.80	4194.191	0.0	26834.504	0.0
441.6968	10.01	-1.60	280268.960	2.5	302902.570	1.5
441.6970	8.01	0.00	188888.380	.5	211521.980	1.5
441.7059	25.02	-3.99	172682.640	3.5	195315.780	2.5
441.7101	7.01	-.34	188857.370	2.0	211490.300	2.0
441.7102	28.01	-3.34	98561.220	2.5	121194.140	2.5
441.7169	25.02	-1.15	192948.290	1.5	215580.870	.5
441.7237	24.00	-1.46	42079.810	4.0	64712.040	3.0
441.7273	22.00	-.12	15220.390	5.0	37852.434	4.0
441.7297	26.00	-3.91	25899.974	4.0	48531.896	3.0
441.7307	23.00	-3.08	9824.580	2.5	32456.450	1.5
441.7315	55.00	-6.45	0.000	0.0	22638.186	0.0
441.7333	24.00	-4.02	31009.000	3.0	53640.740	3.0
441.7338	15.01	-.17	105303.190	1.0	127934.900	1.0
441.7339	21.00	-.49	16026.520	4.5	38658.230	4.5
441.7350	72.01	-.73	15163.614	0.0	37801.621	0.0
441.7389	27.00	-.97	24733.280	2.5	47364.730	1.5
441.7449	22.00	-.22	19421.576	3.0	42052.720	3.0
441.7458	28.01	-2.27	98561.220	2.5	121192.320	3.5
441.7497	30.02	.25	258239.600	4.0	280870.500	4.0
441.7497	30.02	-1.40	258239.600	4.0	280870.500	5.0
441.7497	38.01	-1.66	56057.900	0.0	78695.154	0.0
441.7580	62.01	-1.31	3871.561	0.0	26508.389	0.0
441.7723	22.01	-1.07	9395.760	1.5	32025.500	2.5
441.7729	24.00	-3.63	35572.940	2.0	58202.650	3.0
441.7764	27.00	-3.52	20500.710	1.5	43130.240	.5
441.7826	7.01	-1.25	188857.370	2.0	211486.580	1.0
441.7910	72.00	-1.63	5565.369	0.0	28200.506	0.0
441.7961	27.00	-4.02	32654.500	2.5	55283.020	2.5
441.7983	27.00	-3.76	26450.020	2.5	49078.430	1.5
441.7992	23.00	-2.35	19026.340	2.5	41654.700	2.5
441.8239	21.00	-3.75	14926.240	2.5	37553.340	2.5
441.8250	72.00	-1.89	8872.327	0.0	31505.723	0.0
441.8313	14.00	-2.46	40991.884	1.0	63618.600	0.0
441.8338	22.01	-2.24	9975.920	1.5	32602.510	1.5
441.8375	27.01	-1.46	61388.100	4.0	84014.500	5.0
441.8401	26.01	-4.72	62244.570	1.5	84870.840	2.5
441.8422	26.00	-3.36	24118.815	4.0	46744.975	3.0
441.8424	25.02	-4.90	172682.640	3.5	195308.790	4.5
441.8450	74.00	-.66	20325.695	0.0	42958.066	0.0
441.8483	23.00	-3.36	14548.830	2.5	37174.680	3.5
441.8605	28.00	-3.20	36600.805	2.0	59226.030	1.0
441.8635	10.01	.25	321422.850	4.5	344047.920	3.5
441.8709	10.01	.69	321423.230	4.5	344047.920	3.5
441.8711	10.01	-.17	321423.240	3.5	344047.920	3.5
441.8780	58.01	.03	6936.547	0.0	29567.228	0.0
441.8836	16.02	-1.52	147146.000	2.0	169770.040	1.0
441.8836	16.02	-3.19	147146.000	2.0	169770.040	1.0
441.8908	24.00	-3.05	38537.680	5.0	61161.350	5.0
441.8918	25.02	-.15	195462.260	.5	218085.880	.5
441.8973	26.01	-2.02	64087.500	2.5	86710.840	1.5
441.9030	64.01	-1.04	3952.218	0.0	26581.619	0.0
441.9076	29.01	-2.50	115639.020	2.0	138261.830	3.0
441.9086	8.01	-3.75	238731.540	1.5	261354.300	2.5
441.9100	26.00	-2.82	35379.189	5.0	58001.880	6.0
441.9100	24.00	-2.03	24282.340	4.0	46905.030	4.0
441.9102	25.00	-1.94	45130.160	4.5	67752.840	5.5
441.9147	28.01	-4.04	113321.950	4.5	135944.400	3.5
441.9160	57.01	-.55	16454.134	0.0	39082.869	0.0
441.9300	58.01	-1.27	5646.026	0.0	28274.044	0.0
441.9313	23.00	-3.38	8578.520	2.5	31200.120	1.5
441.9330	62.00	-.28	241.973	0.0	22869.837	0.0
441.9332	30.02	.97	258239.600	4.0	280861.100	5.0
441.9397	26.02	-3.66	179661.480	3.0	202282.650	2.0
441.9440	41.00	-.97	5242.739	0.0	27870.040	0.0
441.9445	22.00	-3.80	25438.898	2.0	48059.820	3.0
441.9524	25.02	.27	195752.480	2.5	218373.000	1.5
441.9550	73.00	-2.25	5968.656	0.0	28595.394	0.0
441.9592	24.01	-4.94	66649.710	1.5	89269.880	.5
441.9596	26.02	-2.33	66464.640	3.0	89084.790	3.0
441.9635	22.00	-3.60	25438.898	2.0	48058.850	1.0
441.9645	30.02	.03	260981.900	3.0	283601.800	3.0
441.9645	30.02	-.71	260981.900	3.0	283601.800	4.0
441.9653	10.01	-.43	321428.060	3.5	344047.920	3.5
441.9655	10.01	-2.85	321428.070	2.5	344047.920	3.5
441.9705	26.01	-3.72	62065.570	3.5	84685.160	3.5
441.9774	25.00	-.00	38120.180	4.5	60739.420	3.5
441.9792	26.00	-3.01	26623.726	2.0	49242.872	3.0
441.9797	21.00	-1.82	18855.760	1.5	41474.880	1.5
441.9830	26.00	-4.61	26623.726	2.0	49242.680	2.0
441.9830	41.00	-1.88	2097.096	0.0	24722.401	0.0
441.9884	11.00	-2.86	16956.172	.5	39574.850	.5
441.9932	23.00	-1.63	2220.130	2.5	24838.560	3.5
441.9944	25.00	-3.69	25285.430	4.5	47903.800	4.5
442.0056	9.02	-1.86	444238.270	4.5	466856.070	3.5
442.0130	23.00	-1.96	2153.200	1.5	24770.620	.5
442.0135	26.02	-4.91	128917.510	2.0	151534.900	2.0
442.0145	28.01	-2.88	98561.220	2.5	121178.560	3.5
442.0286	26.02	-4.56	128917.510	2.0	151534.130	3.0
442.0298	9.02	1.16	444202.700	5.5	466819.260	6.5
442.0323	24.00	-3.28	25177.390	4.0	47793.820	5.0
442.0382	9.02	.06	444202.700	5.5	466818.830	5.5
442.0395	25.00	-4.95	25287.740	3.5	47903.800	4.5
442.0411	27.00	-1.17	31699.690	4.5	54315.670	5.5
442.0450	41.00	-1.88	2097.096	0.0	24719.227	0.0
442.0460	40.00	-.26	10969.423	0.0	33591.503	0.0
442.0470	74.00	-.50	19115.832	0.0	41737.861	0.0
442.0470	76.00	-1.05	0.000	0.0	22622.029	0.0
442.0530	62.01	-.87	2661.698	0.0	25283.420	0.0
442.0552	26.00	-4.86	26627.612	4.0	49242.872	3.0
442.0610	23.00	-1.98	13801.530	1.5	36416.490	1.5
442.0640	41.00	-1.87	322.630	0.0	22943.789	0.0
442.0657	28.01	-4.55	111120.540	1.5	133735.260	2.5
442.0665	21.01	-2.19	4987.640	4.0	27602.320	3.0
442.0701	15.01	-.33	88894.000	1.0	111508.500	0.0
442.0743	26.01	-7.37	15844.710	4.5	38458.990	4.5
442.0749	27.00	-4.31	32654.500	2.5	55268.750	3.5
442.0786	27.00	-1.56	23152.570	3.5	45766.630	3.5
442.0840	44.00	-1.46	8711.012	0.0	31331.148	0.0
442.0849	27.00	-1.15	30102.960	2.5	52716.700	3.5
442.0857	22.00	-3.38	25493.722	2.0	48107.420	2.0
442.0912	18.01	-1.63	132737.610	.5	155351.030	1.5
442.0915	30.02	.06	260988.400	4.0	283601.800	4.0
442.0915	30.02	-1.48	260988.400	4.0	283601.800	3.0
442.0924	10.01	-1.29	321434.560	2.5	344047.920	3.5
442.0960	71.00	-.27	21293.585	0.0	43913.107	0.0
442.1085	9.02	.52	443865.310	1.5	466477.840	2.5
442.1119	26.00	-4.83	29356.780	2.0	51969.140	3.0
442.1140	62.01	-1.01	2984.328	0.0	25602.929	0.0
442.1146	26.01	-4.20	78137.530	3.5	100749.750	2.5
442.1201	28.01	-4.06	70778.120	3.5	93390.060	2.5
442.1230	59.01	-1.50	2984.328	0.0	25602.468	0.0
442.1240	64.01	-.62	10485.478	0.0	33103.567	0.0
442.1340	27.00	-1.23	23611.780	5.5	46223.010	4.5
442.1390	10.01	-.21	280989.530	1.5	303600.500	2.5
442.1445	22.00	-.05	19573.968	4.0	42184.660	4.0
442.1460	44.00	-1.08	8469.040	0.0	31086.004	0.0
442.1475	24.01	-3.11	66727.160	2.5	89337.700	1.5
442.1540	90.01	-2.70	1451.835	0.0	24068.389	0.0
442.1570	23.00	-.79	2220.130	2.5	24830.180	1.5
442.1596	26.02	-3.08	182392.550	2.0	205002.470	3.0
442.1664	29.01	-4.47	108335.430	2.0	130945.000	1.0
442.1744	9.02	-.61	443868.680	2.5	466477.840	2.5
442.1754	9.02	.69	443868.680	2.5	466477.790	3.5
442.1764	22.00	-3.30	18061.540	1.0	40670.600	2.0
442.1782	24.01	-3.62	67012.280	2.5	89621.250	3.5
442.1934	22.01	-1.45	16625.250	1.5	39233.440	1.5
442.1973	27.00	-3.04	27497.060	2.5	50105.050	1.5
442.2030	15.03	-1.95	233995.000	0.0	256602.700	1.0
442.2060	42.00	-.99	18228.600	0.0	40842.495	0.0
442.2149	24.00	-2.13	28679.430	1.0	51286.520	2.0
442.2222	25.01	-4.64	83912.380	5.0	106519.100	5.0
442.2226	23.00	-2.67	13801.530	1.5	36408.230	1.5
442.2226	23.00	-2.00	14949.300	4.5	37556.000	3.5
442.2230	72.00	-1.70	10485.478	0.0	33098.504	0.0
442.2364	28.01	-1.06	112906.930	1.5	135512.920	2.5
442.2378	27.00	-2.07	31871.150	3.5	54477.070	3.5
442.2396	29.01	-4.96	116375.470	3.0	138981.300	2.0
442.2409	26.02	-3.55	179676.890	2.0	202282.650	2.0
442.2410	64.00	-.11	161.315	0.0	22773.420	0.0
442.2426	28.00	-2.61	26665.903	3.0	49271.578	3.0
442.2443	23.00	-1.17	13810.900	.5	36416.490	1.5
442.2451	22.00	-1.65	20006.032	2.0	42611.580	1.0
442.2464	23.00	-1.44	15000.840	5.5	37606.320	6.5
442.2570	26.00	-.99	22946.810	1.0	45551.748	1.0
442.2590	39.01	-1.58	806.575	0.0	23417.760	0.0
442.2656	30.02	-.70	258178.300	4.0	280782.800	3.0
442.2687	24.00	-1.18	28682.180	2.0	51286.520	2.0
442.2769	9.02	.88	443625.310	2.5	466229.230	3.5
442.2807	10.01	-2.12	306243.420	2.5	328647.150	3.5
442.2823	22.00	-2.07	8602.340	2.0	31205.985	3.0
442.2853	28.00	-1.83	32973.414	4.0	55576.905	3.0
442.2865	26.00	-2.22	26623.726	2.0	49227.160	3.0
442.2989	28.00	-.25	29668.918	3.0	52271.716	2.0
442.3143	26.00	-2.54	24118.815	4.0	46720.824	4.0
442.3147	26.01	-4.77	62083.170	4.5	84685.160	3.5
442.3184	12.02	-.99	562136.100	2.0	584737.900	2.0
442.3184	12.02	-.99	562136.100	2.0	584737.900	2.0
442.3188	23.00	-1.17	8715.720	3.5	31317.500	4.5
442.3216	22.01	-2.54	9930.740	1.5	32532.380	.5
442.3247	11.00	-2.56	16973.368	1.5	39574.850	.5
442.3321	25.02	-1.79	115711.600	4.5	138312.700	4.5
442.3323	24.00	-1.49	24303.940	3.0	46905.030	4.0
442.3341	30.02	-2.81	258171.200	5.0	280772.200	6.0
442.3380	62.00	-1.09	241.973	0.0	22849.120	0.0
442.3421	28.01	-3.75	98561.220	2.5	121161.810	1.5
442.3452	22.00	-3.55	18593.990	3.0	41194.420	3.0
442.3560	22.00	-4.48	7255.369	2.0	29855.248	1.0
442.3576	27.00	-2.44	30102.960	2.5	52702.760	1.5
442.3593	26.02	-4.41	179682.940	1.0	202282.650	2.0
442.3597	24.00	-4.04	31106.370	4.0	53706.060	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
442.3605	23.00	-.76	15724.220	3.5	38323.870	4.5
442.3613	27.00	-4.07	33945.900	2.5	56545.510	2.5
442.3620	42.00	-.25	18147.942	0.0	40753.862	0.0
442.3621	24.01	-4.05	47354.630	2.5	69954.200	2.5
442.3625	26.00	-4.61	26627.612	4.0	49227.160	3.0
442.3627	24.00	-2.18	27223.050	2.0	49822.590	2.0
442.3680	58.01	-.48	8469.040	0.0	31074.653	0.0
442.3709	24.00	-3.86	33762.740	6.0	56361.860	5.0
442.3721	29.01	-3.49	115662.770	4.0	138261.830	3.0
442.3780	74.00	-.10	22745.421	0.0	45350.523	0.0
442.3793	9.02	.98	443630.960	3.5	466229.650	4.5
442.3842	26.00	-1.26	29469.010	2.0	52067.450	2.0
442.3870	41.00	-.39	16696.107	0.0	39300.750	0.0
442.3875	9.02	-.35	443630.960	3.5	466229.230	3.5
442.3900	57.00	.27	9840.217	0.0	32444.706	0.0
442.3917	22.00	-.99	20126.055	3.0	42724.110	2.0
442.3991	24.00	-1.39	42153.740	5.0	64751.420	4.0
442.3991	18.00	-4.07	94553.707	0.0	117151.387	1.0
442.4006	30.02	-.92	258239.600	4.0	280837.200	3.0
442.4006	30.02	-2.53	258239.600	4.0	280837.200	4.0
442.4059	23.00	-3.02	13810.900	.5	36408.230	1.5
442.4065	12.02	-.80	562136.100	2.0	584733.400	3.0
442.4065	12.02	-.80	562136.100	2.0	584733.400	3.0
442.4069	26.00	-2.11	29371.860	3.0	51969.140	3.0
442.4073	24.00	-1.35	23512.000	1.0	46109.260	2.0
442.4083	15.01	-.60	105303.190	1.0	127900.400	0.0
442.4100	64.01	-1.27	9356.272	0.0	31959.739	0.0
442.4112	10.01	-1.85	290583.170	1.5	313180.230	1.5
442.4179	26.00	-2.26	28604.610	2.0	51201.330	2.0
442.4267	24.00	-.76	24282.340	4.0	46878.610	3.0
442.4322	20.02	-1.58	339198.090	1.0	361794.080	1.0
442.4340	62.01	-.42	3871.561	0.0	26473.802	0.0
442.4500	24.00	-1.64	24093.160	2.0	46688.240	3.0
442.4580	23.00	-1.40	11100.650	4.5	33695.320	5.5
442.4617	23.01	-3.25	14556.090	4.0	37150.570	4.0
442.4780	44.00	-1.32	11695.340	0.0	34295.334	0.0
442.4797	26.02	-2.88	182408.910	3.0	205002.470	3.0
442.4868	28.00	-3.52	27943.543	1.0	50536.742	1.0
442.4946	30.02	.81	258277.700	3.0	280870.500	4.0
442.4960	73.00	-.63	20487.010	0.0	43086.084	0.0
442.5138	24.00	-1.85	25038.610	5.0	47630.430	6.0
442.5248	21.00	-1.27	18855.760	1.5	41447.020	.5
442.5436	20.00	-.18	15157.901	0.0	37748.197	1.0
442.5485	14.00	-2.77	39955.053	2.0	62545.100	1.0
442.5514	24.00	-3.13	35572.940	2.0	58162.840	2.0
442.5530	26.02	-2.63	182412.650	4.0	205002.470	3.0
442.5610	24.00	-1.52	27223.050	2.0	49812.460	3.0
442.5649	26.00	-2.39	28819.966	5.0	51409.180	4.0
442.5701	23.00	-1.90	10892.500	3.5	33481.450	3.5
442.5712	55.00	-6.56	0.000	0.0	22595.234	0.0
442.5728	25.02	-.30	195592.090	1.5	218180.900	1.5
442.5730	25.02	-2.00	115774.000	3.5	138362.800	3.5
442.5741	26.00	-3.36	26339.682	2.0	48928.423	2.0
442.5746	23.00	-1.44	14910.040	3.5	37498.760	2.5
442.5789	26.02	-3.96	168329.670	3.0	190918.170	3.0
442.5830	22.00	-3.05	8602.340	2.0	31190.631	2.0
442.5861	25.01	-4.47	78913.170	2.0	101501.300	3.0
442.5892	28.00	-3.41	36600.805	2.0	59188.780	3.0
442.5910	74.00	-.92	18147.942	0.0	40742.166	0.0
442.6004	18.01	.24	135085.920	1.5	157673.320	2.5
442.6012	23.00	-.92	2311.370	3.5	24898.730	2.5
442.6054	22.00	-.76	15156.787	4.0	37743.933	3.0
442.6147	25.01	-3.91	78913.170	2.0	101499.840	2.0
442.6150	64.01	-1.96	3064.986	0.0	25657.984	0.0
442.6194	22.01	-3.77	40581.800	2.5	63168.230	2.5
442.6214	28.01	-1.65	112906.930	1.5	135493.260	1.5
442.6270	77.00	-1.37	9759.560	0.0	32351.946	0.0
442.6326	28.01	-2.76	98561.220	2.5	121146.980	2.5
442.6373	24.00	-2.09	38537.680	5.0	61123.200	4.0
442.6380	10.01	-3.33	301855.710	2.5	324441.190	2.5
442.6404	10.01	-2.03	301855.710	2.5	324441.070	3.5
442.6437	24.00	-4.00	24093.160	2.0	46678.350	1.0
442.6584	23.00	-3.66	18805.050	.5	41389.490	1.5
442.6604	20.02	-1.76	360207.160	2.0	382791.500	3.0
442.6635	9.01	-.73	265498.410	2.0	288082.590	1.0
442.6645	24.00	-.01	42252.170	6.0	64836.300	6.0
442.6670	42.00	-.12	20003.065	0.0	42593.409	0.0
442.6680	41.00	-1.19	5887.999	0.0	28478.292	0.0
442.6680	92.01	-1.78	4678.136	0.0	27268.429	0.0
442.6690	24.00	-1.57	24093.160	2.0	46677.060	2.0
442.6716	26.02	-2.52	182418.700	4.0	205002.470	3.0
442.6812	25.00	-3.64	37148.660	5.5	59731.940	4.5
442.6830	60.01	-2.54	1451.835	0.0	24041.363	0.0
442.6880	18.01	-3.36	186340.480	1.5	208923.410	2.5
442.6919	16.00	-4.01	55329.861	1.0	77912.593	1.0
442.6940	92.00	-1.47	0.000	0.0	22588.967	0.0
442.6951	25.02	-2.61	115780.230	2.5	138362.800	3.5
442.6969	7.00	-3.40	93581.520	.5	116164.000	.5
442.6969	7.00	-3.57	93581.520	.5	116164.000	1.5
442.6984	27.00	-4.12	23184.230	2.5	45766.630	3.5
442.7029	24.00	-2.58	25106.340	3.0	47688.510	4.0
442.7063	17.02	-1.52	195268.200	1.5	217850.200	2.5
442.7070	58.01	-.92	3306.958	0.0	25895.261	0.0
442.7098	22.00	.31	12118.394	4.0	34700.212	5.0
442.7106	10.01	-1.19	280262.330	3.5	302844.110	2.5
442.7120	8.01	-1.09	233544.090	1.5	256125.800	2.5
442.7125	22.00	-4.26	8602.340	2.0	31184.021	1.0
442.7170	24.01	-2.98	47372.750	1.5	69954.200	2.5
442.7220	10.01	-2.35	280262.330	3.5	302843.530	3.5
442.7233	7.01	-.01	188909.170	1.0	211490.300	2.0
442.7240	40.00	.38	18631.887	0.0	41219.323	0.0
442.7261	23.00	-1.92	14949.300	4.5	37530.290	5.5
442.7278	27.01	-2.75	64359.560	3.0	86940.460	2.0
442.7296	26.00	-1.46	29469.010	2.0	52049.820	2.0
442.7312	26.00	-3.11	415.932	3.0	22996.661	4.0
442.7314	18.01	-3.75	186340.480	1.5	208921.200	1.5
442.7345	9.02	.52	444238.270	4.5	466818.830	5.5
442.7476	27.00	-3.52	32733.070	3.5	55312.960	4.5
442.7502	25.01	-4.22	59537.400	4.0	82117.160	5.0
442.7522	18.01	-3.53	183675.570	3.5	206255.230	2.5
442.7550	57.01	-.31	14276.381	0.0	36862.235	0.0
442.7576	23.01	-4.94	14461.730	3.0	37041.110	2.0
442.7580	62.01	-1.88	1935.780	0.0	24521.481	0.0
442.7610	64.01	-1.29	9275.615	0.0	31861.163	0.0
442.7650	92.01	-2.12	241.973	0.0	22827.317	0.0
442.7706	24.00	-2.38	24299.890	2.0	46878.610	3.0
442.7710	25.01	-4.10	84307.200	4.0	106885.900	4.0
442.7774	22.00	-3.67	19322.988	2.0	41901.360	1.0
442.7810	62.01	-2.23	2177.753	0.0	24762.281	0.0
442.7843	25.02	-3.01	115762.600	1.5	138340.620	2.5
442.7886	25.03	-3.53	152858.200	3.0	175436.000	3.0
442.7892	22.01	-2.98	10024.740	2.5	32602.510	1.5
442.7920	58.01	-.61	4274.849	0.0	26858.816	0.0
442.7938	20.02	-3.17	360207.160	2.0	382784.700	3.0
442.7963	7.01	-.15	188909.170	1.0	211486.580	1.0
442.7980	29.01	-2.97	95565.650	4.0	118142.970	3.0
442.7994	12.01	-1.21	80619.500	.5	103196.750	.5
442.8131	23.00	-3.47	19078.150	3.5	41654.700	2.5
442.8261	23.00	-2.83	19023.470	4.5	41599.360	4.5
442.8406	10.01	-.29	280268.960	2.5	302844.110	2.5
442.8437	24.01	-3.06	45730.740	2.5	68305.730	1.5
442.8440	58.01	-.81	4194.191	0.0	26775.506	0.0
442.8455	26.02	-4.64	179759.490	2.0	202334.390	1.0
442.8460	44.00	-.76	8711.012	0.0	31292.225	0.0
442.8471	24.00	-3.56	35572.940	2.0	58147.760	3.0
442.8500	24.00	-1.41	24303.940	3.0	46878.610	3.0
442.8504	23.00	-1.11	2153.200	1.5	24727.850	2.5
442.8505	10.01	.57	306243.420	2.5	328818.070	3.5
442.8508	10.01	-.83	306243.420	2.5	328818.050	2.5
442.8520	10.01	.06	280268.960	2.5	302843.530	3.5
442.8522	10.01	-1.98	281025.940	2.5	303600.500	2.5
442.8541	27.00	-3.13	31871.150	3.5	54445.610	2.5
442.8557	26.00	-2.28	31805.059	3.0	54379.440	3.0
442.8633	10.01	.57	281025.940	2.5	303599.930	3.5
442.8733	7.00	-3.13	93581.520	.5	116155.000	.5
442.8733	7.00	-3.11	93581.520	.5	116155.000	1.5
442.8790	24.00	-3.62	33113.270	4.0	55686.460	5.0
442.8808	28.01	-3.84	113172.960	4.5	135746.060	3.5
442.8873	24.00	-2.89	37233.500	5.0	59806.270	5.0
442.8902	23.02	-4.14	63303.120	4.5	85875.740	3.5
442.8938	26.00	-3.95	32873.623	4.0	55446.060	4.0
442.9038	25.02	-2.15	192948.290	1.5	215520.220	2.5
442.9110	23.01	-5.43	12621.570	5.0	35193.130	5.0
442.9110	40.00	-1.63	5000.766	0.0	27578.665	0.0
442.9142	16.00	-4.89	55329.861	1.0	77901.258	0.0
442.9181	10.01	-.66	321422.850	4.5	343994.050	4.5
442.9183	10.01	-1.31	321422.850	4.5	343994.040	5.5
442.9185	26.00	-3.18	31686.342	2.0	54257.520	2.0
442.9187	10.01	-1.58	321422.880	5.5	343994.050	4.5
442.9188	10.01	-.02	321422.880	5.5	343994.040	5.5
442.9234	26.00	-2.54	29469.010	2.0	52039.939	1.0
442.9240	59.01	-.61	2984.328	0.0	25561.565	0.0
442.9255	10.01	-.28	321423.230	4.5	343994.050	4.5
442.9257	10.01	-1.71	321423.240	3.5	343994.050	4.5
442.9257	10.01	-3.99	321423.230	4.5	343994.040	5.5
442.9270	58.01	.07	8711.012	0.0	31288.096	0.0
442.9279	26.02	-4.85	196901.270	5.0	219471.970	4.0
442.9287	26.00	-3.58	31805.059	3.0	54375.719	2.0
442.9318	22.00	-4.30	17215.440	5.0	39785.940	4.0
442.9388	22.00	-2.70	25537.276	1.0	48107.420	2.0
442.9413	24.00	-2.46	36552.130	3.0	59122.150	3.0
442.9416	18.01	-2.10	183675.570	3.5	206245.570	3.5
442.9440	41.00	-1.20	5887.999	0.0	28464.216	0.0
442.9467	26.02	-2.09	179630.770	4.0	202200.510	3.0
442.9546	26.01	-4.23	61156.900	3.5	83726.240	3.5
442.9560	24.00	-2.26	23512.000	1.0	46081.270	0.0
442.9644	10.01	-.06	280262.330	3.5	302831.170	3.5
442.9660	62.00	-.22	806.575	0.0	23381.671	0.0
442.9795	24.01	-2.52	66355.130	1.5	88923.200	2.5
442.9811	23.00	-1.26	2424.890	4.5	24992.880	3.5
442.9900	57.01	-.95	1855.123	0.0	24428.996	0.0
442.9919	24.00	-1.08	28679.430	1.0	51246.870	1.0
442.9993	26.00	-2.53	31307.235	4.0	53874.300	5.0
443.0042	22.00	-.67	19421.576	3.0	41988.390	3.0
443.0058	10.01	-2.69	280262.330	3.5	302829.060	4.5
443.0080	25.02	-2.79	115774.000	3.5	138340.620	2.5
443.0182	22.00	-4.47	25493.722	2.0	48059.820	3.0
443.0190	18.01	-.13	135601.650	.5	158167.710	1.5
443.0193	26.00	-1.24	24335.764	2.0	46901.808	1.0
443.0198	9.01	-.84	265516.570	1.0	288082.590	1.0
443.0204	10.01	-2.03	321428.060	3.5	343994.050	4.5
443.0220	70.00	-.32	24358.571	0.0	46930.813	0.0
443.0266	22.00	-3.84	17075.310	4.0	39640.980	3.0
443.0306	22.00	-3.94	16961.420	3.0	39526.890	2.0
443.0364	22.00	-3.37	25643.695	3.0	48208.870	3.0
443.0365	22.00	-2.25	11639.804	3.0	34204.971	4.0
443.0373	22.00	-4.13	25493.722	2.0	48058.850	1.0
443.0376	28.01	-3.49	109269.830	1.5	131834.940	2.5
443.0380	24.00	-1.52	23512.000	1.0	46077.090	1.0
443.0390	23.00	-2.93	14910.040	3.5	37475.080	3.5
443.0406	25.02	-4.80	172547.850	2.5	195112.810	3.5
443.0410	73.00	-1.36	12179.286	0.0	34750.560	0.0
443.0459	24.00	-.66	28682.180	2.0	51246.870	1.0
443.0461	24.01	-2.49	44307.440	.5	66872.120	.5
443.0475	14.00	-1.81	39955.053	2.0	62519.660	2.0
443.0484	23.00	-.66	15270.420	1.5	37834.980	1.5
443.0504	9.02	-2.05	443913.330	4.5	466477.790	3.5
443.0510	24.00	-3.52	24282.340	4.0	46846.770	3.0
443.0583	25.02	-.61	193498.070	3.5	216062.130	2.5
443.0617	26.00	-1.59	17927.378	1.0	40491.260	0.0
443.0630	64.00	-.25	0.000	0.0	22570.154	0.0
443.0673	24.00	-3.51	36558.550	2.0	59122.150	3.0
443.0740	24.00	-3.71	31364.330	3.0	53927.590	4.0
443.0789	10.01	.95	321431.040	5.5	343994.050	4.5
443.0791	10.01	-1.10	321431.040	5.5	343994.040	5.5
443.0795	10.01	1.03	321431.060	6.5	343994.040	5.5
443.0881	24.00	-3.57	35501.260	3.0	58063.800	2.0
443.0889	23.00	-2.29	19189.280	1.5	41751.780	.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
443.0889	23.00	-1.93	19189.280	1.5	41751.780	1.5
443.0905	25.01	-4.43	59537.400	4.0	82099.820	4.0
443.0905	10.01	.07	280947.100	1.5	303509.520	2.5
443.0946	10.01	.31	280268.960	2.5	302831.170	3.5
443.0967	24.00	-2.54	37244.170	4.0	59806.270	5.0
443.1001	18.01	-.89	132481.140	2.5	155043.070	2.5
443.1018	26.02	-2.69	66522.950	2.0	89084.790	3.0
443.1029	28.00	-1.72	33610.916	2.0	56172.704	3.0
443.1090	73.00	-2.47	5565.369	0.0	28133.180	0.0
443.1109	10.01	-1.28	280947.100	1.5	303508.480	1.5
443.1231	24.00	-4.71	30965.460	3.0	53526.220	4.0
443.1239	16.01	-3.30	130641.000	1.5	153201.720	1.5
443.1254	24.00	-4.21	27703.840	4.0	50264.480	3.0
443.1290	20.02	.61	325467.670	2.0	348028.130	3.0
443.1303	25.02	-2.43	115780.230	2.5	138340.620	2.5
443.1317	22.00	-3.11	17995.750	0.0	40556.070	1.0
443.1333	21.00	-4.09	14926.240	2.5	37486.480	1.5
443.1335	21.01	-1.93	4883.420	3.0	27443.650	2.0
443.1378	9.02	-4.75	443630.960	3.5	466190.970	3.5
443.1413	25.02	-4.79	172755.950	3.5	195315.780	2.5
443.1425	28.01	-4.60	99132.780	5.5	121692.550	4.5
443.1435	16.00	-4.98	55329.861	1.0	77889.582	2.0
443.1478	30.02	-.29	258277.700	3.0	280837.200	4.0
443.1478	30.02	.19	258277.700	3.0	280837.200	3.0
443.1490	40.00	-.47	10808.108	0.0	33373.882	0.0
443.1588	28.01	-4.62	93528.440	3.5	116087.380	4.5
443.1635	26.01	-1.89	64040.960	3.5	86599.660	2.5
443.1692	14.00	-2.61	39760.285	1.0	62318.700	0.0
443.1760	64.00	-.37	7904.437	0.0	30468.836	0.0
443.1783	25.02	.00	195948.440	3.5	218506.390	3.5
443.1808	10.01	.09	306011.070	.5	328568.890	1.5
443.1810	10.01	-.19	306011.070	.5	328568.880	.5
443.1814	7.01	-.53	188857.370	2.0	211415.160	2.0
443.1818	26.02	-2.32	182444.700	3.0	205002.470	3.0
443.1890	56.00	.03	12266.000	0.0	34829.737	0.0
443.1910	29.01	-2.02	115662.770	4.0	138220.070	4.0
443.1979	23.00	-.92	15688.800	2.5	38245.750	3.5
443.2036	26.00	-3.12	35257.309	4.0	57813.970	3.0
443.2042	22.00	-1.95	18287.560	4.0	40844.190	3.0
443.2075	22.01	-3.55	9975.920	1.5	32532.380	.5
443.2113	26.00	-2.59	32873.623	4.0	55429.890	5.0
443.2176	25.00	-4.87	37586.030	1.5	60141.980	.5
443.2179	24.00	-.96	23163.270	0.0	45719.200	1.0
443.2233	9.02	-2.33	443913.330	4.5	466468.990	4.5
443.2250	90.00	-1.48	6291.287	0.0	28853.191	0.0
443.2264	25.02	-.32	195752.480	2.5	218307.980	2.5
443.2308	10.01	.41	306262.770	1.5	328818.050	2.5
443.2318	9.02	1.07	443913.330	4.5	466468.560	5.5
443.2379	16.01	-.45	127976.210	1.5	150531.120	1.5
443.2410	76.00	-1.10	13308.491	0.0	35869.581	0.0
443.2435	27.01	-4.12	63792.100	4.0	86346.730	3.0
443.2437	28.01	-1.18	112906.930	1.5	135461.550	2.5
443.2573	26.00	-1.77	28819.966	5.0	51373.894	5.0
443.2720	58.01	-.63	11614.683	0.0	34174.195	0.0
443.2726	23.00	-1.52	15770.720	4.5	38323.870	4.5
443.2735	7.01	.54	188857.370	2.0	211410.470	3.0
443.2755	23.01	-2.73	50473.760	1.0	73026.760	2.0
443.2763	24.00	.19	42387.320	7.0	64940.280	7.0
443.2808	26.00	-2.37	24335.764	2.0	46888.494	2.0
443.2867	23.00	-2.11	8715.720	3.5	31268.150	3.5
443.2912	13.01	-1.89	124792.000	2.0	147344.200	3.0
443.2914	26.00	-4.66	21999.132	4.0	44551.325	3.0
443.2920	58.01	-1.33	5242.739	0.0	27801.233	0.0
443.2980	73.00	-1.21	15324.929	0.0	37883.118	0.0
443.3030	27.01	-3.83	27484.300	3.0	50035.900	3.0
443.3080	62.00	-.88	241.973	0.0	22799.653	0.0
443.3205	26.02	-2.71	182392.550	2.0	204943.260	2.0
443.3208	26.00	-.60	29469.010	2.0	52019.706	1.0
443.3247	25.02	.07	193756.790	4.5	216307.290	4.5
443.3260	9.02	-2.88	443927.410	3.5	466477.840	2.5
443.3270	9.02	-1.65	443927.410	3.5	466477.790	3.5
443.3274	26.00	-3.17	24338.766	3.0	46889.126	4.0
443.3286	27.02	-2.59	83938.900	3.5	106489.200	3.5
443.3320	45.00	-1.18	16050.847	0.0	38607.306	0.0
443.3359	9.02	-.60	443868.680	2.5	466418.610	3.5
443.3363	24.00	-1.56	42252.170	6.0	64802.080	5.0
443.3399	26.00	-3.65	24338.766	3.0	46888.494	2.0
443.3418	24.00	-2.05	31377.960	4.0	53927.590	4.0
443.3420	28.01	-3.82	75917.630	3.5	98467.250	3.5
443.3457	28.01	-3.44	109675.720	.5	132225.150	1.5
443.3475	7.01	-.06	188937.240	0.0	211486.580	1.0
443.3500	28.01	-3.26	94283.940	4.5	116833.150	4.5
443.3546	21.00	-1.93	16022.720	2.5	38571.700	3.5
443.3565	22.00	-1.07	19322.988	2.0	41871.870	2.0
443.3575	24.01	-3.98	47354.630	2.5	69903.460	3.5
443.3640	64.01	-1.13	10566.135	0.0	33120.966	0.0
443.3671	26.01	-4.07	62322.500	3.5	84870.840	2.5
443.3677	25.00	-1.07	38120.180	4.5	60668.490	4.5
443.3730	58.01	-1.11	8227.067	0.0	30781.440	0.0
443.3771	26.00	-3.17	29056.312	3.0	51604.146	3.0
443.3818	28.00	-2.56	34163.294	2.0	56710.889	2.0
443.3840	18.01	-1.55	172335.520	2.5	194883.000	3.5
443.3846	24.00	-3.34	25038.610	5.0	47586.060	5.0
443.3880	62.01	-.74	3468.273	0.0	26021.883	0.0
443.3890	92.01	-1.33	8307.725	0.0	30861.284	0.0
443.3959	24.00	-1.97	24299.890	2.0	46846.770	3.0
443.3970	22.00	-2.49	11531.760	2.0	34078.580	3.0
443.3978	28.01	-2.65	113407.310	2.5	135954.090	3.5
443.3988	12.01	-.91	80650.020	1.5	103196.750	.5
443.4004	22.00	-.43	15108.121	3.0	37654.770	2.0
443.4067	25.01	-1.79	53017.160	1.0	75563.490	0.0
443.4088	22.00	-1.87	18911.399	2.0	41457.620	3.0
443.4198	25.00	-.87	38934.940	2.5	61480.600	3.5
443.4293	21.00	-2.03	16026.520	4.5	38571.700	3.5
443.4320	62.01	-.75	2984.328	0.0	25535.700	0.0
443.4442	24.00	-1.81	36577.730	4.0	59122.150	3.0
443.4460	24.00	-3.13	35618.510	1.0	58162.840	2.0
443.4574	23.00	-.07	15571.900	2.5	38115.650	3.5
443.4606	24.01	-4.80	54444.190	3.5	76987.780	2.5
443.4621	8.01	-1.38	233544.090	1.5	256087.600	2.5
443.4647	23.00	-3.78	15062.940	6.5	37606.320	6.5
443.4677	14.00	-3.23	39683.163	0.0	62226.390	1.0
443.4755	24.00	-2.26	24303.940	3.0	46846.770	3.0
443.4781	12.02	-2.44	584354.100	2.0	606896.800	3.0
443.4810	63.01	.39	26939.612	0.0	49488.492	0.0
443.4824	7.00	-3.73	93581.520	.5	116124.000	.5
443.4824	7.00	-4.03	93581.520	.5	116124.000	1.5
443.4837	22.00	-4.81	25643.695	3.0	48186.110	4.0
443.4950	42.00	.24	16615.449	0.0	39163.618	0.0
443.4952	25.00	-1.13	38669.600	3.5	61211.430	4.5
443.4957	20.00	-.24	15210.063	1.0	37751.867	2.0
443.5001	9.02	1.00	443927.410	3.5	466468.990	4.5
443.5090	10.00	-2.93	150315.861	2.0	172856.990	1.0
443.5150	26.00	-4.37	704.003	2.0	23244.826	1.0
443.5186	23.00	-3.53	15103.770	4.5	37644.410	4.5
443.5235	26.01	-4.18	61726.090	3.5	84266.480	2.5
443.5326	18.01	-2.79	181594.050	2.5	204133.980	2.5
443.5336	28.00	-2.21	29500.690	1.0	52040.568	2.0
443.5404	23.00	-2.16	11100.650	4.5	33640.180	4.5
443.5428	8.01	-1.33	233544.090	1.5	256083.500	1.5
443.5503	26.02	-2.04	179661.480	3.0	202200.510	3.0
443.5560	63.01	-.60	1613.150	0.0	24158.218	0.0
443.5568	25.02	-2.67	115774.000	3.5	138312.700	4.5
443.5588	20.02	-1.33	340580.150	3.0	363118.750	3.0
443.5666	29.01	-2.41	115639.020	2.0	138177.220	2.0
443.5680	20.00	-.30	15210.063	1.0	37748.197	1.0
443.5784	25.01	-2.96	44138.960	1.0	66676.560	2.0
443.5841	28.01	-4.04	114052.040	3.5	136589.350	3.5
443.5850	57.01	-2.79	0.000	0.0	22543.594	0.0
443.5915	22.00	-1.27	19421.576	3.0	41958.510	2.0
443.6042	23.01	-3.33	30267.460	2.0	52803.750	1.0
443.6042	25.00	-.18	38934.940	2.5	61471.230	2.5
443.6056	26.01	-3.30	49506.990	1.5	72043.210	1.5
443.6060	90.01	-1.92	10566.135	0.0	33108.661	0.0
443.6143	23.00	-.94	2112.320	.5	24648.100	1.5
443.6162	27.00	-2.60	32733.070	3.5	55268.750	3.5
443.6182	27.00	-4.81	23152.570	3.5	45688.150	2.5
443.6198	25.02	-.14	195592.090	1.5	218127.590	.5
443.6223	18.01	-4.72	179931.770	1.5	202467.140	1.5
443.6239	22.00	-1.22	25926.820	4.0	48462.110	5.0
443.6280	90.01	-2.00	9194.957	0.0	31736.366	0.0
443.6296	10.03	-4.44	648060.000	1.5	670595.000	2.5
443.6320	76.00	-1.94	2661.698	0.0	25202.903	0.0
443.6357	25.00	-.52	23549.200	2.5	46083.890	1.5
443.6424	26.02	-2.76	182408.910	3.0	204943.260	2.0
443.6426	27.00	-5.72	13795.520	2.5	36329.860	2.5
443.6456	24.00	-3.50	31393.400	5.0	53927.590	4.0
443.6473	26.02	-2.61	109570.840	2.0	132104.940	2.0
443.6491	24.00	-1.42	26787.500	3.0	49321.510	2.0
443.6491	12.01	-2.19	93310.590	2.5	115844.600	2.5
443.6491	12.01	-.89	93310.590	2.5	115844.600	3.5
443.6550	90.01	-1.21	14195.724	0.0	36735.761	0.0
443.6582	26.01	-4.63	62151.610	2.5	84685.160	3.5
443.6585	22.00	-.71	15156.787	4.0	37690.320	5.0
443.6593	25.02	-3.76	115711.600	4.5	138245.090	5.5
443.6593	12.01	-1.04	93311.110	1.5	115844.600	2.5
443.6631	30.02	-1.39	260981.900	3.0	283515.200	2.0
443.6631	30.02	-1.49	260981.900	3.0	283515.200	3.0
443.6672	22.00	-.55	19573.968	4.0	42107.060	4.0
443.6890	42.00	-.53	18389.915	0.0	40928.224	0.0
443.6900	74.00	-.04	20890.298	0.0	43428.557	0.0
443.6925	26.00	-1.85	24574.655	4.0	47106.463	4.0
443.6966	28.00	-.88	28212.997	0.0	50744.593	1.0
443.6979	10.01	-.80	290371.950	2.5	312903.480	2.5
443.7042	22.00	-1.43	25797.600	3.0	48328.810	4.0
443.7090	76.00	-1.16	15324.929	0.0	37862.223	0.0
443.7127	27.01	-4.31	25317.720	1.0	47848.500	1.0
443.7249	8.01	-3.68	238731.540	1.5	261261.700	1.5
443.7270	79.00	-.64	45974.786	0.0	68511.165	0.0
443.7340	39.00	-.82	10969.423	0.0	33505.447	0.0
443.7348	25.00	-4.01	30354.210	3.5	52883.870	2.5
443.7359	26.02	-4.90	196886.010	6.0	219415.610	5.0
443.7389	23.00	-4.40	15000.840	5.5	37530.290	5.5
443.7550	2.00	-2.03	171135.000	0.0	193669.957	0.0
443.7563	28.00	.10	29668.918	3.0	52197.482	3.0
443.7610	58.01	-.96	6533.259	0.0	29067.912	0.0
443.7688	26.00	-3.67	21715.735	5.0	44243.668	5.0
443.7834	23.00	-.73	2311.370	3.5	24838.560	3.5
443.7874	27.00	-1.39	30443.630	1.5	52970.620	2.5
443.7877	26.01	-4.71	62158.190	4.5	84685.160	3.5
443.7900	41.00	-.39	17341.367	0.0	39874.547	0.0
443.7911	30.02	-1.48	260988.400	4.0	283515.200	3.0
443.7913	25.02	-.44	193756.790	4.5	216283.580	3.5
443.7931	12.02	-1.77	562939.500	2.0	585466.200	1.0
443.7931	12.02	-1.77	562939.500	2.0	585466.200	1.0
443.8040	38.00	-.96	14760.326	0.0	37292.795	0.0
443.8040	72.00	-1.54	5484.711	0.0	28017.180	0.0
443.8050	40.00	-1.52	4355.506	0.0	26887.925	0.0
443.8112	23.00	-2.84	14949.300	4.5	37475.080	3.5
443.8118	18.01	-2.19	172335.520	2.5	194861.270	2.5
443.8171	7.00	-4.12	93581.520	.5	116107.000	.5
443.8171	7.00	-3.62	93581.520	.5	116107.000	1.5
443.8175	24.00	-4.15	21847.880	2.0	44373.340	3.0
443.8220	24.00	-1.56	26796.280	2.0	49321.510	2.0
443.8226	22.00	-1.07	18145.400	2.0	40670.600	2.0
443.8270	64.01	-1.21	5242.739	0.0	27774.041	0.0
443.8283	25.02	-2.54	192948.290	1.5	215473.200	1.5
443.8300	74.00	-.84	18873.860	0.0	41405.009	0.0
443.8343	26.00	-1.85	29732.721	1.0	52257.330	0.0
443.8488	17.00	-1.53	71958.363	2.5	94482.236	2.5
443.8517	26.00	-2.66	31307.235	4.0	53830.960	3.0
443.8538	26.02	-2.81	179676.890	2.0	202200.510	3.0
443.8628	26.02	-4.81	179759.490	2.0	202282.650	2.0
443.8770	9.02	-1.93	443753.060	2.5	466275.500	2.5
443.8780	26.01	-4.76	62662.300	5.5	85184.690	4.5
443.8808	18.01	-2.37	186815.960	3.5	209338.210	3.5
443.8871	26.02	-4.31	179760.720	3.0	202282.650	2.0
443.8875	18.01	-1.02	186815.960	3.5	209337.870	4.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
443.8906	26.02	-4.13	182480.720	2.0	205002.470	3.0
443.8941	22.00	-2.85	25537.276	1.0	48058.850	1.0
443.8949	23.00	-1.51	15724.220	3.5	38245.750	3.5
443.8960	42.00	.26	27181.584	0.0	49709.383	0.0
443.8979	24.00	-4.63	31106.370	4.0	53627.750	5.0
443.9013	23.00	-2.55	19078.150	3.5	41599.360	4.5
443.9040	28.01	-1.64	113225.060	.5	135746.130	1.5
443.9120	90.01	-1.07	11050.060	0.0	33577.067	0.0
443.9129	26.01	-5.46	21711.890	3.5	44232.510	4.5
443.9210	70.00	-.34	17180.052	0.0	39706.583	0.0
443.9240	58.01	-.55	10969.423	0.0	33495.801	0.0
443.9253	10.01	.05	280989.530	1.5	303509.520	2.5
443.9267	25.02	-3.35	172451.230	1.5	194971.150	2.5
443.9318	18.01	-3.87	181594.050	2.5	204113.710	1.5
443.9334	24.00	-1.78	26801.930	1.0	49321.510	2.0
443.9338	22.01	-3.03	40074.710	3.5	62594.270	4.5
443.9424	23.01	-3.46	17910.980	4.0	40430.100	4.0
443.9458	10.01	-.30	280989.530	1.5	303508.480	1.5
443.9462	18.01	-.20	173347.830	1.5	195866.760	1.5
443.9547	27.01	-5.09	24267.800	1.0	46786.300	1.0
443.9633	29.01	-4.26	118071.340	1.0	140589.400	0.0
443.9638	26.00	-3.31	24574.655	4.0	47092.693	3.0
443.9640	76.00	-.86	15324.929	0.0	37849.278	0.0
443.9712	26.01	-3.66	62945.120	3.5	85462.780	3.5
443.9758	18.01	-4.96	186074.350	2.5	208591.780	1.5
443.9760	44.00	-.39	10566.135	0.0	33089.875	0.0
443.9792	28.00	-3.45	36600.805	2.0	59118.060	2.0
443.9825	27.00	-4.03	32430.590	5.5	54947.680	5.5
443.9841	25.00	-1.20	41031.480	4.5	63548.490	4.5
443.9845	16.02	-1.52	147550.320	1.0	170067.310	2.0
443.9880	18.01	-.83	173347.830	1.5	195864.640	2.5
443.9885	26.00	-2.87	18378.187	2.0	40894.972	2.0
443.9961	24.00	-4.32	21856.940	3.0	44373.340	3.0
443.9992	10.01	-.28	280473.580	1.5	302989.820	1.5
444.0034	25.00	-2.04	45060.810	3.5	67576.640	4.5
444.0061	25.00	-3.92	30354.210	3.5	52870.100	3.5
444.0105	23.00	-3.47	19023.470	4.5	41539.140	4.5
444.0115	25.00	-.94	37586.030	1.5	60101.650	2.5
444.0124	18.01	-1.24	159706.460	.5	182222.030	1.5
444.0134	25.00	-1.70	34845.260	.5	57360.780	1.5
444.0179	10.01	-1.52	280473.580	1.5	302988.870	.5
444.0209	8.02	-.36	376067.660	2.0	398582.800	1.0
444.0243	24.00	-2.93	25106.340	3.0	47621.310	3.0
444.0272	25.00	-4.93	41031.480	4.5	63546.300	3.5
444.0320	26.02	-4.43	182392.550	2.0	204907.130	1.0
444.0320	23.00	-.86	19145.130	5.5	41659.710	5.5
444.0345	22.00	-1.17	15108.121	3.0	37622.573	3.0
444.0393	23.01	-1.77	32299.240	1.0	54813.450	0.0
444.0400	6.03	.01	448854.000	0.0	471374.494	0.0
444.0430	41.00	-1.04	12905.203	0.0	35425.544	0.0
444.0440	26.01	-3.19	54063.530	.5	76577.500	.5
444.0440	75.00	-1.21	17180.052	0.0	39700.343	0.0
444.0460	40.01	-1.03	9678.902	0.0	32199.091	0.0
444.0464	26.00	-4.17	29056.312	3.0	51570.160	3.0
444.0466	26.02	-3.97	166498.000	3.0	189011.840	4.0
444.0466	25.01	-4.34	81322.330	1.0	103836.170	2.0
444.0575	22.00	-4.22	7255.369	2.0	29768.655	2.0
444.0580	23.00	-3.52	8715.720	3.5	31228.980	2.5
444.0647	24.00	-4.06	31028.330	2.0	53541.250	2.0
444.0698	16.01	-2.63	130641.000	1.5	153153.660	.5
444.0740	92.00	-1.23	3710.246	0.0	26229.015	0.0
444.0797	26.01	-2.73	64087.500	2.5	86599.660	2.5
444.0805	10.01	-2.58	254165.010	1.5	276677.130	.5
444.0809	17.01	-2.73	128621.900	1.0	151134.000	1.0
444.0824	26.00	-3.53	31937.308	1.0	54449.330	1.0
444.0860	90.01	-1.40	8388.382	0.0	30906.543	0.0
444.0864	29.01	-1.99	115665.400	1.0	138177.220	2.0
444.0880	58.01	-.92	6452.602	0.0	28970.661	0.0
444.0896	28.01	-4.90	77332.470	2.5	99844.130	3.5
444.0919	22.00	-2.03	18825.890	1.0	41337.430	2.0
444.0955	21.00	-3.08	15041.980	3.5	37553.340	2.5
444.0959	27.00	-1.30	29948.760	2.5	52460.100	2.5
444.0971	26.00	-3.61	26623.726	2.0	49135.003	3.0
444.1000	27.00	-3.26	32654.500	2.5	55165.630	2.5
444.1002	24.00	-2.91	25177.390	4.0	47688.510	4.0
444.1030	73.00	-1.70	9920.875	0.0	32438.174	0.0
444.1087	10.01	-3.60	224087.020	1.5	246597.710	.5
444.1273	22.00	-.76	15108.121	3.0	37617.868	4.0
444.1436	22.00	-1.84	25699.950	2.0	48208.870	3.0
444.1439	28.00	-3.28	26665.903	3.0	49174.811	4.0
444.1547	26.00	-2.29	31322.603	3.0	53830.960	3.0
444.1636	9.02	-4.43	444470.240	1.5	466978.150	1.5
444.1673	23.00	-.60	2220.130	2.5	24727.850	2.5
444.1680	73.00	-1.49	10566.135	0.0	33080.139	0.0
444.1711	29.01	-2.62	116375.470	3.0	138883.000	4.0
444.1726	22.01	-2.33	9518.050	2.5	32025.500	2.5
444.1738	26.00	-4.10	26627.612	4.0	49135.003	3.0
444.1800	6.03	.27	448861.000	0.0	471374.395	0.0
444.1800	6.03	-.68	448861.000	0.0	471374.395	0.0
444.1809	24.00	-4.86	27703.840	4.0	50210.870	4.0
444.1810	41.00	-.99	9436.930	0.0	31950.275	0.0
444.1810	62.00	-.09	1451.835	0.0	23965.180	0.0
444.1810	74.00	-.87	17018.737	0.0	39532.082	0.0
444.1849	27.00	-2.06	29563.170	1.5	52070.000	2.5
444.1943	27.00	-4.01	7442.410	3.5	29948.760	2.5
444.2015	7.01	-.03	188909.170	1.0	211415.160	2.0
444.2048	25.01	-2.60	44138.960	1.0	66644.780	1.0
444.2135	22.01	-4.64	39674.640	.5	62180.020	1.5
444.2155	9.02	-2.25	443913.330	4.5	466418.610	3.5
444.2190	30.02	-.89	258277.700	3.0	280782.800	3.0
444.2190	30.02	-1.00	258277.700	3.0	280782.800	2.0
444.2200	42.00	-.46	16696.107	0.0	39207.475	0.0
444.2245	24.00	-4.17	27597.220	3.0	50102.040	3.0
444.2251	9.02	-.40	443913.330	4.5	466418.120	4.5
444.2259	24.00	-1.94	24200.230	6.0	46704.980	5.0
444.2280	62.00	-.25	806.575	0.0	23317.538	0.0
444.2289	9.02	-3.85	443770.900	3.5	466275.500	2.5
444.2315	29.01	-4.45	115569.200	5.0	138073.670	4.0
444.2343	26.00	-1.16	17726.985	2.0	40231.312	2.0
444.2360	25.00	-2.28	37148.660	5.5	59652.900	5.5
444.2416	26.00	-4.54	35767.546	4.0	58271.500	5.0
444.2421	28.00	-2.51	28212.997	0.0	50716.927	1.0
444.2423	27.00	-3.47	23184.230	2.5	45686.150	2.5
444.2550	78.00	-1.55	10001.532	0.0	32511.127	0.0
444.2648	26.02	-3.15	117950.320	4.0	140453.100	3.0
444.2686	10.01	.03	281025.940	2.5	303528.530	3.5
444.2822	26.00	-3.26	17550.180	3.0	40052.080	2.0
444.3000	40.01	-.49	11856.655	0.0	34363.970	0.0
444.3070	42.01	-1.39	11372.710	0.0	33879.670	0.0
444.3070	72.00	-.52	18228.600	0.0	40735.560	0.0
444.3106	25.01	-4.25	49820.160	2.0	72320.620	1.0
444.3148	26.00	-2.66	27543.000	1.0	50043.250	1.0
444.3157	22.00	-3.21	19322.988	2.0	41823.190	3.0
444.3162	9.02	-3.19	443753.060	2.5	466253.240	1.5
444.3185	23.00	-2.61	15264.830	5.5	37764.890	5.5
444.3196	26.00	-.95	23051.744	0.0	45551.748	1.0
444.3201	26.00	-2.29	24772.019	1.0	47271.999	1.0
444.3205	22.00	-3.81	22081.198	2.0	44581.160	2.0
444.3240	22.00	-3.68	24694.895	4.0	47194.680	4.0
444.3270	62.00	-1.00	2258.411	0.0	24764.358	0.0
444.3294	7.01	-3.56	174212.030	2.0	196711.540	2.0
444.3357	22.00	-3.98	18695.230	4.0	41194.420	3.0
444.3481	26.02	-3.57	182444.700	3.0	204943.260	2.0
444.3503	28.01	-4.97	107737.810	1.5	130236.260	2.5
444.3660	39.00	-.67	11453.368	0.0	33957.340	0.0
444.3701	24.00	-1.04	28679.430	1.0	51176.880	0.0
444.3750	58.01	-.97	5404.054	0.0	27907.570	0.0
444.3754	26.02	-4.28	168420.990	2.0	190918.170	3.0
444.3796	22.01	-.73	8710.470	1.5	31207.440	2.5
444.3947	12.02	.61	584345.700	1.0	606841.900	2.0
444.4007	28.01	-3.25	92373.450	2.5	114869.350	1.5
444.4091	22.00	-1.07	19421.576	3.0	41917.050	4.0
444.4116	14.00	-2.03	39955.053	2.0	62450.400	1.0
444.4161	29.01	-2.71	115569.200	5.0	138064.320	5.0
444.4197	23.01	-4.33	14655.630	5.0	37150.570	4.0
444.4204	23.00	-.75	2153.200	1.5	24648.100	1.5
444.4259	18.02	-4.23	186657.200	3.0	209151.820	2.0
444.4278	22.00	-1.55	18061.540	1.0	40556.070	1.0
444.4323	26.01	-3.76	50157.610	4.5	72651.910	3.5
444.4330	40.00	-1.10	11856.655	0.0	34357.234	0.0
444.4390	58.01	-.23	7420.492	0.0	29920.768	0.0
444.4424	25.02	-.55	195592.090	1.5	218085.880	.5
444.4489	9.02	-4.26	444489.400	2.5	466982.860	2.5
444.4510	44.00	-1.43	7985.094	0.0	30484.762	0.0
444.4542	10.01	-2.28	301948.000	1.5	324441.190	2.5
444.4546	25.01	-3.21	49517.580	5.0	72010.750	4.0
444.4549	28.00	-3.39	26665.903	3.0	49159.060	2.0
444.4554	22.01	-2.24	8997.690	3.5	31490.820	3.5
444.4576	26.01	-2.54	50157.610	4.5	72650.630	4.5
444.4607	20.02	-3.86	371059.950	3.0	393552.810	3.0
444.4609	26.00	-2.05	33412.706	3.0	55905.560	4.0
444.4677	28.01	-2.53	105499.050	3.5	127991.560	3.5
444.4698	24.00	-4.88	31048.850	1.0	53541.250	2.0
444.4698	12.02	-2.08	562136.100	2.0	584628.500	2.0
444.4698	12.02	-2.08	562136.100	2.0	584628.500	2.0
444.4700	58.01	-.13	8469.040	0.0	30967.746	0.0
444.4706	20.02	-3.80	371059.950	3.0	393552.310	4.0
444.4819	25.02	-1.62	195315.780	2.5	217807.570	1.5
444.4819	29.01	-1.59	115639.020	2.0	138130.810	3.0
444.4935	9.02	-1.38	443927.410	3.5	466418.610	3.5
444.4990	60.00	-1.07	0.000	0.0	22497.238	0.0
444.5003	24.00	-3.76	35572.940	2.0	58063.800	2.0
444.5032	9.02	-.92	443927.410	3.5	466418.120	4.5
444.5042	27.00	-.88	28777.270	3.5	51267.930	4.5
444.5150	62.00	.24	3064.986	0.0	25561.415	0.0
444.5150	74.00	-1.03	14840.984	0.0	37337.413	0.0
444.5258	26.01	-7.95	16369.390	3.5	38858.960	2.5
444.5283	28.01	-4.09	98561.220	2.5	121050.660	2.5
444.5353	25.00	-3.98	25285.430	4.5	47774.520	3.5
444.5420	9.02	-4.37	444489.400	2.5	466978.150	1.5
444.5426	18.01	-4.03	179931.770	1.5	202420.490	.5
444.5440	25.00	-2.65	37164.250	6.5	59652.900	5.5
444.5457	24.00	-4.46	23933.900	4.0	46422.460	4.0
444.5473	26.00	-5.65	704.003	2.0	23192.486	2.0
444.5550	78.00	-2.30	10082.190	0.0	32576.595	0.0
444.5608	12.02	-.32	584354.100	2.0	606841.900	2.0
444.5608	12.02	.80	584354.100	2.0	606841.900	3.0
444.5685	25.01	-4.53	44521.520	4.0	67006.930	3.0
444.5690	76.00	-1.40	14276.381	0.0	36770.077	0.0
444.5703	10.00	-3.65	150772.112	1.0	173259.430	1.0
444.5710	27.00	-1.06	25041.160	1.5	47528.440	.5
444.5732	27.00	-2.41	32027.500	3.5	54514.670	3.5
444.5758	27.00	-4.21	32781.710	2.5	55268.750	3.5
444.5770	23.01	-3.97	12706.150	6.0	35193.130	5.0
444.5801	23.00	-1.50	15270.420	1.5	37757.240	.5
444.5809	25.00	-4.40	25287.740	3.5	47774.520	3.5
444.5823	17.00	-1.73	72827.038	.5	95313.749	1.5
444.5835	25.01	-4.81	49820.160	2.0	72306.810	2.0
444.5849	18.01	-1.19	172335.520	2.5	194822.100	3.5
444.5850	41.00	-2.02	967.890	0.0	23460.777	0.0
444.5861	27.00	-2.78	26232.050	3.5	48718.570	2.5
444.5890	90.01	-1.32	14679.669	0.0	37172.353	0.0
444.5900	25.01	-3.08	44138.960	1.0	66625.280	0.0
444.6102	27.00	-3.19	31871.150	3.5	54356.450	4.5
444.6139	17.00	-1.96	72488.568	1.5	94973.683	.5
444.6170	41.00	-.42	13066.518	0.0	35557.786	0.0
444.6260	26.01	-2.89	48039.230	2.5	70523.730	3.5
444.6390	60.01	-1.29	1613.150	0.0	24103.305	0.0
444.6430	42.00	.56	29843.282	0.0	52333.235	0.0
444.6442	10.01	-.30	281025.940	2.5	303509.520	2.5
444.6490	64.01	-1.71	3952.218	0.0	26441.867	0.0
444.6527	9.01	.43	232063.340	1.0	254546.490	2.0
444.6528	10.00	-3.39	150772.112	1.0	173255.260	0.0
444.6567	27.00	-4.42	32464.730	4.5	54947.680	5.5
444.6577	8.01	-.08	233430.100	.5	255913.000	1.5
444.6606	22.01	-4.10	39926.830	2.5	62409.580	3.5
444.6630	39.00	-.57	11292.053	0.0	33780.994	0.0
444.6648	10.01	-1.76	281025.940	2.5	303508.480	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
444.6690	9.01	-.30	232064.160	2.0	254546.490	2.0
444.6721	9.01	.60	232064.160	2.0	254546.330	3.0
444.6731	23.00	-3.24	15270.420	1.5	37752.540	2.5
444.6775	8.01	-3.33	233430.100	.5	255912.000	.5
444.6832	26.00	-1.64	29732.721	1.0	52214.330	1.0
444.6893	28.01	-3.93	98561.220	2.5	121042.520	1.5
444.6900	26.00	-2.62	26627.612	4.0	49108.876	4.0
444.6923	27.00	-3.20	31871.150	3.5	54352.300	3.5
444.6960	62.01	-2.30	3468.273	0.0	25955.545	0.0
444.6994	27.00	-2.85	26597.640	1.5	49078.430	1.5
444.7030	7.01	.25	164610.760	1.0	187091.370	2.0
444.7073	27.00	-2.82	23207.760	1.5	45688.150	2.5
444.7117	9.01	-1.84	232066.320	3.0	254546.490	2.0
444.7123	26.00	-3.40	17726.985	2.0	40207.120	3.0
444.7149	9.01	-.30	232066.320	3.0	254546.330	3.0
444.7154	25.02	-1.13	193235.430	2.5	215715.410	1.5
444.7180	41.00	-.72	5887.999	0.0	28374.159	0.0
444.7188	9.01	.76	232066.320	3.0	254546.130	4.0
444.7230	42.00	-.22	27262.242	0.0	49748.149	0.0
444.7328	27.01	-3.28	27902.500	4.0	50381.600	3.0
444.7350	76.00	-.64	14276.381	0.0	36761.681	0.0
444.7397	22.00	-1.35	19573.968	4.0	42052.720	3.0
444.7445	29.01	-4.69	117231.690	1.0	139710.200	2.0
444.7507	9.01	-3.74	232063.340	1.0	254541.540	1.0
444.7525	9.01	-2.83	232063.340	1.0	254541.450	2.0
444.7552	27.00	-1.75	29563.170	1.5	52041.140	.5
444.7558	23.00	-.92	19023.470	4.5	41501.410	4.5
444.7634	26.00	-4.23	26224.961	3.0	48702.518	4.0
444.7668	9.01	-4.19	232064.160	2.0	254541.540	1.0
444.7684	9.01	-2.43	232064.160	2.0	254541.460	3.0
444.7721	26.00	-1.27	17927.378	1.0	40404.492	1.0
444.7783	13.01	-2.20	124792.000	2.0	147268.800	1.0
444.7807	26.01	-3.84	50142.930	2.5	72619.610	2.5
444.7815	8.02	-.13	376067.660	2.0	398544.300	2.0
444.7830	90.01	-1.77	6210.629	0.0	28693.503	0.0
444.7835	24.00	-2.30	27176.220	1.0	49652.760	2.0
444.7906	26.02	-2.88	105895.350	1.0	128371.530	0.0
444.7908	9.02	-3.51	443753.060	2.5	466229.230	3.5
444.7971	27.00	-4.35	14399.280	.5	36875.130	1.5
444.8021	28.01	-3.28	112906.930	1.5	135382.530	1.5
444.8033	29.01	-4.33	116643.960	3.0	139119.500	3.0
444.8111	9.01	-4.37	232066.320	3.0	254541.460	3.0
444.8113	9.01	-4.65	232066.320	3.0	254541.450	2.0
444.8120	25.02	-.17	195592.090	1.5	218067.190	2.5
444.8121	9.01	-2.26	232066.320	3.0	254541.410	4.0
444.8134	23.00	-2.94	15770.720	4.5	38245.750	3.5
444.8260	8.01	-.38	253789.510	.5	276263.900	.5
444.8260	8.01	-.67	253789.510	.5	276263.900	1.5
444.8262	27.00	-4.34	21920.090	4.5	44394.470	3.5
444.8460	18.01	-1.08	173393.380	2.5	195866.760	1.5
444.8462	18.01	-2.95	183675.570	3.5	206148.940	3.5
444.8545	9.02	-1.06	469119.520	2.5	491592.470	1.5
444.8545	9.02	.09	469119.520	2.5	491592.470	2.5
444.8676	27.00	-1.10	30443.630	1.5	52915.920	.5
444.8696	25.02	-2.29	115762.600	1.5	138234.790	1.5
444.8706	28.01	-4.71	113172.960	4.5	135645.100	5.5
444.8708	25.00	-4.30	30411.740	.5	52883.870	1.5
444.8709	9.02	-.10	469120.350	1.5	491592.470	1.5
444.8709	9.02	-1.06	469120.350	1.5	491592.470	2.5
444.8714	28.01	-2.04	113407.310	2.5	135879.410	3.5
444.8719	22.00	-4.99	26564.385	3.0	49036.460	4.0
444.8727	8.01	-.68	253791.870	1.5	276263.900	.5
444.8727	8.01	.02	253791.870	1.5	276263.900	1.5
444.8792	14.00	-3.65	39760.285	1.0	62231.990	2.0
444.8797	22.00	-1.89	25635.740	1.0	48107.420	2.0
444.8832	17.01	-3.05	128662.500	2.0	151134.000	1.0
444.8860	25.00	-3.49	30411.740	.5	52883.100	.5
444.8880	18.01	.04	173393.380	2.5	195864.640	2.5
444.8950	40.00	-1.94	5000.766	0.0	27477.980	0.0
444.9010	74.00	-1.38	12098.628	0.0	34575.539	0.0
444.9052	24.00	-2.21	38537.680	5.0	61008.070	5.0
444.9112	27.00	-3.70	29563.170	1.5	52033.260	1.5
444.9143	22.00	.54	15220.390	5.0	37690.320	5.0
444.9332	26.00	-3.81	29356.780	2.0	51825.758	3.0
444.9340	44.00	-.67	8469.040	0.0	30944.284	0.0
444.9340	58.01	-.34	4839.451	0.0	27314.695	0.0
444.9363	23.00	-2.71	19023.470	4.5	41492.290	3.5
444.9434	25.00	-1.96	37148.660	5.5	59617.120	6.5
444.9517	29.01	-3.22	115662.770	4.0	138130.810	3.0
444.9519	18.01	-2.42	172829.580	1.5	195297.610	1.5
444.9563	23.00	-1.00	10892.500	3.5	33360.310	3.5
444.9567	26.00	-4.91	20641.110	4.0	43108.899	4.0
444.9648	26.01	-1.74	63948.840	4.5	86416.220	3.5
444.9654	23.00	-3.34	15062.940	6.5	37530.290	5.5
444.9676	28.01	-2.41	114052.040	3.5	136519.280	4.5
444.9710	66.01	-1.39	0.000	0.0	22473.375	0.0
444.9740	42.00	-.25	16615.449	0.0	39088.672	0.0
444.9870	59.01	-1.01	1613.150	0.0	24085.717	0.0
444.9872	25.00	-4.60	25287.740	3.5	47753.990	2.5
444.9901	14.00	-3.01	39760.285	1.0	62226.390	1.0
444.9926	14.00	-1.50	39955.053	2.0	62421.030	3.0
444.9931	23.00	-2.29	19026.340	2.5	41492.290	3.5
444.9964	22.00	-.58	15156.787	4.0	37622.573	3.0
445.0091	28.00	-1.90	31786.210	3.0	54251.353	3.0
445.0180	77.00	-1.49	15970.189	0.0	38441.190	0.0
445.0211	28.00	-1.67	33112.368	3.0	55576.905	3.0
445.0266	25.00	-3.73	30419.610	2.5	52883.870	1.5
445.0266	25.00	-4.12	30419.610	2.5	52883.870	2.5
445.0280	40.00	-.72	10808.108	0.0	33278.604	0.0
445.0298	23.03	-1.28	263822.400	4.0	286286.500	4.0
445.0325	26.00	-1.94	25091.620	0.0	47555.584	1.0
445.0326	26.01	-3.29	50187.950	3.5	72651.910	3.5
445.0329	26.00	-4.47	18378.187	2.0	40842.130	3.0
445.0338	23.03	-1.73	263593.000	2.0	286056.900	3.0
445.0360	74.00	-.41	22342.133	0.0	44812.225	0.0
445.0372	22.00	-4.92	25643.695	3.0	48107.420	2.0
445.0393	20.02	-3.85	360388.680	3.0	382852.300	2.0
445.0482	22.01	-1.56	8744.270	2.5	31207.440	2.5
445.0555	24.01	-3.31	67012.280	2.5	89475.080	2.5
445.0565	28.00	-4.25	22102.349	4.0	44565.100	3.0
445.0579	26.01	-4.45	50187.950	3.5	72650.630	4.5
445.0607	26.02	-3.22	182480.720	2.0	204943.260	2.0
445.0720	73.00	-1.17	13227.833	0.0	35696.108	0.0
445.0730	58.01	-.36	5484.711	0.0	27952.935	0.0
445.0754	23.03	-.22	265271.600	3.0	287733.400	2.0
445.0757	26.00	-2.75	31307.235	4.0	53769.020	4.0
445.0779	27.00	-2.39	25739.930	2.5	48201.600	3.5
445.0810	71.00	-1.54	7420.492	0.0	29888.312	0.0
445.0845	8.01	-2.99	238892.960	2.5	261354.300	2.5
445.0896	22.00	.39	15156.787	4.0	37617.868	4.0
445.0914	23.00	.08	19078.150	3.5	41539.140	4.5
445.0920	23.01	-3.43	30306.400	3.0	52767.360	3.0
445.1031	30.02	-1.35	238336.200	2.0	260796.600	3.0
445.1031	30.02	-2.51	238336.200	2.0	260796.600	3.0
445.1033	24.00	-2.98	27597.220	3.0	50057.610	2.0
445.1101	22.00	-3.91	26564.385	3.0	49024.430	3.0
445.1358	9.02	-1.05	443770.900	3.5	466229.650	4.5
445.1412	27.00	-1.80	31699.690	4.5	54158.170	4.5
445.1441	9.02	-2.68	443770.900	3.5	466229.230	3.5
445.1475	25.00	-3.74	30425.710	1.5	52883.870	1.5
445.1475	25.00	-4.41	30425.710	1.5	52883.870	2.5
445.1532	18.01	-3.82	183797.360	2.5	206255.230	2.5
445.1542	26.01	-2.09	49506.990	1.5	71964.810	2.5
445.1568	25.01	-3.97	84428.210	5.0	106885.900	4.0
445.1570	60.01	-.75	2984.328	0.0	25448.313	0.0
445.1586	25.00	-.20	23296.670	3.5	45754.270	3.5
445.1594	26.02	-3.74	166498.000	3.0	188955.560	3.0
445.1606	23.01	-4.09	14461.730	3.0	36919.230	3.0
445.1628	25.00	-3.74	30425.710	1.5	52883.100	.5
445.1687	18.01	-1.35	183675.570	3.5	206132.660	4.5
445.1733	26.02	-3.40	182486.400	1.0	204943.260	2.0
445.1814	25.01	-4.47	59537.400	4.0	81993.850	4.0
445.1818	25.02	-4.86	109841.120	3.5	132297.550	2.5
445.1870	73.00	-2.21	9678.902	0.0	32141.373	0.0
445.1990	60.01	-1.95	0.000	0.0	22461.865	0.0
445.2018	23.00	.69	15062.940	6.5	37518.360	7.5
445.2147	27.00	-6.33	3482.820	4.5	25937.590	4.5
445.2150	57.00	.06	9840.217	0.0	32301.275	0.0
445.2181	27.00	-3.29	28470.510	1.5	50925.110	1.5
445.2189	25.02	-2.75	115780.230	2.5	138234.790	1.5
445.2210	24.00	-2.27	23512.000	1.0	45966.450	2.0
445.2254	23.00	-2.56	19145.130	5.5	41599.360	4.5
445.2260	12.02	-1.76	584462.400	5.0	606916.600	4.0
445.2260	12.02	-.03	584462.400	5.0	606916.600	5.0
445.2335	22.00	-2.41	25605.030	0.0	48058.850	1.0
445.2345	25.02	-3.47	172855.020	4.5	195308.790	4.5
445.2377	8.01	-.73	189068.370	1.5	211521.980	1.5
445.2472	18.01	-2.60	186470.280	1.5	208923.410	2.5
445.2476	15.01	-1.64	105303.190	1.0	127756.300	2.0
445.2478	12.02	-.11	584463.500	4.0	606916.600	4.0
445.2478	12.02	-2.02	584463.500	4.0	606916.600	5.0
445.2498	28.02	-3.95	121412.200	2.0	143865.200	3.0
445.2524	26.00	-.64	37164.250	6.5	59617.120	6.5
445.2560	42.00	-.44	23390.681	0.0	45849.671	0.0
445.2560	90.00	-1.96	2823.013	0.0	25282.003	0.0
445.2601	10.01	.18	306243.420	2.5	328695.900	2.5
445.2605	26.00	-2.95	31805.059	3.0	54257.520	2.0
445.2605	10.01	-1.01	306243.420	2.5	328695.880	1.5
445.2651	23.00	-3.81	15103.770	4.5	37556.000	3.5
445.2677	24.00	-4.85	21847.880	2.0	44299.980	2.0
445.2704	25.02	.31	195948.440	3.5	218400.400	3.5
445.2714	23.00	-1.62	14910.040	3.5	37361.950	4.5
445.2730	62.01	-.98	2177.753	0.0	24635.885	0.0
445.2730	64.00	-.18	12421.258	0.0	34879.390	0.0
445.2736	18.01	-4.82	172829.580	1.5	195281.380	.5
445.2803	26.00	-4.22	20874.482	3.0	43325.946	3.0
445.2835	8.02	-3.02	370326.700	0.0	392778.000	1.0
445.2847	9.02	-.53	497322.460	3.5	519773.700	3.5
445.2847	9.02	1.02	497322.460	3.5	519773.700	4.5
445.2909	28.00	-2.31	31786.210	3.0	54237.136	4.0
445.2910	18.01	-3.21	186470.280	1.5	208921.200	1.5
445.2950	62.00	-.11	3952.218	0.0	26409.241	0.0
445.2996	25.00	-4.27	30419.610	2.5	52870.100	3.5
445.3000	72.00	-2.78	0.000	0.0	22456.771	0.0
445.3004	9.02	.90	497323.250	2.5	519773.700	3.5
445.3012	25.00	-.70	23719.520	1.5	46169.930	.5
445.3035	22.00	-2.67	19421.576	3.0	41871.870	2.0
445.3093	25.03	-2.71	152986.000	2.0	175436.000	3.0
445.3111	23.00	-.83	15770.720	4.5	38220.630	5.5
445.3160	58.01	-1.50	4676.136	0.0	27134.100	0.0
445.3166	24.00	-3.23	31355.210	2.0	53804.840	3.0
445.3178	27.00	-2.29	32027.500	3.5	54477.070	3.5
445.3252	30.02	-2.25	258277.700	3.0	280726.900	2.0
445.3280	26.00	-3.32	26479.366	1.0	48928.423	2.0
445.3295	24.00	-1.78	42387.320	7.0	64836.300	6.0
445.3315	22.00	-1.82	11531.760	2.0	33980.639	2.0
445.3321	26.00	-2.01	31937.308	1.0	54386.160	1.0
445.3345	23.01	-1.68	30318.630	4.0	52767.360	3.0
445.3371	23.03	-1.18	263608.300	3.0	286056.900	3.0
445.3387	26.01	-4.19	50076.100	1.5	72524.620	1.5
445.3448	18.01	-1.97	183797.360	2.5	206245.570	3.5
445.3603	21.00	-2.01	16210.800	3.5	38658.230	4.5
445.3700	24.01	-4.90	66727.160	2.5	89174.100	3.5
445.3708	22.00	.29	15108.121	3.0	37555.021	3.0
445.3752	25.00	-4.13	45130.160	4.5	67576.840	4.5
445.3804	26.00	-4.24	31322.603	3.0	53769.020	4.0
445.3859	26.00	-4.47	31686.342	2.0	54132.480	1.0
445.3920	75.00	.08	35731.281	0.0	58183.413	0.0
445.3930	64.01	-1.45	8469.040	0.0	30921.122	0.0
445.3944	25.00	-3.80	35041.370	3.5	57487.080	2.5
445.4000	28.01	-2.78	113225.060	.5	135670.490	.5
445.4027	24.00	-3.62	35618.510	1.0	58063.800	2.0
445.4059	26.02	-4.49	114351.920	3.0	136797.050	3.0
445.4089	28.01	-3.45	109675.720	.5	132120.700	.5
445.4129	18.01	-3.20	183675.570	3.5	206120.350	2.5
445.4275	22.00	-.71	19573.968	4.0	42018.010	5.0
445.4299	24.00	-4.12	25177.390	4.0	47621.310	3.0
445.4343	29.01	-4.12	116375.470	3.0	138819.170	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
445.4373	25.02	-2.53	172451.230	1.5	194894.780	1.5
445.4380	59.01	-2.20	403.288	0.0	22853.101	0.0
445.4384	26.00	-1.13	22838.320	2.0	45281.816	2.0
445.4510	90.01	-1.76	11453.368	0.0	33902.526	0.0
445.4575	26.02	-2.71	179757.980	4.0	202200.510	3.0
445.4578	26.00	-3.49	24574.655	4.0	47017.170	3.0
445.4620	75.00	-1.85	14518.354	0.0	36966.958	0.0
445.4630	62.01	-.77	4355.506	0.0	26804.060	0.0
445.4661	28.01	-2.85	113407.310	2.5	135849.410	2.5
445.4667	26.00	-2.17	29320.050	1.0	51762.120	2.0
445.4700	26.02	-4.94	114351.920	3.0	136793.820	2.0
445.4779	20.00	.45	15315.943	2.0	37757.449	3.0
445.4856	20.02	-1.93	340580.150	3.0	363021.270	2.0
445.4875	26.02	-4.21	179759.490	2.0	202200.510	3.0
445.4939	28.01	-1.34	113408.710	1.5	135849.410	2.5
445.4939	19.01	-1.02	190134.800	1.0	212575.500	2.0
445.4976	24.00	-3.28	31364.330	3.0	53804.640	3.0
445.4990	58.01	-1.36	4436.164	0.0	26882.903	0.0
445.5016	26.00	-2.17	31307.235	4.0	53747.547	3.0
445.5119	26.02	-3.03	179760.720	3.0	202200.510	3.0
445.5280	26.01	-2.18	50212.930	2.5	72651.910	3.5
445.5295	28.00	-.57	29832.810	3.0	52271.716	2.0
445.5300	42.00	-.22	27181.584	0.0	49626.762	0.0
445.5321	22.00	-1.57	11639.804	3.0	34078.580	3.0
445.5430	40.00	-.45	14679.669	0.0	37124.192	0.0
445.5435	27.00	-4.20	18389.570	1.5	40827.770	1.5
445.5435	24.00	-1.74	24282.340	4.0	46720.540	4.0
445.5460	74.00	-.91	19115.832	0.0	41560.204	0.0
445.5570	10.00	-3.12	149824.221	2.0	172261.740	1.0
445.5622	25.02	.76	193756.790	4.5	216194.050	5.5
445.5645	28.01	-4.97	55299.650	4.5	77736.790	4.5
445.5794	24.00	-3.50	27816.880	5.0	50253.270	5.0
445.5800	57.01	-1.79	5646.026	0.0	28088.685	0.0
445.5846	26.01	-4.28	37227.320	.5	59663.450	1.5
445.5882	28.01	-2.76	98467.250	3.5	120903.200	3.5
445.5887	20.00	-.70	15315.943	2.0	37751.867	2.0
445.5906	25.01	-3.92	85734.620	3.0	108170.450	2.0
445.5971	18.01	-1.57	186815.960	3.5	209251.460	3.5
445.6102	24.01	-3.54	54444.190	3.5	76879.030	3.5
445.6110	62.01	-1.90	4355.506	0.0	26796.604	0.0
445.6173	22.00	-3.07	19322.988	2.0	41757.470	3.0
445.6180	24.00	-2.92	23933.900	4.0	46368.350	3.0
445.6189	12.02	-1.56	584462.400	5.0	606896.800	4.0
445.6300	40.00	-.43	14921.641	0.0	37361.782	0.0
445.6329	26.00	-1.88	24574.655	4.0	47008.351	5.0
445.6400	60.01	-1.04	5887.999	0.0	28327.636	0.0
445.6408	12.02	-1.65	584463.500	4.0	606896.800	3.0
445.6408	12.02	-3.75	584463.500	4.0	606896.800	4.0
445.6414	16.01	-.55	127824.930	.5	150258.200	.5
445.6442	10.01	-.99	306262.770	1.5	328695.900	2.5
445.6446	10.01	-.02	306262.770	1.5	328695.880	1.5
445.6543	23.00	-6.22	14910.040	3.5	37342.660	2.5
445.6549	18.01	-2.91	186815.960	3.5	209248.550	2.5
445.6553	23.01	-2.20	30267.460	2.0	52700.030	2.0
445.6555	27.00	-3.12	32733.070	3.5	55165.630	2.5
445.6616	26.00	-1.69	31307.235	4.0	53739.488	5.0
445.6616	20.00	-1.48	15315.943	2.0	37748.197	1.0
445.6638	26.00	-3.27	31805.059	3.0	54237.200	4.0
445.6641	22.01	-1.83	25193.040	2.5	47625.170	2.5
445.6698	27.00	-4.97	32464.730	4.5	54896.570	3.5
445.6734	26.01	-3.75	50187.950	3.5	72619.610	2.5
445.6800	41.00	-1.62	1129.205	0.0	23566.828	0.0
445.6805	28.02	-3.05	97841.400	2.0	120272.700	1.0
445.6867	24.01	-4.14	25033.950	3.5	47464.940	4.5
445.6909	9.02	-3.88	444552.080	3.5	466982.860	2.5
445.6933	21.00	-1.93	16141.040	2.5	38571.700	3.5
445.6964	17.01	-2.32	128662.500	2.0	151093.000	3.0
445.6996	27.00	-4.62	32430.590	5.5	54860.930	4.5
445.7030	25.02	-3.36	172682.640	3.5	195112.810	3.5
445.7050	10.01	.13	280473.580	1.5	302903.650	2.5
445.7092	7.01	-2.92	188857.370	2.0	211287.230	3.0
445.7121	24.00	-2.20	27223.050	2.0	49652.760	2.0
445.7239	10.01	-.64	281171.380	2.5	303600.500	2.5
445.7265	10.01	-1.84	280473.580	1.5	302902.570	1.5
445.7304	23.01	-3.71	26839.820	3.0	49268.610	4.0
445.7316	24.01	-4.75	32355.940	3.5	54784.670	3.5
445.7340	72.00	-2.11	2339.068	0.0	24773.973	0.0
445.7352	10.01	-.46	281171.380	2.5	303599.930	3.5
445.7356	25.01	-3.93	85673.720	4.0	108102.250	3.0
445.7360	42.00	-.09	16615.449	0.0	39050.253	0.0
445.7378	25.02	-1.04	195752.480	2.5	218180.900	1.5
445.7420	41.00	-1.56	1532.493	0.0	23966.995	0.0
445.7428	22.00	-1.20	11776.806	4.0	34204.971	4.0
445.7430	40.00	-.61	10969.423	0.0	33403.875	0.0
445.7447	25.02	-1.96	193235.430	2.5	215663.500	3.5
445.7467	23.00	-.95	2220.130	2.5	24648.100	1.5
445.7487	28.01	-2.48	113225.060	.5	135652.930	1.5
445.7614	25.01	-3.65	48317.850	4.0	70745.080	3.0
445.7626	24.00	-1.75	27223.050	2.0	49650.220	3.0
445.7626	25.02	-3.94	195948.440	3.5	218375.610	4.5
445.7684	24.00	-3.39	31377.960	4.0	53804.840	3.0
445.7690	23.00	-2.23	15688.800	2.5	38115.650	3.5
445.7692	27.00	-1.34	29735.180	3.5	52162.020	3.5
445.7708	27.00	-4.66	32841.990	4.5	55268.750	3.5
445.7739	27.00	-4.36	33150.680	1.5	55577.280	1.5
445.7755	23.00	-.13	15103.770	4.5	37530.290	5.5
445.7760	13.01	-4.37	125706.200	1.0	148132.700	2.0
445.7777	26.02	-3.05	182480.720	2.0	204907.130	1.0
445.7780	58.01	-1.17	8307.725	0.0	30740.416	0.0
445.7785	25.00	-.66	41031.480	4.5	63457.850	5.5
445.7839	18.01	-2.49	190507.360	1.5	212933.460	2.5
445.7853	22.00	-2.44	18911.399	2.0	41337.430	2.0
445.7875	28.01	-3.60	99844.130	3.5	122270.050	3.5
445.7904	24.00	-4.48	27163.200	0.0	49588.970	1.0
445.7916	24.00	-4.18	31280.350	5.0	53706.060	5.0
445.8000	90.00	-1.34	3629.588	0.0	26061.172	0.0
445.8061	26.00	-4.81	24772.019	1.0	47197.000	2.0
445.8066	18.01	-3.41	190507.360	1.5	212932.320	1.5
445.8069	26.00	-1.71	31322.603	3.0	53747.547	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
445.8090	74.00	-1.54	13227.833	0.0	35658.964	0.0
445.8120	41.00	-.51	13308.491	0.0	35739.471	0.0
445.8300	74.00	-.84	19680.435	0.0	42110.509	0.0
445.8340	59.01	-1.58	4355.506	0.0	26785.379	0.0
445.8396	25.02	-3.62	172547.850	2.5	194971.150	2.5
445.8403	23.00	-2.00	19078.150	3.5	41501.410	4.5
445.8433	22.00	-2.21	25635.740	1.0	48058.850	1.0
445.8475	24.00	-2.99	38537.680	5.0	60960.580	4.0
445.8497	24.00	-.21	28637.000	3.0	51059.790	4.0
445.8513	27.00	-3.03	28845.220	5.5	51267.930	4.5
445.8520	62.01	-1.27	806.575	0.0	23235.542	0.0
445.8527	24.00	-.55	24282.340	4.0	46704.980	5.0
445.8592	27.00	-.83	28777.270	3.5	51199.580	3.5
445.8601	18.01	-3.17	190511.190	2.5	212933.460	2.5
445.8634	24.00	-3.63	35572.940	2.0	57995.040	1.0
445.8650	42.00	-.44	23390.681	0.0	45818.995	0.0
445.8682	24.00	-2.48	27176.220	1.0	49598.080	2.0
445.8797	27.00	-1.64	29735.180	3.5	52156.460	4.5
445.8828	18.01	-4.78	190511.190	2.5	212932.320	1.5
445.8841	28.01	-5.00	95893.760	1.5	118314.820	2.5
445.8883	18.01	-2.70	186171.260	.5	208592.110	.5
445.8903	22.00	-3.77	26494.322	2.0	48915.070	2.0
445.8907	26.02	-3.13	182486.400	1.0	204907.130	1.0
445.8948	18.01	-3.13	186171.260	.5	208591.780	1.5
445.8972	9.02	-.32	444057.440	1.5	466477.840	2.5
445.8974	22.01	-2.88	45908.560	5.5	68328.950	4.5
445.9027	28.00	-.11	26665.903	3.0	49086.030	4.0
445.9074	27.00	-4.04	24326.110	3.5	46746.000	2.5
445.9082	24.00	-4.35	31106.370	4.0	53526.220	4.0
445.9121	26.00	-1.22	17550.180	3.0	39969.830	3.0
445.9161	25.02	-2.22	193498.070	3.5	215917.520	4.5
445.9199	24.00	-4.75	30965.460	3.0	53384.720	3.0
445.9290	62.00	-.50	806.575	0.0	23231.670	0.0
445.9328	23.01	-2.99	32299.240	1.0	54717.850	1.0
445.9340	16.01	-2.41	133399.820	1.5	155818.370	2.5
445.9362	24.00	-3.39	31364.330	3.0	53782.770	4.0
445.9428	27.00	-3.51	32027.500	3.5	54445.610	2.5
445.9497	23.00	-3.87	9544.540	.5	31962.300	.5
445.9519	25.00	.21	41031.480	4.5	63449.130	5.5
445.9530	76.00	-.97	15324.929	0.0	37748.817	0.0
445.9728	24.00	-.77	24303.940	3.0	46720.540	4.0
445.9752	23.00	-.55	2311.370	3.5	24727.850	2.5
445.9760	73.00	-.36	19035.175	0.0	41457.906	0.0
445.9770	23.01	-1.65	32299.240	1.0	54715.630	2.0
445.9823	22.00	-4.47	25643.695	3.0	48059.820	3.0
445.9862	26.00	-4.18	21999.132	4.0	44415.057	4.0
445.9933	28.01	-4.92	99040.750	1.5	121456.320	1.5
445.9937	7.01	-1.91	166521.690	1.0	188937.240	0.0
446.0040	44.00	-.25	8711.012	0.0	31132.336	0.0
446.0120	26.00	-4.10	22249.430	3.0	44664.061	2.0
446.0154	23.00	-2.88	10892.500	3.5	33306.960	4.5
446.0161	22.00	-2.29	19573.968	4.0	41988.390	3.0
446.0175	10.00	-2.28	149657.042	3.0	172071.396	2.0
446.0196	26.00	-4.44	29798.960	4.0	52213.207	3.0
446.0210	58.01	.02	3790.903	0.0	26211.372	0.0
446.0217	9.01	-1.16	266270.110	2.0	288684.250	2.0
446.0218	23.00	-2.71	19078.150	3.5	41492.290	3.5
446.0311	23.00	-.22	2424.890	4.5	24838.560	3.5
446.0340	40.00	-1.94	5000.766	0.0	27420.582	0.0
446.0419	25.00	-3.50	41031.480	4.5	63444.610	4.5
446.0420	41.00	-.33	13389.148	0.0	35808.561	0.0
446.0423	23.00	-.84	19023.470	4.5	41436.580	3.5
446.0494	24.00	-2.53	27176.220	1.0	49586.970	1.0
446.0500	74.00	-1.01	13711.778	0.0	36130.789	0.0
446.0514	23.00	-2.86	14949.300	4.5	37361.950	4.5
446.0560	18.01	-1.76	132630.650	1.5	155043.070	2.5
446.0620	42.01	-.97	16615.449	0.0	39033.657	0.0
446.0659	27.00	-3.81	34133.590	3.5	56545.510	2.5
446.0727	27.00	-1.70	31871.150	3.5	54282.730	2.5
446.0735	24.00	-2.36	33040.100	2.0	55451.640	3.0
446.0747	24.00	-4.63	21847.880	2.0	44259.360	3.0
446.0789	22.00	-1.92	25797.600	3.0	48208.870	3.0
446.0850	23.02	-1.35	161588.040	3.5	183999.000	3.5
446.0862	29.01	-4.97	115662.770	4.0	138073.670	4.0
446.0908	22.00	-1.92	18145.400	2.0	40556.070	1.0
446.0994	23.00	-.01	19026.340	2.5	41436.580	3.5
446.1004	9.02	-2.94	443865.310	1.5	466275.500	2.5
446.1042	24.00	-4.92	30965.460	3.0	53375.460	4.0
446.1077	20.02	-1.53	360388.680	3.0	382798.500	4.0
446.1080	90.01	-1.51	9356.272	0.0	31772.369	0.0
446.1140	58.01	-.28	7259.177	0.0	29674.972	0.0
446.1180	72.00	-1.71	5565.369	0.0	27980.963	0.0
446.1199	26.00	-3.48	24335.764	2.0	46744.975	3.0
446.1220	40.01	-1.17	8065.752	0.0	30461.145	0.0
446.1223	25.00	-3.39	38351.780	.5	60760.870	1.5
446.1306	24.00	-2.15	25177.390	4.0	47586.060	5.0
446.1344	7.00	-2.89	93581.520	.5	115990.000	.5
446.1344	7.00	-3.19	93581.520	.5	115990.000	1.5
446.1360	64.00	-.87	7339.834	0.0	29754.524	0.0
446.1368	26.00	-2.47	27543.000	1.0	49951.360	0.0
446.1422	26.01	-3.88	20830.520	2.5	43238.610	2.5
446.1511	25.00	-3.68	37420.240	5.5	59827.880	5.5
446.1537	9.02	-4.41	444575.350	2.5	466982.860	2.5
446.1545	22.00	-2.08	25699.950	2.0	48107.420	2.0
446.1581	28.01	-3.41	113172.960	4.5	135580.250	4.5
446.1654	26.00	-3.27	704.003	2.0	23110.925	3.0
446.1675	9.02	-2.94	443868.680	2.5	466275.500	2.5
446.1703	26.01	-2.30	50212.930	2.5	72619.610	2.5
446.1711	8.02	.01	376067.660	2.0	398474.300	3.0
446.1716	26.01	-4.14	63273.030	2.5	85679.640	2.5
446.1760	24.01	-2.89	66649.710	1.5	89056.100	2.5
446.1796	26.00	-4.41	24338.766	3.0	46744.975	3.0
446.1858	24.00	-2.83	24282.340	4.0	46686.240	3.0
446.1865	22.00	-4.19	7255.369	2.0	29661.232	1.0
446.1950	22.00	-1.87	18061.540	1.0	40466.979	2.0
446.1958	26.00	-2.55	29056.312	3.0	51461.707	4.0
446.1969	26.00	-2.16	29356.780	2.0	51762.120	2.0
446.1999	26.00	-3.24	24772.019	1.0	47177.210	1.0
446.2075	24.00	-2.36	31377.960	4.0	53782.770	4.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
446.2099	22.00	-3.09	0.000	2.0	22404.690	3.0
446.2117	24.01	-3.77	67070.480	1.5	89475.080	2.5
446.2256	25.00	-3.22	30354.210	3.5	52758.110	4.5
446.2288	25.00	-.85	37586.030	1.5	59989.770	1.5
446.2290	76.00	-.65	20890.298	0.0	43300.316	0.0
446.2354	23.00	.59	15000.840	5.5	37404.250	6.5
446.2420	60.01	-1.83	1613.150	0.0	24022.515	0.0
446.2449	28.00	-.54	27943.543	1.0	50346.477	2.0
446.2461	27.00	-3.50	21780.470	5.5	44183.340	4.5
446.2472	20.02	-4.21	360388.680	3.0	382791.500	3.0
446.2507	28.01	-2.24	113177.610	3.5	135580.250	4.5
446.2517	23.00	-2.04	19026.340	2.5	41428.930	2.5
446.2551	24.00	-4.43	21856.940	3.0	44259.360	3.0
446.2637	22.00	-2.09	25926.820	4.0	48328.810	4.0
446.2659	25.02	-4.91	172569.270	1.5	194971.150	2.5
446.2712	22.00	-2.71	19421.576	3.0	41823.190	3.0
446.2724	29.01	-1.10	115662.770	4.0	138064.320	5.0
446.2754	23.01	-7.06	12545.150	4.0	34946.550	4.0
446.2776	24.00	-1.69	24277.060	0.0	46678.350	1.0
446.2849	10.00	-2.87	150858.508	2.0	173259.430	1.0
446.2849	9.02	-3.09	444489.400	2.5	466890.320	3.5
446.2970	92.01	-1.92	887.233	0.0	23293.837	0.0
446.2990	60.01	-.84	4436.164	0.0	26842.667	0.0
446.3003	15.01	-.51	105550.450	2.0	127950.600	2.0
446.3129	23.00	-1.40	15724.220	3.5	38123.760	4.5
446.3133	26.00	-3.06	24772.019	1.0	47171.520	0.0
446.3250	64.01	-1.11	10001.532	0.0	32406.730	0.0
446.3312	12.02	-.68	584462.400	5.0	606861.000	5.0
446.3312	12.02	1.13	584462.400	5.0	606861.000	6.0
446.3385	22.00	-.51	15156.787	4.0	37555.021	3.0
446.3392	24.00	-2.64	27703.840	4.0	50102.040	3.0
446.3410	58.01	-.26	7662.464	0.0	30066.859	0.0
446.3416	28.00	-1.71	28068.091	4.0	50466.172	4.0
446.3458	25.02	-1.79	172451.230	1.5	194849.100	1.5
446.3479	24.01	-4.51	66872.120	.5	89269.880	.5
446.3500	74.00	-.03	23793.968	0.0	46197.911	0.0
446.3527	28.01	-2.40	107082.210	2.5	129479.730	1.5
446.3530	75.00	.06	35086.021	0.0	57489.814	0.0
446.3531	12.02	1.05	584463.500	4.0	606861.000	5.0
446.3536	22.00	-.52	15220.390	5.0	37617.868	4.0
446.3595	25.00	-4.32	35114.980	2.5	57512.160	1.5
446.3599	16.01	.11	128599.110	3.5	150996.270	2.5
446.3606	22.00	-4.31	19421.576	3.0	41818.700	4.0
446.3611	17.01	-4.63	128621.900	1.0	151019.000	2.0
446.3790	27.00	-3.66	32464.730	4.5	54860.930	4.5
446.3826	20.02	-2.26	360388.680	3.0	382784.700	3.0
446.3900	62.00	-1.25	2258.411	0.0	24660.347	0.0
446.4030	28.01	-1.97	93390.060	2.5	115785.060	1.5
446.4079	24.00	-2.96	35807.900	2.0	58202.650	3.0
446.4101	9.01	-2.95	266270.110	2.0	288664.750	3.0
446.4150	41.00	-1.64	2742.356	0.0	25143.037	0.0
446.4170	58.01	-1.18	7259.177	0.0	29659.758	0.0
446.4227	23.00	-.72	19145.130	5.5	41539.140	4.5
446.4231	24.00	-2.45	27816.880	5.0	50210.870	4.0
446.4303	23.01	-2.84	30306.400	3.0	52700.030	2.0
446.4335	9.01	-0.00	266270.110	2.0	288663.580	2.0
446.4372	56.01	-3.01	48258.590	0.0	70658.157	0.0
446.4454	27.00	-1.31	28777.270	3.5	51170.140	4.5
446.4470	22.01	-1.62	9363.710	.5	31756.500	1.5
446.4522	25.02	-2.10	193756.790	4.5	216149.320	3.5
446.4616	28.01	-2.90	107082.210	2.5	129474.270	3.5
446.4666	24.00	-1.68	24286.540	1.0	46678.350	1.0
446.4681	26.00	-2.81	26140.164	3.0	48531.896	3.0
446.4681	25.00	-.40	23549.200	2.5	45940.930	2.5
446.4684	28.00	-4.15	36600.805	2.0	58992.520	2.0
446.4690	58.01	-.67	8227.067	0.0	30625.039	0.0
446.4731	7.00	-2.83	93581.520	.5	115973.000	1.5
446.4741	23.00	-1.27	15724.220	3.5	38115.650	3.5
446.4755	22.00	-1.57	19322.988	2.0	41714.350	2.0
446.4769	26.00	-3.08	24335.764	2.0	46727.055	2.0
446.4770	42.01	-.53	20245.038	0.0	42642.608	0.0
446.4847	24.00	-2.98	33060.740	3.0	55451.640	3.0
446.4847	13.01	-4.79	125706.200	1.0	148097.100	0.0
446.4923	24.00	-1.33	24286.540	1.0	46677.060	2.0
446.4961	24.00	-4.38	26787.500	3.0	49177.830	3.0
446.4970	63.01	.20	27100.927	0.0	49497.494	0.0
446.4975	26.00	-4.20	29371.860	3.0	51752.120	2.0
446.5070	60.01	-2.26	0.000	0.0	22396.065	0.0
446.5090	29.01	-3.40	115639.020	2.0	138028.700	1.0
446.5126	13.01	-2.48	125700.500	0.0	148090.000	1.0
446.5130	92.01	-2.09	2258.411	0.0	24654.176	0.0
446.5152	24.00	-1.48	31393.400	5.0	53782.770	4.0
446.5229	22.00	-4.91	25388.334	4.0	47777.320	5.0
446.5242	24.00	-3.00	35813.730	3.0	58202.650	3.0
446.5260	22.00	-1.99	17995.750	0.0	40384.580	1.0
446.5324	22.00	-3.50	25797.600	3.0	48186.110	4.0
446.5340	90.01	-1.18	8549.697	0.0	30944.408	0.0
446.5356	24.00	-.89	24299.890	2.0	46688.240	3.0
446.5368	26.00	-4.39	24338.766	3.0	46727.055	2.0
446.5370	26.00	-2.96	29320.050	1.0	51708.330	2.0
446.5440	9.02	-1.95	443865.310	1.5	466253.240	1.5
446.5473	23.00	-1.07	15571.900	2.5	37959.660	2.5
446.5495	24.00	-4.63	20520.920	3.0	42908.570	4.0
446.5529	7.01	-2.38	166521.690	1.0	188909.170	1.0
446.5600	60.01	-2.01	1451.835	0.0	23845.242	0.0
446.5800	24.01	-1.24	52321.300	4.5	74707.420	5.5
446.5818	27.00	-1.08	29735.180	3.5	52121.210	4.5
446.5824	22.00	-.09	14028.470	2.0	36414.470	3.0
446.5863	9.02	.22	444470.240	1.5	466856.050	2.5
446.5920	41.00	-1.29	10162.848	0.0	32554.651	0.0
446.5940	76.00	.55	38070.349	0.0	60462.052	0.0
446.6036	10.01	-2.98	254292.190	.5	276677.130	.5
446.6098	24.00	-2.95	20523.940	5.0	42908.570	4.0
446.6134	15.01	-.83	105550.450	2.0	127934.900	1.0
446.6163	24.00	-1.37	24303.940	3.0	46688.240	3.0
446.6179	8.00	-4.99	107595.159	2.0	129979.384	1.0
446.6184	23.03	-2.06	263902.300	3.0	286286.500	4.0
446.6239	27.00	-2.97	32781.710	2.5	55165.630	2.5
446.6248	9.01	-1.02	266270.110	2.0	288653.990	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
446.6264	13.01	-2.61	125706.200	1.0	148090.000	1.0
446.6264	13.01	-2.13	125706.200	1.0	148090.000	2.0
446.6350	74.00	-1.06	13227.833	0.0	35617.480	0.0
446.6381	28.00	.02	29888.505	2.0	52271.716	2.0
446.6381	25.02	-1.69	195592.090	1.5	217975.300	2.5
446.6400	72.01	-.59	20003.065	0.0	42392.461	0.0
446.6415	25.00	-3.32	34845.260	.5	57228.300	.5
446.6420	41.00	-2.40	1129.205	0.0	23518.501	0.0
446.6477	28.01	-4.97	115739.150	4.5	138121.880	4.5
446.6539	28.01	-4.77	97273.830	2.5	119656.250	3.5
446.6550	64.01	-1.08	4194.191	0.0	26582.835	0.0
446.6554	26.00	-.40	22838.320	2.0	45220.662	3.0
446.6574	26.00	-4.38	888.132	1.0	23270.374	0.0
446.6602	8.01	-.17	233430.100	.5	255812.200	1.5
446.6611	26.00	-3.74	24338.766	3.0	46720.824	4.0
446.6651	26.00	-4.97	20641.110	4.0	43022.969	4.0
446.6684	26.01	-4.04	50142.930	2.5	72524.620	1.5
446.6702	19.01	-.59	165149.500	0.0	187531.100	1.0
446.6712	24.00	-4.23	26796.280	2.0	49177.830	3.0
446.6719	14.00	-3.25	39760.285	1.0	62141.800	1.0
446.6784	28.01	-1.94	113177.610	3.5	135558.800	4.5
446.6862	23.00	-1.22	11100.650	4.5	33481.450	3.5
446.6878	27.00	-.44	24326.110	3.5	46706.830	3.5
446.6910	40.00	-1.34	5000.766	0.0	27387.606	0.0
446.6926	26.00	-1.98	31686.342	2.0	54066.821	2.0
446.7013	7.01	-3.06	174212.030	2.0	196592.070	1.0
446.7028	21.00	-2.78	17012.980	2.5	39392.950	3.5
446.7036	24.01	-2.68	66256.770	.5	88634.700	1.5
446.7090	56.00	-.86	13514.000	0.0	35899.938	0.0
446.7105	23.00	-4.99	15264.830	5.5	37644.410	4.5
446.7171	23.00	-3.80	15078.250	.5	37457.500	1.5
446.7211	22.00	-4.92	26657.409	4.0	49036.460	4.0
446.7230	64.01	-.88	10727.450	0.0	33112.686	0.0
446.7260	44.00	-.54	20083.723	0.0	42468.809	0.0
446.7329	24.00	-2.35	24299.890	2.0	46678.350	1.0
446.7340	62.01	-.39	5242.739	0.0	27627.424	0.0
446.7418	26.00	-3.52	33412.706	3.0	55790.720	3.0
446.7421	27.01	-9.47	24074.600	2.0	46452.600	2.0
446.7489	25.02	-1.73	193498.070	3.5	215875.730	2.5
446.7540	58.01	-.83	4436.164	0.0	26819.847	0.0
446.7540	75.00	-.61	24600.544	0.0	46984.227	0.0
446.7587	24.00	-1.42	24299.890	2.0	46677.060	2.0
446.7611	23.00	-1.83	14548.830	2.5	36925.880	3.5
446.7714	24.00	-4.46	35618.510	1.0	57995.040	1.0
446.7738	10.01	-1.41	290803.820	.5	313180.230	1.5
446.7756	16.02	-1.06	147690.990	2.0	170067.310	2.0
446.7804	24.00	-4.83	21810.840	1.0	44186.920	2.0
446.7920	75.00	-1.18	16534.792	0.0	38910.571	0.0
446.7968	26.01	-2.50	64040.960	3.5	86416.220	3.5
446.7986	15.01	-.24	105224.830	0.0	127600.000	1.0
446.8014	24.00	-2.01	27223.050	2.0	49598.080	2.0
446.8022	23.00	.40	14910.040	3.5	37285.030	4.5
446.8052	8.00	-4.37	107595.159	3.0	129970.000	2.0
446.8060	27.01	-5.07	24411.500	0.0	46786.300	1.0
446.8072	25.00	-1.55	45130.160	4.5	67504.900	5.5
446.8170	66.01	-1.77	806.575	0.0	23187.102	0.0
446.8220	40.00	-1.19	11130.738	0.0	33511.015	0.0
446.8242	24.01	-4.77	68477.110	4.5	90851.000	4.5
446.8280	42.00	-.50	16615.449	0.0	38995.425	0.0
446.8395	24.00	-2.22	24303.940	3.0	46677.060	2.0
446.8434	28.00	-1.67	33500.854	3.0	55873.780	2.0
446.8485	22.01	-.63	9118.150	4.5	31490.820	3.5
446.8503	9.02	-.51	469119.520	2.5	491492.100	2.5
446.8503	9.02	.80	469119.520	2.5	491492.100	3.5
446.8599	25.00	-4.22	35114.980	2.5	57487.080	2.5
446.8669	9.02	.64	469120.350	1.5	491492.100	2.5
446.8671	29.01	-3.45	108014.660	3.0	130386.400	2.0
446.8689	28.00	-3.47	29668.918	3.0	52040.568	2.0
446.8710	59.01	-.89	1693.808	0.0	24071.631	0.0
446.8757	23.00	-1.27	15103.770	4.5	37475.080	3.5
446.8790	40.00	-1.85	4113.534	0.0	26490.956	0.0
446.8819	13.01	-3.78	125719.000	2.0	148090.000	1.0
446.8819	13.01	-2.61	125719.000	2.0	148090.000	2.0
446.8819	13.01	-1.86	125719.000	2.0	148090.000	3.0
446.8827	23.01	-3.08	26839.820	3.0	49210.780	3.0
446.8871	9.01	-.92	266270.110	2.0	288640.850	1.0
446.8913	10.01	-.39	280473.580	1.5	302844.110	2.5
446.8970	57.00	-1.20	2984.328	0.0	25360.849	0.0
446.9013	20.02	-2.22	340748.720	2.0	363118.750	3.0
446.9039	10.01	-4.24	301801.090	3.5	324170.990	2.5
446.9046	22.01	-4.16	40798.370	3.5	63168.230	2.5
446.9075	10.01	-2.88	301801.090	3.5	324170.810	3.5
446.9078	29.01	-2.08	115569.200	2.5	137938.900	4.0
446.9150	22.01	-3.00	8744.270	2.5	31113.610	3.5
446.9237	8.01	-1.01	233544.090	1.5	255913.000	1.5
446.9264	28.01	-3.36	94705.930	3.5	117074.700	3.5
446.9270	8.01	-2.93	238892.960	2.5	261261.700	1.5
446.9320	41.00	-1.59	5242.739	0.0	27617.507	0.0
446.9320	92.00	-1.58	0.000	0.0	22374.768	0.0
446.9364	26.00	-.56	29469.010	2.0	51837.279	3.0
446.9368	17.00	-2.37	74225.846	1.5	96594.096	.5
446.9436	8.01	-3.08	233544.090	1.5	255912.000	.5
446.9460	23.00	-4.18	17054.870	2.5	39422.660	2.5
446.9492	25.01	-3.89	85734.620	3.0	108102.250	3.0
446.9540	27.00	-.22	23855.620	4.5	46223.010	4.5
446.9614	22.00	-3.20	26657.409	4.0	49024.430	3.0
446.9684	9.02	.61	444489.400	2.5	466856.070	3.5
446.9688	9.02	.14	444489.400	2.5	466856.050	2.5
446.9710	41.00	-.29	12179.286	0.0	34552.102	0.0
446.9712	23.00	.50	14949.300	4.5	37315.830	5.5
446.9748	24.00	-2.94	24056.110	5.0	46422.460	4.0
446.9778	25.02	-3.22	115762.600	1.5	138128.800	1.5
446.9834	24.00	-2.43	27223.050	2.0	49588.970	1.0
446.9840	25.02	-2.29	94697.850	3.5	117063.740	4.5
446.9888	28.01	-3.96	113172.960	4.5	135538.610	5.5
446.9972	25.01	-4.84	49882.150	4.0	72247.380	3.0
446.9980	22.00	-3.09	26494.322	2.0	48859.510	1.0
447.0083	28.00	-1.77	29832.810	3.0	52197.482	3.0
447.0116	9.01	-1.48	266270.110	2.0	288634.620	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
447.0140	26.02	-4.17	182830.760	6.0	205195.150	5.0
447.0144	25.00	-.70	23719.520	1.5	46083.690	1.5
447.0182	29.01	-2.49	115639.020	2.0	138003.200	2.0
447.0210	26.00	-3.68	24772.019	1.0	47136.058	2.0
447.0224	25.00	-3.06	41031.480	4.5	63395.450	3.5
447.0226	9.01	-.62	266270.110	2.0	288634.070	2.0
447.0310	40.00	-.45	12259.943	0.0	34629.756	0.0
447.0357	29.01	-2.72	115665.400	1.0	138028.700	1.0
447.0377	17.01	-2.64	128729.800	3.0	151093.000	3.0
447.0387	23.00	-2.60	19026.340	2.5	41389.490	1.5
447.0389	23.01	-5.04	14556.090	4.0	36919.230	3.0
447.0472	28.00	-.30	27414.893	2.0	49777.619	3.0
447.0483	25.02	-2.22	195752.480	2.5	218115.150	3.5
447.0485	26.01	-3.41	62322.500	3.5	84685.160	3.5
447.0507	26.00	-3.35	35611.608	3.0	57974.160	2.0
447.0560	40.00	-.17	12663.231	0.0	35031.793	0.0
447.0649	23.01	-5.16	26839.820	3.0	49201.660	2.0
447.0655	56.01	-1.77	48258.590	0.0	70626.677	0.0
447.0795	23.00	-1.89	15000.840	5.5	37361.950	4.5
447.0825	9.01	-1.75	266270.110	2.0	288631.070	1.0
447.0837	21.00	-2.94	16210.800	3.5	38571.700	3.5
447.0869	22.01	-2.05	9395.760	1.5	31756.500	1.5
447.0890	62.00	.18	2258.411	0.0	24625.322	0.0
447.0907	9.02	-1.85	443868.680	2.5	466229.230	3.5
447.0915	18.01	-2.72	186890.950	2.5	209251.460	3.5
447.0963	10.00	-3.28	150121.592	1.0	172481.660	1.0
447.0970	60.01	-1.71	5000.766	0.0	27367.277	0.0
447.0973	10.01	-3.06	301801.090	3.5	324161.310	3.5
447.1039	10.01	-1.72	301801.090	3.5	324160.980	4.5
447.1043	22.00	-3.59	25699.950	2.0	48059.820	3.0
447.1053	27.00	-2.23	29735.180	3.5	52095.000	3.5
447.1069	9.02	-3.37	444623.120	3.5	466982.860	2.5
447.1109	25.02	-1.35	195948.440	3.5	218307.980	2.5
447.1215	9.01	.47	266270.110	2.0	288629.120	3.0
447.1233	22.00	-.10	13981.750	1.0	36340.670	2.0
447.1235	24.01	-4.21	42898.120	2.5	65257.030	3.5
447.1237	22.00	-2.99	25699.950	2.0	48058.850	1.0
447.1240	58.01	0.00	5565.369	0.0	27930.529	0.0
447.1290	41.00	-.65	9275.615	0.0	31640.525	0.0
447.1290	64.01	-.78	10324.163	0.0	32689.073	0.0
447.1297	26.01	-2.87	62689.960	2.5	85048.560	1.5
447.1311	27.00	-1.10	28845.220	5.5	51203.750	5.5
447.1323	9.01	-2.34	266270.110	2.0	288628.580	2.0
447.1331	23.00	-1.24	19078.150	3.5	41436.580	3.5
447.1377	18.01	-4.61	157233.930	3.5	179592.130	2.5
447.1497	18.01	-4.11	186890.950	2.5	209248.550	2.5
447.1500	2.00	.05	169087.000	0.0	191450.860	0.0
447.1513	25.01	-4.09	49889.860	3.0	72247.380	3.0
447.1543	27.00	-.68	24733.280	2.5	47090.650	2.5
447.1561	25.02	-4.99	172613.870	2.5	194971.150	2.5
447.1587	10.01	.05	281171.380	2.5	303528.530	3.5
447.1589	27.00	-1.75	30102.960	2.5	52460.100	2.5
447.1597	26.00	-2.25	32133.977	2.0	54491.080	3.0
447.1660	42.01	-.46	21454.900	0.0	43817.960	0.0
447.1678	26.00	-6.20	888.132	1.0	23244.826	1.0
447.1699	10.01	-2.61	301801.090	3.5	324157.680	2.5
447.1741	23.00	-3.75	8476.200	1.5	30832.580	2.5
447.1761	23.00	-4.43	19145.130	5.5	41501.410	4.5
447.1793	26.00	-4.33	31805.059	3.0	54161.182	3.0
447.1849	17.00	-3.45	71958.363	2.5	94314.206	1.5
447.2029	24.00	-2.47	35807.900	2.0	58162.840	2.0
447.2040	42.00	.24	28068.817	0.0	50429.977	0.0
447.2053	20.01	-2.55	52166.930	.5	74521.750	1.5
447.2115	26.01	-2.29	78137.530	3.5	100492.040	3.5
447.2147	24.00	-3.87	35640.690	0.0	57995.040	1.0
447.2185	24.00	-2.61	35813.730	3.0	58167.890	4.0
447.2251	28.01	-4.02	72375.420	1.5	94729.250	2.5
447.2271	10.00	-3.98	150121.592	1.0	172475.323	2.0
447.2289	26.01	-4.36	50076.100	1.5	72429.740	.5
447.2340	92.01	-1.39	241.973	0.0	22601.633	0.0
447.2409	23.00	-2.20	15770.720	4.5	38123.760	4.5
447.2430	62.01	-1.53	1451.835	0.0	23811.045	0.0
447.2519	26.00	-4.31	11976.239	4.0	34328.733	3.0
447.2530	41.00	-1.53	2097.096	0.0	24455.806	0.0
447.2618	13.01	-2.77	125700.500	0.0	148052.500	1.0
447.2702	18.01	-2.26	183797.360	2.5	206148.940	3.5
447.2708	26.00	-2.07	29356.780	2.0	51708.330	2.0
447.2720	58.01	-.74	3548.931	0.0	25906.691	0.0
447.2724	26.00	-2.86	26351.049	5.0	48702.518	4.0
447.2796	23.01	-3.39	30306.400	3.0	52657.510	4.0
447.2798	28.02	-4.69	121802.800	3.0	144153.900	4.0
447.2806	25.00	-.79	23818.870	.5	46169.930	.5
447.2862	23.00	-2.75	19078.150	3.5	41428.930	2.5
447.2881	22.00	-3.19	26564.385	3.0	48915.070	2.0
447.2904	26.00	-4.33	20641.110	4.0	42991.680	5.0
447.2920	26.01	-4.31	22939.350	2.5	45289.840	1.5
447.2974	26.00	-3.85	23244.826	1.0	45595.046	0.0
447.2988	28.01	-4.55	116145.690	3.5	138495.840	4.5
447.3014	27.00	-3.14	27497.060	2.5	49847.080	2.5
447.3020	62.01	-1.32	2177.753	0.0	24534.013	0.0
447.3180	42.00	-.46	18389.915	0.0	40745.376	0.0
447.3196	24.00	-1.13	35813.730	3.0	58162.840	2.0
447.3232	25.01	-4.36	59537.400	4.0	81886.330	5.0
447.3280	64.00	-1.46	161.315	0.0	22516.276	0.0
447.3304	25.02	-4.02	115780.230	2.5	138128.800	1.5
447.3400	9.02	-3.46	443927.410	3.5	466275.500	2.5
447.3520	73.00	-1.58	9194.957	0.0	31548.719	0.0
447.3538	24.00	-3.74	31280.350	5.0	53627.750	5.0
447.3590	46.00	-1.68	11614.683	0.0	33968.095	0.0
447.3596	25.00	-4.89	35165.050	1.5	57512.160	1.5
447.3632	25.02	-3.10	172547.850	2.5	194894.780	1.5
447.3759	13.01	-2.30	125706.200	1.0	148052.500	1.0
447.3840	59.01	-1.71	5000.766	0.0	27352.929	0.0
447.3930	44.00	-1.29	6452.602	0.0	28804.315	0.0
447.3957	25.02	-.47	195462.260	.5	217807.570	1.5
447.4033	23.00	-.34	15770.720	4.5	38115.650	3.5
447.4083	24.00	-1.61	33934.880	3.0	56279.560	4.0
447.4135	22.01	-3.91	39926.830	2.5	62271.250	2.5
447.4141	27.00	-1.63	29216.370	2.5	51560.760	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
447.4165	26.01	-3.31	44929.590	2.5	67273.660	1.5
447.4297	26.01	-3.01	62829.160	.5	85172.770	.5
447.4359	15.02	-2.10	191639.500	1.5	213982.800	2.5
447.4359	15.02	-3.05	191639.500	1.5	213982.800	1.5
447.4366	22.00	-2.12	24694.895	4.0	47038.160	3.0
447.4403	22.00	-1.36	19573.968	4.0	41917.050	4.0
447.4429	25.01	-2.04	85759.300	4.0	108102.250	3.0
447.4503	28.01	-4.77	114869.350	1.5	137211.930	.5
447.4560	42.00	.01	16534.792	0.0	38883.358	0.0
447.4565	24.01	-2.34	44307.440	.5	66649.710	1.5
447.4619	10.00	-3.61	150917.431	0.0	173259.430	1.0
447.4623	28.01	-2.13	98561.220	2.5	120903.200	3.5
447.4659	9.02	-2.10	444552.080	3.5	466893.880	4.5
447.4690	58.01	-1.13	8711.012	0.0	31058.929	0.0
447.4703	26.00	-3.30	33412.706	3.0	55754.290	2.0
447.4722	23.00	-.06	15264.830	5.5	37606.320	6.5
447.4757	18.01	-1.22	150474.900	1.5	172816.210	.5
447.4758	23.00	-.49	15062.940	6.5	37404.250	6.5
447.4832	22.00	-1.98	16961.420	3.0	39302.360	4.0
447.4853	22.00	-2.89	11639.804	3.0	33980.639	2.0
447.5038	24.00	-3.88	35618.510	1.0	57958.420	0.0
447.5054	24.00	-1.18	35862.820	4.0	58202.650	3.0
447.5080	75.00	-.82	17180.052	0.0	39526.021	0.0
447.5180	62.01	-2.42	806.575	0.0	23152.045	0.0
447.5182	22.00	-2.00	16875.190	2.0	39214.380	3.0
447.5244	23.01	-2.10	30318.630	4.0	52657.510	4.0
447.5250	15.01	.43	105550.450	2.0	127889.300	3.0
447.5256	28.01	-2.09	113407.310	2.5	135746.130	1.5
447.5304	17.00	-1.63	72488.568	1.5	94827.150	2.5
447.5326	9.02	.85	444552.080	3.5	466890.550	4.5
447.5347	24.00	-1.50	33113.270	4.0	55451.640	3.0
447.5347	24.00	-2.57	23305.010	2.0	45643.380	3.0
447.5372	9.02	-2.18	444552.080	3.5	466890.320	3.5
447.5392	10.01	-1.20	281171.380	2.5	303509.520	2.5
447.5461	29.01	-3.27	115665.400	1.0	138003.200	2.0
447.5517	28.01	-2.87	107142.210	1.5	129479.730	1.5
447.5527	22.00	-2.13	17075.310	4.0	39412.780	5.0
447.5537	28.01	-2.65	113408.710	1.5	135746.130	1.5
447.5570	60.01	-2.58	483.945	0.0	22827.468	0.0
447.5601	10.01	-1.73	281171.380	2.5	303508.480	1.5
447.5620	42.00	-.62	18147.942	0.0	40491.215	0.0
447.5691	23.01	-1.94	30267.460	2.0	52604.110	1.0
447.5720	39.00	-.48	11211.395	0.0	33554.169	0.0
447.5727	26.00	-2.72	29371.860	3.0	51708.330	2.0
447.5840	60.00	-1.08	2339.068	0.0	24681.243	0.0
447.5843	22.00	-1.85	19421.576	3.0	41757.470	3.0
447.5876	23.00	-.61	14949.300	4.5	37285.030	4.5
447.5886	7.01	-3.96	166521.690	1.0	188857.370	2.0
447.5916	26.00	-4.87	20876.482	3.0	43210.011	2.0
447.5960	28.01	-3.99	113177.610	3.5	135512.920	2.5
447.5980	14.00	-4.38	57328.789	1.0	79664.000	1.0
447.5998	27.00	-4.18	32654.500	2.5	54989.620	3.5
447.6021	26.00	-.67	22946.810	1.0	45281.816	2.0
447.6048	22.01	-3.93	40074.710	3.5	62409.580	3.5
447.6058	27.00	-3.39	29735.180	3.5	52070.000	2.5
447.6076	26.00	-.58	29732.721	1.0	52067.450	2.0
447.6080	47.00	-.47	29359.337	0.0	51700.314	0.0
447.6120	64.00	-.36	0.000	0.0	22340.777	0.0
447.6128	24.00	-.34	42605.810	6.0	64940.280	7.0
447.6282	12.02	-.48	586777.900	3.0	609111.600	3.0
447.6282	12.02	.95	586777.900	3.0	609111.600	4.0
447.6323	13.01	-2.07	125719.000	2.0	148052.500	1.0
447.6433	24.00	-1.96	38537.680	5.0	60870.630	4.0
447.6443	12.02	-.53	584563.900	3.0	606896.800	3.0
447.6443	12.02	.90	584563.900	3.0	606896.800	4.0
447.6461	26.00	-3.01	27943.543	1.0	50276.354	0.0
447.6487	8.01	-2.41	238626.320	.5	260959.000	1.5
447.6511	26.00	-2.07	33765.291	2.0	56097.850	3.0
447.6599	24.00	-2.58	35870.530	4.0	58202.650	3.0
447.6603	12.02	-2.04	586779.500	4.0	609111.600	3.0
447.6603	12.02	-.49	586779.500	4.0	609111.600	4.0
447.6609	22.00	-2.18	16817.190	1.0	39149.260	2.0
447.6643	12.02	-.59	586779.500	4.0	609111.400	4.0
447.6643	12.02	1.06	586779.500	4.0	609111.400	5.0
447.6960	39.00	-.45	11211.395	0.0	33547.981	0.0
447.7122	22.00	-2.99	19573.968	4.0	41903.480	5.0
447.7213	27.00	-2.58	28845.220	5.5	51174.280	5.5
447.7235	27.00	-3.35	32027.500	3.5	54356.450	4.5
447.7238	28.00	-2.62	35639.148	3.0	57968.080	3.0
447.7260	59.01	-1.75	1613.150	0.0	23948.239	0.0
447.7291	27.00	-1.11	30443.630	1.5	52772.300	2.5
447.7421	10.01	-4.37	224087.020	1.5	246415.040	1.5
447.7441	28.01	-4.16	92792.080	3.5	115120.000	2.5
447.7450	39.00	-.55	10888.765	0.0	33222.906	0.0
447.7500	62.00	-.91	3064.986	0.0	25398.878	0.0
447.7682	7.01	-1.47	166582.450	2.0	188909.170	1.0
447.7710	92.01	-2.26	887.233	0.0	23220.077	0.0
447.7726	12.02	-.60	586785.100	3.0	609111.600	3.0
447.7726	12.02	-2.05	586785.100	3.0	609111.600	4.0
447.7766	12.02	.96	586785.100	3.0	609111.400	4.0
447.7886	12.02	.77	584571.100	2.0	606896.800	3.0
447.7932	10.01	-.80	306243.420	2.5	328568.890	1.5
447.7943	24.01	-3.94	67012.280	2.5	89337.700	1.5
447.7959	23.00	-3.57	9636.960	1.5	31962.300	.5
447.7990	75.00	-1.10	17180.052	0.0	39511.500	0.0
447.8008	26.00	-3.61	17726.985	2.0	40052.080	2.0
447.8031	23.01	-4.03	12621.570	5.0	34946.550	4.0
447.8043	27.00	-1.77	28845.220	5.5	51170.140	4.5
447.8067	27.00	-3.42	32027.500	3.5	54354.300	3.5
447.8207	18.01	-1.26	181594.050	2.5	203918.150	1.5
447.8279	28.00	-3.59	28212.997	0.0	50536.742	1.0
447.8297	9.01	-2.35	266360.600	1.0	288684.250	2.0
447.8314	27.00	-.92	25041.160	1.5	47364.730	1.5
447.8390	75.00	-1.20	14921.641	0.0	37251.094	0.0
447.8420	22.00	-1.54	18061.540	1.0	40384.580	1.0
447.8430	18.01	-3.93	183797.360	2.5	206120.350	2.5
447.8472	28.01	-4.11	105668.780	2.5	127991.560	3.5
447.8474	16.02	-2.30	147744.540	3.0	170067.310	2.0
447.8480	77.00	-1.29	12985.861	0.0	35314.865	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
447.8664	18.01	-4.78	179931.770	1.5	202253.590	1.5
447.8667	27.00	-3.18	21215.900	.5	43537.710	1.5
447.8709	25.01	-1.24	53597.130	2.0	75918.730	2.0
447.8713	22.00	-1.26	18145.400	2.0	40466.979	2.0
447.8800	64.01	-1.16	4758.794	0.0	27086.203	0.0
447.8829	17.01	-1.85	139350.000	1.0	161671.000	0.0
447.8968	10.01	-1.09	290583.170	1.5	312903.480	2.5
447.8987	26.00	-3.99	31937.308	1.0	54257.520	2.0
447.9000	7.03	-1.24	465223.000	0.0	487549.412	0.0
447.9002	25.01	-3.77	82735.290	2.0	105055.430	2.0
447.9030	12.02	.82	586791.600	2.0	609111.600	3.0
447.9100	9.02	-.33	444470.240	1.5	466789.890	1.5
447.9164	9.02	.20	444470.240	1.5	466789.570	2.5
447.9190	23.03	-.21	264902.200	3.0	287221.400	2.0
447.9239	28.01	-3.73	55417.830	3.5	77736.790	4.5
447.9351	26.00	-4.22	35379.189	5.0	57697.590	4.0
447.9360	58.01	-.43	4436.164	0.0	26760.782	0.0
447.9363	26.02	-3.23	200504.990	3.0	222823.330	4.0
447.9393	25.00	.18	41230.300	3.5	63548.490	4.5
447.9410	44.00	-1.26	13550.463	0.0	35874.832	0.0
447.9427	26.02	-2.91	200514.460	4.0	222832.480	5.0
447.9433	20.01	-2.99	52166.930	.5	74484.920	.5
447.9552	11.02	-1.77	442710.500	1.5	465027.900	1.5
447.9587	26.00	-2.23	29313.008	6.0	51630.230	5.0
447.9612	26.00	-1.74	29732.721	1.0	52049.820	2.0
447.9696	22.00	-.57	13981.750	1.0	36298.430	1.0
447.9707	26.00	-3.93	23192.486	2.0	45509.112	1.0
447.9730	22.00	-.99	17369.590	1.0	39686.100	2.0
447.9746	25.00	-4.70	41031.480	4.5	63347.910	4.5
447.9769	9.02	-.36	443913.330	4.5	466229.650	4.5
447.9810	76.00	-1.24	12663.231	0.0	34985.606	0.0
447.9831	28.01	-3.27	92792.080	3.5	115108.090	2.5
447.9853	9.02	-2.25	443913.330	4.5	466229.230	3.5
447.9885	13.02	.90	167612.750	2.5	189928.490	3.5
447.9887	27.00	-1.08	29948.760	2.5	52264.490	1.5
447.9959	9.02	-.92	444578.510	4.5	466893.880	4.5
447.9963	26.00	-3.45	32133.977	2.0	54449.330	1.0
447.9971	13.02	1.02	167613.370	3.5	189928.680	4.5
447.9977	10.01	-3.14	301855.710	2.5	324170.990	2.5
448.0005	9.02	.54	444578.510	4.5	466893.650	5.5
448.0010	13.02	-.53	167613.370	3.5	189928.490	3.5
448.0014	10.01	-3.22	301855.710	2.5	324170.810	3.5
448.0036	23.00	-.43	15000.840	5.5	37315.830	5.5
448.0040	9.02	.85	444575.350	2.5	466890.320	3.5
448.0094	25.02	-.25	195752.480	2.5	218067.190	2.5
448.0140	26.00	-2.01	24574.655	4.0	46889.126	4.0
448.0266	24.00	-1.09	27163.200	0.0	49477.040	1.0
448.0320	62.00	-.94	0.000	0.0	22319.834	0.0
448.0350	29.00	-1.74	30569.200	0.0	52888.885	0.0
448.0351	24.00	-1.65	28637.000	3.0	50950.420	3.0
448.0371	20.02	-2.58	340580.150	3.0	362893.470	2.0
448.0391	26.01	-2.51	64286.440	3.5	86599.660	2.5
448.0450	44.00	-.34	14921.641	0.0	37240.828	0.0
448.0455	26.01	-7.14	21308.080	1.5	43620.980	1.5
448.0542	25.01	-4.71	46903.260	2.0	69215.730	1.0
448.0561	28.00	.13	31441.665	2.0	53754.036	2.0
448.0596	22.00	-.83	14028.470	2.0	36340.670	2.0
448.0628	9.02	.16	444578.510	4.5	466890.550	4.5
448.0674	9.02	-2.52	444578.510	4.5	466890.320	3.5
448.0692	25.00	-3.90	37789.930	2.5	60101.650	2.5
448.0696	25.00	-1.51	37420.240	5.5	59731.940	4.5
448.0698	26.01	-2.76	50212.930	2.5	72524.620	1.5
448.0770	40.00	-.69	14599.011	0.0	36916.604	0.0
448.0781	20.02	-2.03	328588.760	3.0	350900.040	2.0
448.0820	90.01	-2.16	4032.876	0.0	26350.220	0.0
448.0825	18.01	-1.97	170400.940	2.5	192712.000	1.5
448.0907	26.02	-4.13	200524.120	5.0	222834.770	6.0
448.0930	73.00	.05	24842.516	0.0	47159.312	0.0
448.0946	8.01	-2.10	238731.540	1.5	261042.000	2.5
448.0970	60.00	-.58	1048.548	0.0	23365.145	0.0
448.1060	64.01	-1.04	4758.794	0.0	27074.942	0.0
448.1074	22.00	-2.86	25797.600	3.0	48107.420	2.0
448.1136	12.01	-.56	71490.190	2.5	93799.700	2.5
448.1136	12.01	.74	71490.190	2.5	93799.700	3.5
448.1243	28.00	-1.94	29888.505	2.0	52197.482	3.0
448.1265	26.02	-4.06	200514.460	4.0	222823.330	4.0
448.1270	69.01	-2.12	0.000	0.0	22315.103	0.0
448.1281	22.00	.22	14105.680	3.0	36414.470	3.0
448.1311	12.01	.59	71491.060	1.5	93799.700	2.5
448.1419	24.00	-1.33	36552.130	3.0	58860.230	2.0
448.1440	41.00	-1.21	10162.848	0.0	32477.104	0.0
448.1524	24.00	-2.22	32097.360	6.0	54404.940	7.0
448.1544	7.00	-3.07	93581.520	.5	115889.000	.5
448.1544	7.00	-2.69	93581.520	.5	115889.000	1.5
448.1568	27.00	-5.54	4142.660	3.5	26450.020	2.5
448.1596	26.00	-2.11	29732.721	1.0	52039.939	1.0
448.1815	18.01	-.31	151087.250	2.5	173393.380	2.5
448.1817	10.01	-1.78	306262.770	1.5	328568.890	1.5
448.1819	10.01	-1.05	306262.770	1.5	328568.880	.5
448.1823	18.01	-4.17	183797.360	2.5	206103.450	1.5
448.1893	23.00	-3.89	17116.920	3.5	39422.660	2.5
448.1900	60.00	-.89	1048.548	0.0	23360.514	0.0
448.1921	10.01	-2.06	301855.710	2.5	324161.310	3.5
448.1945	7.00	-3.37	93581.520	.5	115887.000	.5
448.1945	7.00	-4.04	93581.520	.5	115887.000	1.5
448.2028	24.00	-1.45	35862.820	4.0	58167.890	4.0
448.2030	44.00	-1.41	11695.340	0.0	34006.659	0.0
448.2042	15.01	-4.58	107361.100	3.0	129666.100	2.0
448.2082	17.01	-1.66	139350.000	1.0	161654.800	1.0
448.2170	90.00	-1.50	4920.109	0.0	27230.731	0.0
448.2172	26.00	-3.54	888.132	1.0	23192.486	2.0
448.2175	24.00	-1.59	35398.020	4.0	57702.360	5.0
448.2245	9.02	.28	444552.080	3.5	466856.070	3.5
448.2249	9.02	-.82	444552.080	3.5	466856.050	2.5
448.2256	26.00	-1.45	17927.378	1.0	40231.312	2.0
448.2398	22.01	-5.10	8997.690	3.5	31300.920	4.5
448.2440	70.00	-.15	24600.544	0.0	46909.822	0.0
448.2448	9.01	-.59	266360.600	1.0	288663.580	2.0
448.2500	40.00	-.52	15002.299	0.0	37311.278	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
448.2582	28.00	-3.54	34408.574	1.0	56710.889	2.0
448.2597	9.02	-1.50	443927.410	3.5	466229.650	4.5
448.2605	30.02	-1.61	215340.500	2.0	237642.700	3.0
448.2651	10.01	-1.46	301855.710	2.5	324157.680	2.5
448.2666	26.00	-4.78	22249.430	3.0	44551.325	3.0
448.2690	22.00	-2.77	11776.806	4.0	34078.580	3.0
448.2701	10.01	-4.74	301855.710	2.5	324157.430	1.5
448.2709	24.00	-2.08	36558.550	2.0	58860.230	2.0
448.2732	26.00	-1.26	29469.010	2.0	51770.577	3.0
448.2796	25.02	-3.72	172547.850	2.5	194849.100	1.5
448.2882	24.00	-.76	27176.220	1.0	49477.040	1.0
448.2882	24.00	-2.38	27176.220	1.0	49477.040	2.0
448.2948	9.02	-1.01	444489.400	2.5	466789.890	1.5
448.3013	9.02	-1.55	444489.400	2.5	466789.570	2.5
448.3037	23.00	-4.85	14514.750	1.5	36814.800	1.5
448.3190	27.00	-4.61	33150.680	1.5	55449.970	2.5
448.3196	10.00	-3.04	148257.790	1.0	170557.050	1.0
448.3330	64.01	-.70	8469.040	0.0	30773.889	0.0
448.3439	16.01	-.15	128233.070	2.5	150531.120	1.5
448.3487	23.01	-2.19	32420.040	0.0	54717.850	1.0
448.3491	9.02	-.69	469241.410	5.5	491539.200	5.5
448.3491	9.02	1.16	469241.410	5.5	491539.200	6.5
448.3578	24.00	-2.50	35870.530	4.0	58167.890	4.0
448.3588	27.00	-.64	28845.220	5.5	51142.530	6.5
448.3666	27.00	-4.99	13795.520	2.5	36092.440	2.5
448.3689	15.01	-1.69	105303.190	1.0	127600.000	1.0
448.3717	24.00	-1.27	27223.050	2.0	49519.720	3.0
448.3735	28.01	-3.22	99844.130	3.5	122140.710	4.5
448.3788	26.00	-2.49	29371.860	3.0	51668.175	4.0
448.3900	58.01	-.14	6936.547	0.0	29238.561	0.0
448.3922	27.00	-.98	25232.790	.5	47528.440	.5
448.3944	9.02	1.08	469243.660	4.5	491539.200	5.5
448.3958	27.00	-3.53	32654.500	2.5	54949.970	1.5
448.4071	23.00	-4.16	15664.750	1.5	37959.660	2.5
448.4190	74.00	-1.83	1613.150	0.0	23913.722	0.0
448.4215	26.00	-.91	29056.312	3.0	51350.505	4.0
448.4338	27.00	-4.51	14036.280	1.5	36329.860	2.5
448.4366	25.01	-4.03	83875.460	4.0	106168.900	5.0
448.4403	20.02	-.48	328606.780	2.0	350900.040	2.0
448.4484	28.00	-2.74	29013.228	2.0	51306.085	3.0
448.4500	22.00	-2.65	19421.576	3.0	41714.350	2.0
448.4501	27.00	-3.86	7442.410	3.5	29735.180	3.5
448.4543	22.00	-.24	17369.590	1.0	39662.150	1.0
448.4575	27.00	-3.55	32654.500	2.5	54946.900	2.5
448.4592	24.00	-.71	24897.550	4.0	47189.870	4.0
448.4636	17.01	-1.17	127726.900	1.0	150019.000	0.0
448.4676	28.01	-4.80	113172.960	4.5	135464.860	3.5
448.4688	24.00	-1.34	24833.860	3.0	47125.700	3.0
448.4740	22.00	-1.36	17423.853	2.0	39715.437	3.0
448.4760	76.00	-1.42	10082.190	0.0	32379.927	0.0
448.4769	25.01	-4.43	65567.070	2.0	87858.510	2.0
448.4928	26.01	-7.91	16369.390	3.5	38660.040	3.5
448.4948	20.02	-.24	325467.670	2.0	347758.220	2.0
448.4970	42.00	-.62	16615.449	0.0	38912.142	0.0
448.5046	22.00	-1.87	16817.190	1.0	39107.250	1.0
448.5150	63.01	-.34	26697.639	0.0	48993.437	0.0
448.5206	9.02	-4.59	469119.520	2.5	491408.790	3.5
448.5312	25.01	-4.56	83875.460	4.0	106164.200	4.0
448.5358	25.02	-2.61	172682.640	3.5	194971.150	2.5
448.5473	23.01	-3.61	50738.820	1.0	73026.760	2.0
448.5480	64.00	-1.81	483.945	0.0	22778.103	0.0
448.5489	29.01	-4.07	114511.440	1.0	136799.300	2.0
448.5520	58.01	-.95	7823.779	0.0	30117.738	0.0
448.5539	25.00	-1.76	38669.600	3.5	60957.210	3.5
448.5576	26.02	-3.35	114325.350	5.0	136612.780	4.0
448.5612	28.01	-3.53	113177.610	3.5	135464.860	3.5
448.5652	24.01	-2.88	67334.200	3.5	89621.250	3.5
448.5654	8.01	-2.02	238892.960	2.5	261180.000	3.5
448.5665	26.00	-1.08	29732.721	1.0	52019.706	1.0
448.5670	26.00	-4.31	21038.987	2.0	43325.946	3.0
448.5684	23.00	-3.36	17054.870	2.5	39341.760	3.5
448.5780	90.01	-1.66	10566.135	0.0	32858.802	0.0
448.5950	60.01	-2.27	2984.328	0.0	25276.150	0.0
448.5958	24.00	-3.17	31355.210	2.0	53640.740	3.0
448.5959	26.00	-4.31	29469.010	2.0	51754.534	1.0
448.5988	25.01	-4.56	82735.290	2.0	105020.670	1.0
448.5988	26.01	-2.35	64425.460	2.5	86710.840	1.5
448.5990	24.01	-4.85	68305.730	1.5	90591.100	2.5
448.6060	57.00	-.65	7420.492	0.0	29711.768	0.0
448.6084	17.01	-2.01	139350.000	1.0	161634.900	2.0
448.6107	25.02	-2.52	193235.430	2.5	215520.220	2.5
448.6130	72.01	-1.49	12017.970	0.0	34308.898	0.0
448.6157	23.01	-4.19	17910.980	4.0	40195.520	3.0
448.6198	28.01	-2.80	99040.750	1.5	121325.090	2.5
448.6228	23.00	-2.09	15000.840	5.5	37285.030	4.5
448.6278	28.01	-4.15	113177.610	3.5	135461.550	2.5
448.6350	64.01	.01	18551.230	0.0	40841.065	0.0
448.6369	24.00	-1.92	35884.400	5.0	58167.890	4.0
448.6659	22.00	-3.19	25926.820	4.0	48208.870	3.0
448.6670	16.01	-.54	127976.210	1.5	150258.200	.5
448.6695	26.02	-1.69	182810.660	5.0	205092.530	4.0
448.6703	24.00	-2.25	37205.880	3.0	59487.710	4.0
448.6755	24.01	-3.27	66355.130	1.5	88636.700	1.5
448.6793	9.01	-.34	266360.600	1.0	288641.980	0.0
448.6880	26.02	-3.84	196881.470	7.0	219162.420	6.0
448.6888	25.02	-4.35	172613.870	2.5	194894.780	1.5
448.6900	64.00	-.64	1693.808	0.0	23980.910	0.0
448.6900	90.00	-2.01	2500.383	0.0	24787.485	0.0
448.6910	58.01	-.62	2339.068	0.0	24626.121	0.0
448.6926	9.02	-2.24	444575.350	2.5	466856.070	3.5
448.6930	25.01	-4.91	82774.730	1.0	105055.430	2.0
448.6930	9.02	-2.72	444575.350	2.5	466856.050	2.5
448.6995	26.00	-2.49	31686.342	2.0	53966.720	2.0
448.7021	9.01	-.28	266360.600	1.0	288640.850	1.0
448.7050	42.00	-.18	22100.161	0.0	44386.518	0.0
448.7106	25.02	-3.93	172569.270	1.5	194849.100	1.5
448.7280	39.00	-.69	10969.423	0.0	33254.638	0.0
448.7378	28.01	-4.26	112686.300	2.5	134964.780	1.5
448.7408	20.02	-2.55	371274.480	2.0	393552.810	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
448.7426	28.01	-3.78	105588.890	4.5	127867.130	4.5
448.7460	5.02	.95	244139.000	0.0	266423.321	0.0
448.7470	39.00	-.28	10888.765	0.0	33173.037	0.0
448.7474	12.02	-1.33	584563.900	3.0	606841.900	2.0
448.7474	12.02	-.03	584563.900	3.0	606841.900	3.0
448.7500	90.01	-2.04	4113.534	0.0	26397.657	0.0
448.7547	9.02	-4.59	443913.330	4.5	466190.470	3.5
448.7563	9.02	-1.05	444578.510	4.5	466856.070	3.5
448.7648	9.02	-4.31	443913.330	4.5	466190.470	4.5
448.7688	14.00	-2.22	39955.053	2.0	62231.990	2.0
448.7718	8.01	.11	253789.510	.5	276066.300	1.5
448.7741	26.00	-3.27	26105.908	6.0	48382.585	5.0
448.7795	24.00	-2.16	31364.330	3.0	53640.740	3.0
448.7795	26.02	-4.77	196886.010	6.0	219162.420	6.0
448.7820	59.01	-2.59	403.288	0.0	22685.822	0.0
448.7851	29.01	-3.43	115662.770	4.0	137938.900	4.0
448.7936	27.00	-2.63	28777.270	3.5	51052.980	3.5
448.8007	22.00	-4.03	26564.385	3.0	48839.740	3.0
448.8040	24.00	-1.41	24093.160	2.0	46368.350	3.0
448.8093	24.00	-3.20	33934.880	3.0	56209.810	3.0
448.8094	10.00	-2.35	148257.790	1.0	170532.717	2.0
448.8095	7.01	-2.41	166582.450	2.0	188857.370	2.0
448.8123	29.01	-4.46	115639.020	2.0	137913.800	1.0
448.8194	8.01	-.60	253791.870	1.5	276066.300	1.5
448.8194	8.01	.37	253791.870	1.5	276066.300	2.5
448.8248	24.00	-1.36	33935.650	2.0	56209.810	3.0
448.8250	79.00	-.31	45329.526	0.0	67609.925	0.0
448.8260	23.00	-3.24	17116.920	3.5	39391.020	4.5
448.8266	22.00	-1.78	16875.190	2.0	39149.260	2.0
448.8274	23.00	-2.28	14548.830	2.5	36822.860	3.5
448.8328	22.01	-.62	25193.040	2.5	47466.800	3.5
448.8383	24.01	-3.11	66649.710	1.5	88923.200	2.5
448.8385	7.00	-3.58	93581.520	.5	115855.000	.5
448.8385	7.00	-3.89	93581.520	.5	115855.000	1.5
448.8387	9.01	-1.19	266360.600	1.0	288634.070	2.0
448.8390	44.00	-1.35	8711.012	0.0	30990.716	0.0
448.8400	64.01	-.94	10808.108	0.0	33087.762	0.0
448.8437	24.00	-4.36	42438.820	2.0	64712.040	3.0
448.8516	26.02	-4.18	114339.950	4.0	136612.780	4.0
448.8573	20.02	-1.64	340748.720	2.0	363021.270	2.0
448.8600	76.00	-2.83	2661.698	0.0	24940.359	0.0
448.8680	90.01	-2.22	1774.465	0.0	24052.729	0.0
448.8810	58.01	-1.13	8711.012	0.0	30988.631	0.0
448.8817	14.00	-3.55	39955.053	2.0	62226.390	1.0
448.8894	26.00	-2.12	29469.010	2.0	51739.964	2.0
448.8913	23.00	-1.41	15688.800	2.5	37959.660	2.5
448.8913	23.00	-.85	14910.040	3.5	37180.900	4.5
448.8925	12.02	-.20	584571.100	2.0	606841.900	2.0
448.8925	12.02	-1.11	584571.100	2.0	606841.900	3.0
448.8928	26.00	-3.88	20641.110	4.0	42911.897	5.0
448.8934	9.02	.97	444623.120	3.5	466893.680	4.5
448.8980	56.00	-.05	13514.000	0.0	35790.776	0.0
448.8992	9.01	-.32	266360.600	1.0	288631.070	1.0
448.9000	42.00	-.43	23551.996	0.0	45828.672	0.0
448.9094	22.00	-.10	14028.470	2.0	36298.430	1.0
448.9107	17.02	-2.54	179495.200	2.5	201765.100	2.5
448.9123	24.01	-4.14	32355.940	3.5	54625.760	2.5
448.9147	27.01	-3.13	28111.900	2.0	50381.600	3.0
448.9171	26.01	-3.50	22810.330	3.5	45079.910	2.5
448.9180	20.01	-2.45	68056.910	3.5	90326.450	3.5
448.9180	20.01	-.90	68056.910	3.5	90326.450	4.5
448.9180	20.01	-1.02	68056.910	2.5	90326.450	3.5
448.9213	25.00	-1.67	38669.600	3.5	60938.970	4.5
448.9230	18.01	-2.23	183985.940	1.5	206255.230	2.5
448.9242	26.02	-4.67	200504.990	3.0	222774.220	2.0
448.9270	24.00	-4.50	31106.370	4.0	53375.460	4.0
448.9285	8.01	-.05	233544.090	1.5	255813.100	2.5
448.9379	27.00	-2.72	26450.020	2.5	48718.570	2.5
448.9441	24.00	-.30	28682.180	2.0	50950.420	3.0
448.9449	28.01	-1.46	113225.060	.5	135493.260	1.5
448.9467	8.01	-.98	233544.090	1.5	255812.200	1.5
448.9493	9.01	-.08	266360.600	1.0	288628.580	2.0
448.9560	24.01	-3.06	67353.600	4.5	89621.250	3.5
448.9604	9.02	-1.52	444623.120	3.5	466890.550	4.5
448.9647	24.01	-3.79	67070.480	1.5	89337.700	1.5
448.9650	9.02	-.24	444623.120	3.5	466890.320	3.5
448.9710	69.01	-1.88	8711.012	0.0	30984.165	0.0
448.9719	28.01	-2.77	113177.610	3.5	135444.470	3.5
448.9742	26.00	-3.98	978.076	0.0	23244.826	1.0
448.9834	9.02	-2.91	444202.700	5.5	466468.990	4.5
448.9844	27.00	-1.67	29294.520	3.5	51560.760	2.5
448.9892	13.01	-1.84	125866.700	1.0	148132.700	2.0
448.9899	23.00	-2.93	14548.830	2.5	36814.800	1.5
448.9921	9.02	.-.62	444202.700	5.5	466468.560	5.5
448.9948	22.00	-1.37	18037.225	4.0	40302.950	3.0
449.0002	23.00	-2.71	15264.830	5.5	37530.290	5.5
449.0020	62.00	-1.20	3064.986	0.0	25336.602	0.0
449.0049	28.00	-1.44	28569.210	2.0	50834.435	2.0
449.0087	26.00	-3.69	24335.764	2.0	46600.800	1.0
449.0090	25.00	-.69	23818.870	.5	46083.890	1.5
449.0096	27.00	-1.36	28777.270	3.5	51042.260	2.5
449.0167	23.00	-1.88	14910.040	3.5	37174.680	3.5
449.0190	42.00	-.56	20003.065	0.0	42273.838	0.0
449.0238	26.00	-4.00	23244.826	1.0	45509.112	1.0
449.0240	44.00	-1.64	7985.094	0.0	30255.619	0.0
449.0294	27.00	-2.21	25937.590	4.5	48201.600	3.5
449.0385	9.02	-3.70	443927.410	3.5	466190.970	3.5
449.0398	22.00	-4.83	26772.965	5.0	49036.460	4.0
449.0403	25.01	-4.80	44745.460	2.0	67008.930	3.0
449.0447	27.00	-3.05	21920.090	4.5	44183.340	4.5
449.0482	23.00	-1.76	15571.900	2.5	37834.980	1.5
449.0500	26.00	-4.65	20874.482	3.0	43137.472	3.0
449.0525	28.00	-1.44	33610.916	2.0	55873.780	2.0
449.0532	28.00	-1.60	28569.210	2.0	50832.039	3.0
449.0538	23.00	-7.64	10892.500	3.5	33155.300	4.5
449.0542	24.00	-1.74	31377.960	4.0	53640.740	3.0
449.0578	12.02	-1.05	584628.500	2.0	606891.100	3.0
449.0599	26.01	-2.80	78487.250	1.5	100749.750	2.5
449.0631	28.01	-4.31	96052.480	2.5	118314.820	2.5
449.0639	28.01	-3.78	113172.960	4.5	135435.260	4.5
449.0650	22.00	-.10	17423.853	2.0	39686.100	2.0
449.0652	28.00	-1.44	31441.665	2.0	53703.899	1.0
449.0655	22.00	-3.13	25797.600	3.0	48059.820	3.0
449.0744	28.01	-2.40	113408.710	1.5	135670.490	.5
449.0748	26.00	-2.02	31805.059	3.0	54066.821	2.0
449.0790	23.00	-1.41	14949.300	4.5	37210.850	5.5
449.0798	26.00	-1.82	31805.059	3.0	54066.570	4.0
449.0840	92.01	-1.96	1693.808	0.0	23961.357	0.0
449.0905	26.02	-3.71	200504.990	3.0	222765.970	4.0
449.0929	26.02	-3.86	114351.920	3.0	136612.780	4.0
449.0970	14.02	-3.73	204828.060	3.0	227088.720	3.0
449.0986	18.01	-1.73	151087.250	2.5	173347.880	1.5
449.1002	27.01	-4.74	63616.000	2.0	85876.500	1.0
449.1006	7.00	-3.98	93581.520	.5	115842.000	.5
449.1006	7.00	-3.49	93581.520	.5	115842.000	1.5
449.1032	17.00	-2.73	74225.846	1.5	96486.198	1.5
449.1172	23.00	-2.32	11100.650	4.5	33360.310	3.5
449.1246	22.00	-2.79	25926.820	4.0	48186.110	4.0
449.1279	27.00	-2.03	30443.630	1.5	52702.760	1.5
449.1280	42.00	-.23	18147.942	0.0	40413.310	0.0
449.1361	24.01	-4.94	42898.120	2.5	65156.840	2.5
449.1385	22.00	-4.82	18911.399	2.0	41170.003	3.0
449.1398	26.01	-2.89	23031.300	1.5	45289.840	1.5
449.1416	18.01	-3.37	157673.320	2.5	179931.770	1.5
449.1470	23.00	-1.73	15103.770	4.5	37361.950	4.5
449.1549	25.02	-2.41	172855.020	4.5	195112.810	3.5
449.1560	40.00	-2.06	4113.534	0.0	26477.514	0.0
449.1603	25.01	-4.46	83912.380	5.0	106169.900	6.0
449.1648	25.00	-3.93	41031.480	4.5	63288.780	3.5
449.1648	25.00	-1.08	41031.480	4.5	63288.780	5.5
449.1660	42.00	.33	33714.843	0.0	55978.327	0.0
449.1680	44.00	-1.02	13873.093	0.0	36136.478	0.0
449.1700	17.00	-2.73	74225.846	1.5	96482.889	2.5
449.1702	24.00	-2.42	23386.350	3.0	45643.380	3.0
449.1750	39.00	-1.20	11453.368	0.0	33716.406	0.0
449.1770	10.00	-2.68	149824.221	2.0	172080.916	1.0
449.1799	27.00	-4.79	32733.070	3.5	54989.620	3.5
449.1805	25.01	-4.75	83912.380	5.0	106168.900	5.0
449.1825	27.00	-4.75	33150.680	1.5	55407.100	1.5
449.1842	24.00	-1.97	24093.160	2.0	46349.500	2.0
449.1880	14.02	-2.87	204828.060	3.0	227084.210	2.0
449.1931	17.02	-4.40	179076.100	1.5	201332.000	1.5
449.2066	27.00	-3.87	32027.500	3.5	54282.730	2.5
449.2068	27.00	-2.08	25269.250	3.5	47524.470	4.5
449.2090	15.01	-3.60	101636.490	1.0	123891.600	2.0
449.2240	90.01	-1.45	12340.601	0.0	34601.210	0.0
449.2271	24.00	-1.31	37233.500	5.0	59487.710	4.0
449.2302	23.00	-2.84	8578.520	2.5	30832.580	2.5
449.2306	16.01	-1.13	131028.760	1.5	153282.800	2.5
449.2315	28.00	-3.03	28578.046	3.0	50832.039	3.0
449.2316	24.00	-.45	27223.050	2.0	49477.040	1.0
449.2316	24.00	-2.75	27223.050	2.0	49477.040	2.0
449.2330	74.00	-1.09	17018.737	0.0	39278.900	0.0
449.2355	8.02	-2.19	370524.200	2.0	392778.000	1.0
449.2387	20.02	-2.96	343110.240	0.0	365363.880	1.0
449.2420	39.00	-1.30	11292.053	0.0	33551.770	0.0
449.2430	59.01	-1.93	3387.616	0.0	25647.284	0.0
449.2457	26.02	-4.31	200504.990	3.0	222758.280	2.0
449.2470	45.00	-1.87	9114.300	0.0	31373.770	0.0
449.2477	22.01	-4.94	39926.830	2.5	62180.020	1.5
449.2485	24.00	-2.94	28637.000	3.0	50890.150	2.0
449.2524	22.00	-1.59	16961.420	3.0	39214.380	3.0
449.2538	23.00	-2.21	15062.940	6.5	37315.830	5.5
449.2653	27.00	-4.41	32430.590	5.5	54682.910	4.5
449.2681	26.00	-2.16	32133.977	2.0	54386.160	1.0
449.2720	28.01	-1.73	91800.050	4.5	114052.040	3.5
449.2793	18.01	-4.13	186340.480	1.5	208592.110	.5
449.2817	26.02	-3.43	200514.460	4.0	222765.970	4.0
449.2859	18.01	-3.61	186340.480	1.5	208591.780	1.5
449.2861	23.01	-2.04	50775.470	2.0	73026.760	2.0
449.2950	58.01	-1.32	7259.177	0.0	29516.269	0.0
449.2960	41.01	-.14	20890.298	0.0	43147.340	0.0
449.3023	27.00	-2.53	32654.500	2.5	54904.990	2.5
449.3110	57.00	-1.44	1048.548	0.0	23304.847	0.0
449.3228	10.01	-4.66	306899.330	2.5	329148.800	1.5
449.3254	10.01	-3.65	306899.330	2.5	329148.670	2.5
449.3279	22.00	-3.93	19573.968	4.0	41823.190	3.0
449.3330	90.00	-1.50	0.000	0.0	22255.209	0.0
449.3363	26.00	-2.76	28819.966	5.0	51068.770	5.0
449.3392	23.00	-2.32	14514.750	1.5	36763.410	2.5
449.3430	24.00	-1.34	33906.650	1.0	56155.120	2.0
449.3445	29.01	-3.34	115665.400	1.0	137913.800	1.0
449.3447	24.01	-4.54	68477.110	4.5	90725.500	3.5
449.3479	22.01	-3.62	8710.470	1.5	30958.700	2.5
449.3574	26.01	-1.54	63876.380	5.5	86124.140	4.5
449.3640	56.00	-.26	13514.000	0.0	35767.674	0.0
449.3692	10.00	-2.96	149824.221	2.0	172071.396	2.0
449.3717	24.00	-.36	42589.250	5.0	64836.300	6.0
449.3906	26.00	-2.57	31322.603	3.0	53568.720	2.0
449.3970	25.00	-4.74	35114.980	2.5	57360.780	1.5
449.3970	74.00	-.62	19115.832	0.0	41367.872	0.0
449.4006	28.01	-2.95	113407.310	2.5	135652.930	1.5
449.4008	23.00	-2.45	17054.870	2.5	39300.480	2.5
449.4038	26.00	-1.89	32133.977	2.0	54379.440	3.0
449.4083	25.02	-2.42	173063.550	5.5	195308.790	4.5
449.4083	26.02	-3.62	200504.990	3.0	222750.230	3.0
449.4180	11.00	-1.82	16956.172	.5	39200.930	1.5
449.4186	22.00	-2.39	19573.968	4.0	41818.700	4.0
449.4220	58.01	-.91	6291.287	0.0	28542.089	0.0
449.4289	28.01	-3.28	113408.710	1.5	135652.930	1.5
449.4358	24.01	-4.96	53566.220	3.5	75810.100	4.5
449.4390	24.00	-4.99	27223.050	2.0	49466.770	2.0
449.4420	40.01	-.01	19277.147	0.0	41526.959	0.0
449.4426	24.00	-1.28	37244.170	4.0	59487.710	4.0
449.4462	26.00	-2.83	23783.617	5.0	46026.980	6.0
449.4475	25.01	-3.84	59537.400	4.0	81780.700	3.0
449.4510	74.00	-.57	19115.832	0.0	41365.198	0.0
449.4567	26.00	-1.07	17726.985	2.0	39969.830	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
449.4570	41.00	-1.52	5887.999	0.0	28137.068	0.0
449.4647	28.01	-4.26	99844.130	3.5	122086.580	3.5
449.4710	57.00	-1.25	2581.041	0.0	24829.417	0.0
449.4723	27.00	-3.22	32654.500	2.5	54896.570	3.5
449.4750	27.00	-.65	28470.510	1.5	50712.450	2.5
449.4808	23.00	-3.42	9544.540	.5	31786.190	.5
449.4938	28.01	-4.25	99559.330	2.5	121800.340	1.5
449.4940	40.00	-.74	14921.641	0.0	37168.879	0.0
449.4994	26.02	-4.19	183431.280	5.0	205672.010	4.0
449.5000	7.03	-.77	465301.000	0.0	487547.941	0.0
449.5041	24.00	-2.61	23933.900	4.0	46174.400	3.0
449.5077	9.02	.89	444578.510	4.5	466818.830	5.5
449.5140	62.01	-2.69	2661.698	0.0	24907.946	0.0
449.5213	23.00	-4.12	19189.280	1.5	41428.930	2.5
449.5229	26.01	-4.86	62945.120	3.5	85184.690	4.5
449.5239	9.02	-3.82	444238.270	4.5	466477.790	3.5
449.5300	74.00	-1.34	15002.299	0.0	37247.755	0.0
449.5308	22.00	-1.01	18145.400	2.0	40384.580	1.0
449.5336	29.01	-3.12	116643.960	3.0	138883.000	4.0
449.5350	77.00	.20	32908.268	0.0	55153.477	0.0
449.5361	26.00	-3.10	31686.342	2.0	53925.260	1.0
449.5390	58.01	-1.12	4920.109	0.0	27165.120	0.0
449.5397	26.00	-3.65	23270.374	0.0	45509.112	1.0
449.5415	26.00	-2.16	31307.235	4.0	53545.882	3.0
449.5427	28.01	-3.61	100609.010	2.5	122847.600	3.5
449.5455	22.01	-3.69	9518.050	2.5	31756.500	1.5
449.5486	22.00	-.84	17423.853	2.0	39662.150	1.0
449.5518	26.01	-4.42	38164.240	2.5	60402.380	2.5
449.5556	26.00	-2.50	29056.312	3.0	51294.262	3.0
449.5593	25.02	-4.60	193235.430	2.5	215473.200	1.5
449.5649	9.02	-3.00	444552.080	3.5	466789.570	2.5
449.5702	24.00	-.46	42564.850	4.0	64802.080	5.0
449.5837	28.01	-4.11	114052.040	3.5	136288.600	2.5
449.5896	16.01	-1.45	129858.070	1.5	152094.340	2.5
449.5926	28.01	-3.91	99844.130	3.5	122080.250	2.5
449.5942	26.00	-3.28	29469.010	2.0	51705.052	2.0
449.5993	20.02	-1.64	324660.470	3.0	346896.260	2.0
449.5997	26.02	-3.74	200514.460	4.0	222750.230	3.0
449.6030	77.00	.07	33956.816	0.0	56198.660	0.0
449.6064	23.00	-.91	15724.220	3.5	37959.660	2.5
449.6106	25.02	-3.86	172613.870	2.5	194849.100	1.5
449.6155	22.00	-.08	14105.680	3.0	36340.670	2.0
449.6174	20.00	-2.26	23652.304	1.0	45887.200	0.0
449.6230	58.01	-.66	8307.725	0.0	30548.580	0.0
449.6242	22.00	-2.55	170.132	3.0	22404.690	3.0
449.6246	10.01	-.39	280700.770	3.5	302935.310	4.5
449.6254	23.03	-.41	263822.400	4.0	286056.900	3.0
449.6271	26.00	-4.53	20874.482	3.0	43108.899	4.0
449.6365	24.01	-4.03	67387.300	2.5	89621.250	3.5
449.6430	59.01	-1.01	403.288	0.0	22643.154	0.0
449.6430	75.00	-1.31	19599.777	0.0	41839.643	0.0
449.6433	14.00	-3.01	40991.884	1.0	63225.500	2.0
449.6500	73.00	-2.87	1935.780	0.0	24175.300	0.0
449.6517	25.00	-3.23	38669.600	3.5	60902.800	3.5
449.6568	9.02	-3.12	444623.120	3.5	466856.070	3.5
449.6572	9.02	-4.26	444623.120	3.5	466856.050	2.5
449.6626	25.00	-.82	37420.240	5.5	59652.900	5.5
449.6747	22.00	-2.18	16875.190	2.0	39107.250	1.0
449.6749	27.00	-3.71	18389.570	1.5	40621.620	1.5
449.6826	25.00	-1.86	37586.030	1.5	59817.700	2.5
449.6840	23.00	-2.14	14949.300	4.5	37180.900	4.5
449.6842	24.00	-1.31	7593.160	2.0	29824.750	3.0
449.6911	27.00	-2.13	32027.500	3.5	54258.750	2.5
449.6970	40.01	-1.13	5726.684	0.0	27963.879	0.0
449.6976	25.01	-.92	85895.270	2.0	108126.200	3.0
449.7018	9.02	-1.00	444238.270	4.5	466468.990	4.5
449.7061	22.00	-3.75	26494.322	2.0	48724.830	1.0
449.7065	24.00	-.52	42605.810	6.0	64836.300	6.0
449.7083	13.01	-2.27	125866.700	1.0	148097.100	0.0
449.7089	9.01	-1.65	266453.880	2.0	288684.250	2.0
449.7105	9.02	-.92	444238.270	4.5	466468.560	5.5
449.7130	64.00	-.49	967.890	0.0	23204.294	0.0
449.7160	22.00	-3.80	26494.322	2.0	48724.340	2.0
449.7250	41.00	-1.57	8711.012	0.0	30946.823	0.0
449.7251	24.00	-4.93	30965.460	3.0	53195.030	2.0
449.7297	26.02	-4.10	200504.990	3.0	222734.330	4.0
449.7427	12.02	.92	584687.900	3.0	606916.600	4.0
449.7500	23.00	-4.67	15270.420	1.5	37498.760	2.5
449.7508	27.01	-3.05	27469.200	5.0	49697.500	4.0
449.7534	25.01	-2.89	48317.850	4.0	70546.020	4.0
449.7538	24.00	-3.31	24897.550	4.0	47125.700	3.0
449.7563	26.01	-4.76	60625.470	5.5	82853.500	5.5
449.7583	25.02	-3.54	121117.140	3.5	143345.070	3.5
449.7627	28.01	-4.69	113172.960	4.5	135400.670	3.5
449.7657	11.00	-1.56	16973.368	1.5	39200.930	2.5
449.7657	11.00	-2.52	16973.368	1.5	39200.930	1.5
449.7678	8.01	-2.23	238731.540	1.5	260959.000	1.5
449.7690	12.02	-.64	584689.200	4.0	606916.600	4.0
449.7690	12.02	1.02	584689.200	4.0	606916.600	5.0
449.7761	22.00	-1.38	17075.310	4.0	39302.360	4.0
449.7840	16.01	-.85	131186.860	2.5	153413.520	3.5
449.7850	58.01	-.49	7662.464	0.0	29895.309	0.0
449.7933	25.01	-2.67	43528.300	5.0	65754.500	6.0
449.8074	17.01	-2.12	127726.900	1.0	149952.400	1.0
449.8099	23.00	-1.94	14949.300	4.5	37174.680	3.5
449.8140	44.00	-.71	9033.642	0.0	31265.053	0.0
449.8176	17.02	-4.16	217850.200	2.5	240075.200	3.5
449.8208	23.00	-2.45	17116.920	3.5	39341.760	3.5
449.8280	64.01	-1.43	3387.616	0.0	25618.335	0.0
449.8323	28.01	-4.04	113753.040	4.5	135977.310	4.5
449.8439	29.01	-4.82	128558.900	3.0	150782.600	2.0
449.8453	25.01	-4.52	83933.770	3.0	106157.400	3.0
449.8470	74.00	-1.01	18873.860	0.0	41103.640	0.0
449.8516	28.01	-3.77	113407.310	2.5	135630.630	2.5
449.8520	13.01	-4.67	125866.700	1.0	148090.000	2.0
449.8524	26.00	-1.66	31322.603	3.0	53545.882	3.0
449.8542	18.01	-1.51	174409.830	1.5	196633.020	2.5
449.8568	28.01	-3.16	113177.610	3.5	135400.670	3.5
449.8583	10.01	-1.79	301948.000	1.5	324170.990	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
449.8617	25.02	-1.57	195752.480	2.5	217975.300	2.5
449.8718	24.00	-.82	23512.000	1.0	45734.320	2.0
449.8760	78.00	.17	30004.597	0.0	52232.944	0.0
449.8765	28.01	-3.61	113407.310	2.5	135629.400	3.5
449.8799	28.01	-4.43	113408.710	1.5	135630.630	2.5
449.8817	26.00	-4.12	34636.820	2.0	56858.650	2.0
449.8850	71.00	-2.99	0.000	0.0	22227.903	0.0
449.8863	28.00	-2.46	29084.478	4.0	51306.085	3.0
449.8902	25.00	-.53	23719.520	1.5	45940.930	2.5
449.8925	10.01	-.17	280768.520	.5	302989.820	1.5
449.8941	25.01	-4.36	48435.960	6.0	70657.180	5.0
449.8960	90.00	-1.00	5484.711	0.0	27712.070	0.0
449.8990	10.00	-3.14	151038.452	1.0	173259.430	1.0
449.9052	26.02	-3.61	200524.120	5.0	222744.790	5.0
449.9110	62.00	-.26	1451.835	0.0	23678.453	0.0
449.9117	10.01	-.07	280768.520	.5	302988.870	.5
449.9182	25.01	-4.04	53698.700	2.0	75918.730	2.0
449.9190	28.01	-4.80	100592.980	3.5	122812.970	3.5
449.9214	26.02	-4.70	200514.460	4.0	222734.330	4.0
449.9243	15.01	.47	107923.570	2.0	130143.300	3.0
449.9245	16.02	-1.48	147550.320	1.0	169770.040	1.0
449.9253	27.00	-4.78	21215.900	.5	43435.580	.5
449.9295	24.00	-2.46	33935.650	2.0	56155.120	2.0
449.9295	24.00	-2.51	32097.360	6.0	54316.830	6.0
449.9309	26.01	-3.56	62829.160	.5	85048.560	1.5
449.9313	27.01	-4.16	25317.720	1.0	47537.100	2.0
449.9400	5.03	-.94	635801.000	0.0	658026.186	0.0
449.9440	42.00	-.85	18389.915	0.0	40614.903	0.0
449.9480	62.01	-1.58	1935.780	0.0	24160.570	0.0
449.9581	9.02	-3.80	444057.440	1.5	466275.500	2.5
449.9623	25.01	-1.88	85952.600	3.0	108170.450	2.0
449.9650	72.00	-1.99	6533.259	0.0	28757.210	0.0
449.9738	22.00	-3.98	15108.121	3.0	37325.407	2.0
449.9784	10.01	-1.45	291801.880	1.5	314018.940	.5
449.9800	41.00	-.56	12017.970	0.0	34241.180	0.0
449.9835	10.00	-3.45	151038.452	1.0	173255.260	0.0
449.9885	20.02	.80	328588.760	3.0	350605.320	4.0
449.9941	28.01	-4.47	113407.310	2.5	135623.590	1.5
450.0059	28.01	-4.69	107082.210	2.5	129297.910	3.5
450.0103	25.02	-.54	195592.090	1.5	217807.570	1.5
450.0116	9.02	-3.33	444202.700	5.5	466418.120	4.5
450.0136	26.02	-1.93	183456.690	3.0	205672.010	4.0
450.0220	57.00	-.28	7581.807	0.0	29802.943	0.0
450.0225	28.01	-4.48	113408.710	1.5	135623.590	1.5
450.0229	26.02	-3.40	183457.150	4.0	205672.010	4.0
450.0278	24.00	-.40	24833.860	3.0	47048.480	3.0
450.0286	23.00	-3.29	14548.830	2.5	36763.410	2.5
450.0294	9.02	-4.77	444575.350	2.5	466789.890	1.5
450.0316	22.01	-3.19	8744.270	2.5	30958.700	2.5
450.0340	58.01	-.72	9678.902	0.0	31899.445	0.0
450.0340	25.00	-1.54	41230.300	3.5	63444.610	4.5
450.0359	9.02	-.42	444575.350	2.5	466789.570	2.5
450.0438	27.00	-4.66	32733.070	3.5	54946.900	2.5
450.0482	24.00	-3.18	24833.860	3.0	47047.470	2.0
450.0498	26.01	-4.86	62083.170	4.5	84296.700	5.5
450.0553	27.00	-.91	29948.760	2.5	52162.020	3.5
450.0565	27.01	-2.81	27484.300	3.0	49697.500	4.0
450.0614	25.01	-2.30	48333.060	5.0	70546.020	4.0
450.0640	24.00	-1.08	42589.250	5.0	64802.080	5.0
450.0685	24.00	-.62	42538.810	3.0	64751.420	4.0
450.0687	28.01	-4.51	113407.310	2.5	135619.910	1.5
450.0748	28.01	-1.87	107082.210	2.5	129294.510	2.5
450.0750	68.00	-1.86	0.000	0.0	22218.519	0.0
450.0796	23.00	-1.82	15103.770	4.5	37315.830	5.5
450.0829	25.01	-3.88	84307.200	4.0	106519.100	5.0
450.0853	23.01	-5.43	14461.730	3.0	36673.510	2.0
450.0863	23.00	-1.58	17054.870	2.5	39266.600	1.5
450.0867	8.01	-.23	233544.090	1.5	255755.800	2.5
450.0910	27.01	-4.98	63665.000	1.0	85876.500	1.0
450.0985	24.00	-1.48	37205.880	3.0	59417.010	3.0
450.1037	9.01	-2.76	266453.880	2.0	288664.750	3.0
450.1058	28.01	-4.56	113407.310	2.5	135618.080	2.5
450.1068	24.00	-.46	28679.430	1.0	50890.150	2.0
450.1094	24.00	-1.06	23512.000	1.0	45722.590	0.0
450.1110	26.01	-2.99	62962.260	1.5	85172.770	.5
450.1171	26.02	-3.44	200524.120	5.0	222734.330	4.0
450.1212	23.00	-2.40	15000.840	5.5	37210.850	5.5
450.1264	22.01	-.77	8997.690	3.5	31207.440	2.5
450.1274	9.01	-.45	266453.880	2.0	288663.580	2.0
450.1278	10.01	-1.20	301948.000	1.5	324157.680	2.5
450.1290	42.00	-.86	18228.600	0.0	40444.454	0.0
450.1321	25.01	-4.05	48317.850	4.0	70527.320	5.0
450.1329	10.01	-2.38	301948.000	1.5	324157.430	1.5
450.1368	26.01	-3.99	50142.930	2.5	72352.170	3.5
450.1380	62.01	-2.30	2661.698	0.0	24877.107	0.0
450.1408	23.00	-2.63	17181.980	4.5	39391.020	4.5
450.1427	23.02	-3.89	63315.050	3.5	85524.000	2.5
450.1436	12.02	-.03	584687.900	3.0	606896.800	3.0
450.1436	12.02	-1.46	584687.900	3.0	606896.800	4.0
450.1558	23.01	-3.34	50473.760	1.0	72682.060	2.0
450.1625	24.00	-1.42	28682.180	2.0	50890.150	2.0
450.1668	28.00	-2.41	29832.810	3.0	52040.568	2.0
450.1700	12.02	-1.46	584689.200	4.0	606896.800	3.0
450.1700	12.02	.09	584689.200	4.0	606896.800	4.0
450.1781	24.00	-1.20	23512.000	1.0	45719.200	1.0
450.1820	60.01	-1.46	1613.150	0.0	23826.388	0.0
450.1830	59.01	-2.08	3387.616	0.0	25600.805	0.0
450.1852	26.02	-3.90	196886.010	6.0	219092.860	5.0
450.1868	24.01	-4.33	68305.730	1.5	90512.500	1.5
450.1945	24.01	-4.36	52298.120	3.5	74504.510	4.5
450.1962	23.00	-.92	11100.650	4.5	33306.960	4.5
450.1984	12.02	-1.50	584628.500	2.0	606834.700	2.0
450.2045	23.03	-.64	263593.000	2.0	285798.900	2.0
450.2055	15.01	-1.38	105550.450	2.0	127756.300	2.0
450.2142	23.01	-4.35	44098.460	3.0	66303.880	3.0
450.2195	24.00	-4.48	24093.160	2.0	46298.320	1.0
450.2213	25.00	-.68	23549.200	2.5	45754.270	3.5
450.2587	26.00	-2.33	28819.966	5.0	51023.190	6.0
450.2600	28.01	-4.77	99844.130	3.5	122047.290	3.5

ORIGINAL PAGE IS
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WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
450.2633	30.02	-1.51	214357.000	1.0	236560.000	0.0
450.2639	28.01	-3.47	113753.040	4.5	135956.010	5.5
450.2657	10.01	-1.58	280700.770	3.5	302903.650	2.5
450.2795	12.02	-2.69	584628.500	2.0	606830.700	3.0
450.2797	28.01	-2.05	93390.060	2.5	115592.250	1.5
450.2897	23.03	-3.15	265019.700	1.0	287221.400	2.0
450.2929	18.01	-1.71	172829.580	1.5	195031.120	2.5
450.3040	41.00	-1.10	5242.739	0.0	27449.959	0.0
450.3047	24.01	-3.48	45669.540	1.5	67870.500	1.5
450.3091	18.01	-2.48	159393.310	1.5	181594.050	2.5
450.3126	23.01	-4.34	12545.150	4.0	34745.720	3.0
450.3136	23.01	-3.48	50473.760	1.0	72674.280	2.0
450.3199	23.00	-2.69	19189.280	1.5	41389.490	1.5
450.3219	9.01	-.61	266453.880	2.0	288653.990	3.0
450.3268	25.01	-2.32	48317.850	4.0	70517.720	3.0
450.3274	25.00	-3.17	37789.930	2.5	59989.770	1.5
450.3363	24.01	-4.16	67070.480	1.5	89269.880	.5
450.3373	18.01	-2.93	190732.970	.5	212932.320	1.5
450.3380	62.00	-.61	241.973	0.0	22447.516	0.0
450.3400	20.02	-2.39	360388.680	3.0	382587.900	4.0
450.3420	41.00	-.94	13066.518	0.0	35271.664	0.0
450.3467	7.01	-2.90	188857.370	2.0	211056.260	3.0
450.3544	24.01	-3.08	45669.540	1.5	67868.050	2.5
450.3546	27.01	-5.53	25147.200	4.0	47345.700	5.0
450.3780	45.00	-1.27	14679.669	0.0	36883.240	0.0
450.3781	22.00	-1.18	17215.440	5.0	39412.780	5.0
450.3790	64.00	-1.75	967.890	0.0	23171.412	0.0
450.3797	25.00	-.94	37630.620	4.5	59827.680	5.5
450.3874	25.00	-.38	37420.240	5.5	59617.120	6.5
450.3913	24.00	-.82	42515.350	2.0	64712.040	3.0
450.3931	25.02	-3.47	115711.600	4.5	137908.200	5.5
450.3943	22.01	-4.54	40074.710	3.5	62271.250	2.5
450.3998	24.00	-2.25	42605.810	6.0	64802.080	5.0
450.4045	24.01	-2.21	66727.160	2.5	88923.200	2.5
450.4094	9.02	-2.86	444057.440	1.5	466253.240	1.5
450.4108	25.00	-4.97	35165.050	1.5	57360.780	1.5
450.4221	26.00	-3.68	31937.308	1.0	54132.480	1.0
450.4345	26.01	-3.51	50157.610	4.5	72352.170	3.5
450.4406	25.01	-3.09	48333.060	5.0	70527.320	5.0
450.4453	23.00	-4.60	17054.870	2.5	39248.900	1.5
450.4518	28.01	-4.97	100619.260	4.5	122812.970	3.5
450.4550	24.01	-4.42	25033.950	3.5	47227.500	3.5
450.4643	27.00	-4.35	34352.420	1.5	56545.510	2.5
450.4751	10.01	-1.61	280797.260	2.5	302989.820	1.5
450.4821	26.00	-2.63	26339.682	2.0	48531.896	3.0
450.4860	74.00	-1.14	12098.628	0.0	34296.876	0.0
450.4900	42.00	.39	25810.406	0.0	48008.457	0.0
450.4926	27.02	-4.43	83773.400	1.5	105965.100	2.5
450.4995	28.01	-4.66	113753.040	4.5	135944.400	3.5
450.5047	17.01	-2.88	128621.900	1.0	150813.000	1.0
450.5050	62.01	-1.90	1935.780	0.0	24133.092	0.0
450.5070	27.00	-2.52	30443.630	1.5	52634.620	.5
450.5126	20.02	-.69	328588.760	3.0	350779.470	3.0
450.5149	23.03	-.41	263608.300	3.0	285798.900	2.0
450.5196	24.01	-4.74	45669.540	1.5	67859.910	.5
450.5220	90.00	-.91	8711.012	0.0	30907.486	0.0
450.5232	24.00	-.53	25038.610	5.0	47228.800	5.0
450.5234	26.02	-2.96	200524.120	5.0	222714.300	6.0
450.5370	28.01	-4.18	107082.210	2.5	129271.720	3.5
450.5405	24.00	-2.55	35398.020	4.0	57587.360	4.0
450.5508	24.00	-3.20	31352.420	1.0	53541.250	2.0
450.5709	22.00	-2.01	16961.420	3.0	39149.260	2.0
450.5860	21.00	-4.23	11520.150	1.5	33707.250	2.5
450.5864	23.00	-3.59	15270.420	1.5	37457.500	1.5
450.5886	9.01	-.82	266453.880	2.0	288640.850	1.0
450.5920	56.00	-.02	12636.000	0.0	34829.026	0.0
450.5931	14.00	-2.15	39955.053	2.0	62141.800	1.0
450.5950	39.00	-.04	10969.423	0.0	33162.301	0.0
450.5967	24.00	-1.75	42564.850	4.0	64751.420	4.0
450.6057	24.01	-4.21	52298.120	3.5	74484.250	2.5
450.6075	24.00	-2.23	31355.210	2.0	53541.250	2.0
450.6077	23.00	-4.09	14514.750	1.5	36700.780	2.5
450.6124	13.01	-4.83	125866.700	1.0	148052.500	1.0
450.6183	9.01	-1.13	266498.740	1.0	288684.250	2.0
450.6210	64.00	-.61	483.945	0.0	22675.543	0.0
450.6250	28.01	-3.74	112422.190	5.5	134607.370	4.5
450.6268	24.00	-2.60	24940.610	2.0	47125.700	3.0
450.6301	28.00	-1.52	28569.210	2.0	50754.137	2.0
450.6327	27.01	-4.91	24767.800	1.0	46452.600	2.0
450.6330	64.01	-1.45	3952.218	0.0	26143.225	0.0
450.6490	90.00	-1.44	7420.492	0.0	29610.711	0.0
450.6538	25.01	-4.64	44745.460	2.0	66929.220	2.0
450.6558	24.00	-2.78	25038.610	5.0	47222.270	6.0
450.6579	23.00	-1.48	17116.920	3.5	39300.480	2.5
450.6590	22.00	-3.13	19573.968	4.0	41757.470	3.0
450.6590	60.01	-1.91	483.945	0.0	22673.672	0.0
450.6607	25.01	-1.96	85989.120	2.0	108172.540	1.0
450.6650	24.01	-4.17	52321.300	4.5	74504.510	4.5
450.6670	42.00	.11	26455.667	0.0	48645.000	0.0
450.6703	21.00	-3.42	15672.550	1.5	37855.500	2.5
450.6739	22.01	-3.51	9118.150	4.5	31300.920	4.5
450.6827	24.00	.08	33762.740	6.0	55945.080	5.0
450.6828	22.00	-3.84	26657.409	4.0	48839.740	3.0
450.6930	64.01	-1.94	3387.616	0.0	25575.669	0.0
450.7024	29.01	-3.03	116080.460	3.0	138261.630	3.0
450.7032	25.01	-3.22	85989.120	2.0	108170.450	2.0
450.7040	75.00	.35	28714.077	0.0	50901.588	0.0
450.7046	23.00	-2.27	15103.770	4.5	37285.030	4.5
450.7062	25.01	-4.46	82839.490	0.0	105020.670	1.0
450.7120	40.00	-.74	4355.506	0.0	26542.623	0.0
450.7123	26.01	-2.34	62689.960	2.5	84870.640	2.5
450.7152	23.00	-1.29	14514.750	1.5	36695.490	.5
450.7152	9.01	.30	266453.880	2.0	288634.620	3.0
450.7172	23.00	-2.92	15571.900	2.5	37752.540	2.5
450.7194	26.02	-4.13	114351.920	3.0	136532.450	2.0
450.7209	24.01	-3.96	25047.040	2.5	47227.500	3.5
450.7225	26.00	-2.22	25091.620	0.0	47271.999	1.0
450.7229	23.00	-3.71	20789.130	2.5	42969.490	1.5
450.7233	9.02	-2.31	444238.270	4.5	466418.610	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
450.7264	9.01	-.13	266453.880	2.0	288634.070	2.0
450.7290	23.00	-4.33	15000.840	5.5	37180.900	4.5
450.7333	9.02	-2.20	444238.270	4.5	466418.120	4.5
450.7350	29.00	-.34	44926.239	0.0	67112.224	0.0
450.7385	25.01	-3.25	48317.850	4.0	70497.440	4.0
450.7560	7.01	-1.12	166678.640	3.0	188857.370	2.0
450.7592	22.00	-3.48	18141.229	5.0	40319.800	6.0
450.7715	24.00	-4.48	31106.370	4.0	53284.340	3.0
450.7845	20.00	-4.99	20349.260	2.0	42526.591	2.0
450.7874	9.01	-.67	266453.880	2.0	288631.070	1.0
450.7928	24.00	-1.88	31364.330	3.0	53541.250	2.0
450.7942	24.00	-2.68	36577.730	4.0	58754.580	5.0
450.8010	75.00	-.03	28714.077	0.0	50896.814	0.0
450.8019	22.00	-1.90	22404.690	3.0	44581.160	2.0
450.8080	58.01	-1.38	4920.109	0.0	27102.502	0.0
450.8082	24.00	-3.07	36552.130	3.0	58728.290	4.0
450.8097	28.00	-3.85	28578.046	3.0	50754.137	2.0
450.8130	10.01	-.13	281332.550	.5	303508.480	1.5
450.8131	28.01	-1.83	93390.060	2.5	115565.980	2.5
450.8204	7.01	-2.49	188857.370	2.0	211032.930	2.0
450.8240	28.00	-4.14	28569.210	2.0	50744.593	1.0
450.8257	26.01	-2.46	63948.840	4.5	86124.140	4.5
450.8269	9.01	-1.72	266453.880	2.0	288629.120	3.0
450.8270	28.01	-3.08	112422.190	5.5	134597.430	5.5
450.8271	22.00	.03	17540.205	3.0	39715.437	3.0
450.8276	29.01	-4.45	116643.960	3.0	138819.170	3.0
450.8280	26.01	-2.41	23031.300	1.5	45206.490	.5
450.8297	17.00	-2.25	72488.568	1.5	94663.670	1.5
450.8324	26.02	-2.67	200524.120	5.0	222699.090	5.0
450.8379	9.01	-.19	266453.880	2.0	288628.580	2.0
450.8410	41.00	-.66	12905.203	0.0	35085.972	0.0
450.8481	26.01	-3.03	64425.460	2.5	86599.660	2.5
450.8643	23.03	-.46	264113.100	4.0	286286.500	4.0
450.8670	27.00	-1.93	30742.650	.5	52915.920	.5
450.8678	24.00	-2.82	42538.810	3.0	64712.040	3.0
450.8733	16.01	-1.64	131028.760	1.5	153201.720	1.5
450.8758	24.00	-1.67	37244.170	4.0	59417.010	3.0
450.8786	7.01	-1.17	188857.370	2.0	211030.070	3.0
450.8788	20.02	.65	328606.780	2.0	350779.470	3.0
450.8841	24.01	-3.74	67448.820	4.5	89621.250	3.5
450.8945	27.00	-3.14	32733.070	3.5	54904.990	2.5
450.8969	12.02	-2.92	584689.200	4.0	606861.000	5.0
450.8989	16.01	-2.14	129787.710	.5	151959.410	1.5
450.9012	27.00	-4.23	21780.470	5.5	43952.060	5.5
450.9061	28.00	-2.23	35639.148	3.0	57810.494	4.0
450.9080	64.01	-1.13	10001.532	0.0	32179.005	0.0
450.9140	58.01	-1.05	7017.204	0.0	29194.382	0.0
450.9207	16.01	-1.16	130134.080	2.5	152304.710	3.5
450.9270	26.00	-3.62	24574.655	4.0	46744.975	3.0
450.9272	28.01	-2.98	54557.050	4.5	76727.360	5.5
450.9288	23.00	-1.39	15664.750	1.5	37834.980	1.5
450.9298	26.00	-2.47	29798.960	4.0	51969.140	3.0
450.9309	28.01	-4.75	115108.090	2.5	137278.220	1.5
450.9313	24.01	-4.97	42986.730	1.5	65156.840	2.5
450.9374	29.00	-.77	42264.541	0.0	64440.568	0.0
450.9376	30.02	-2.28	214878.000	3.0	237047.800	2.0
450.9447	20.00	-4.92	20349.260	2.0	42518.708	1.0
450.9451	24.01	-3.17	66256.770	.5	88426.200	.5
450.9624	56.01	-1.65	48483.290	0.0	70658.088	0.0
450.9923	26.00	-4.36	21999.132	4.0	44166.240	3.0
450.9964	18.01	-3.09	172829.580	1.5	194996.490	1.5
451.0000	24.00	-2.34	36558.550	2.0	58725.280	1.0
451.0004	25.02	-1.57	195948.440	3.5	218115.150	3.5
451.0047	26.02	-3.04	201164.210	2.0	223330.710	3.0
451.0057	9.02	-1.74	444623.120	3.5	466789.570	2.5
451.0080	9.02	-1.32	469241.410	5.5	491407.750	4.5
451.0088	30.02	-.85	215340.500	2.0	237506.800	1.0
451.0100	44.00	-1.31	7985.094	0.0	30157.551	0.0
451.0149	10.00	-2.98	150315.861	2.0	172481.860	1.0
451.0160	59.01	-.78	3387.616	0.0	25559.778	0.0
451.0170	58.01	-1.14	7743.122	0.0	29915.235	0.0
451.0192	25.01	-.78	85960.410	3.0	108126.200	3.0
451.0251	27.02	-3.95	83799.600	2.5	105965.100	2.5
451.0265	25.02	-2.94	193498.070	3.5	215663.500	3.5
451.0320	92.01	-2.39	0.000	0.0	22171.376	0.0
451.0322	25.00	-2.43	41230.300	3.5	63395.450	3.5
451.0326	9.02	-1.41	469243.660	4.5	491408.790	3.5
451.0367	25.01	-4.33	44521.520	4.0	66686.450	3.0
451.0385	9.01	-.75	266498.740	1.0	288663.580	2.0
451.0407	28.01	-4.39	94729.250	2.5	116893.980	2.5
451.0479	25.01	-3.61	48333.060	5.0	70497.440	4.0
451.0483	26.02	-3.47	201166.350	3.0	223330.710	3.0
451.0511	26.01	-2.75	50187.950	3.5	72352.170	3.5
451.0530	90.01	-.86	10485.478	0.0	32655.822	0.0
451.0538	9.02	-3.17	469243.660	4.5	491407.750	4.5
451.0625	26.02	-3.62	201164.210	2.0	223327.870	2.0
451.0658	27.00	-4.17	32733.070	3.5	54896.570	3.5
451.0729	18.00	-3.40	95399.870	1.0	117563.020	0.0
451.0855	26.01	-4.00	50076.100	1.5	72238.630	2.5
451.0920	58.01	-1.06	8872.327	0.0	31040.754	0.0
451.0928	24.00	-2.63	42589.250	5.0	64751.420	4.0
451.0980	73.00	-1.46	5565.369	0.0	27733.501	0.0
451.1000	24.01	-1.98	67012.280	2.5	89174.100	3.5
451.1032	26.00	-2.78	31805.059	3.0	53966.720	2.0
451.1059	27.00	-2.67	30102.960	2.5	52264.490	1.5
451.1059	25.02	-4.04	115774.000	3.5	137935.530	4.5
451.1061	26.02	-4.72	201166.350	3.0	223327.870	2.0
451.1090	41.00	.09	17341.367	0.0	39508.958	0.0
451.1191	28.01	-2.62	112422.190	5.5	134583.070	6.5
451.1200	44.00	-.76	13550.463	0.0	35717.514	0.0
451.1221	25.02	-.28	193756.790	4.5	215917.520	4.5
451.1287	26.02	-2.94	201166.350	3.0	223326.760	4.0
451.1310	49.00	-.18	2177.753	0.0	24344.263	0.0
451.1330	62.00	-.45	3952.218	0.0	26118.630	0.0
451.1356	21.00	-1.29	14926.240	2.5	37086.310	1.5
451.1379	22.00	-3.31	26564.385	3.0	48724.340	2.0
451.1399	10.01	.63	306687.290	2.5	328847.150	3.5
451.1415	23.00	-1.42	17181.980	4.5	39341.760	3.5
451.1476	10.01	-.80	306687.670	3.5	328847.150	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
451.1480	10.00	-3.19	150315.861	2.0	172475.323	2.0
451.1492	23.00	-3.77	8476.200	1.5	30635.600	2.5
451.1497	10.01	.74	306687.670	3.5	328847.050	4.5
451.1500	73.00	-2.13	5565.369	0.0	27730.946	0.0
451.1572	24.00	-4.38	35398.020	4.0	57557.030	3.0
451.1696	12.02	-1.22	584733.400	3.0	606891.800	4.0
451.1822	24.01	-1.39	52298.120	3.5	74455.900	4.5
451.1826	24.00	-3.16	24897.550	4.0	47055.310	5.0
451.1830	62.01	-1.47	1451.835	0.0	23615.791	0.0
451.1839	12.02	-2.09	584733.400	3.0	606891.100	3.0
451.1869	22.00	-2.99	18145.400	2.0	40302.950	3.0
451.1885	28.01	-3.75	113225.060	.5	135382.530	1.5
451.1908	24.00	-.40	24897.550	4.0	47054.910	4.0
451.1955	10.01	-1.04	291495.040	2.5	313652.170	1.5
451.2058	28.01	-3.69	70635.460	2.5	92792.080	3.5
451.2130	41.00	-1.51	9275.615	0.0	31438.097	0.0
451.2150	42.00	-1.34	11050.080	0.0	33212.464	0.0
451.2250	25.01	-3.78	44745.460	2.0	66901.140	2.0
451.2267	20.00	-4.28	20371.000	3.0	42526.591	2.0
451.2343	20.02	-.85	339198.090	1.0	361353.310	1.0
451.2359	7.01	-2.20	189335.160	3.0	211490.300	2.0
451.2382	24.01	-2.19	67353.600	4.5	89508.630	5.5
451.2469	23.03	-.56	263902.300	3.0	286056.900	3.0
451.2500	90.01	-1.56	11453.368	0.0	33614.033	0.0
451.2561	9.02	-1.73	469241.410	5.5	491395.560	4.5
451.2561	9.02	.07	469241.410	5.5	491395.560	5.5
451.2565	13.02	.41	143633.380	.5	165787.510	1.5
451.2592	12.02	-1.58	584687.900	3.0	606841.900	2.0
451.2592	12.02	-2.88	584687.900	3.0	606841.900	3.0
451.2592	23.03	-1.33	265067.400	2.0	287221.400	2.0
451.2624	25.02	-3.12	94697.850	3.5	116851.690	3.5
451.2651	9.01	-2.94	256262.460	1.0	278416.170	0.0
451.2655	25.00	-2.17	37630.620	4.5	59784.310	3.5
451.2694	28.01	-1.75	105838.060	3.5	127991.560	3.5
451.2716	23.01	-.77	30613.970	4.0	52767.360	3.0
451.2716	28.01	-2.54	99040.750	1.5	121194.140	2.5
451.2733	22.00	-.39	6742.757	4.0	28896.062	5.0
451.2856	12.02	-1.45	584689.200	4.0	606841.900	3.0
451.2897	27.01	-4.00	24886.500	2.0	47039.000	3.0
451.2910	74.00	-.52	17986.627	0.0	40145.279	0.0
451.2911	20.02	-.58	328588.760	3.0	350741.190	3.0
451.2938	28.01	-1.77	107142.210	1.5	129294.510	2.5
451.2986	28.00	-1.93	29888.505	2.0	52040.568	2.0
451.2995	24.00	-1.82	37205.880	3.0	59357.900	2.0
451.3009	23.00	-2.51	14548.830	2.5	36700.780	2.5
451.3019	9.02	-0.00	469243.660	4.5	491395.560	4.5
451.3019	9.02	-1.49	469243.660	4.5	491395.560	5.5
451.3095	24.01	-3.12	47354.630	2.5	69506.160	3.5
451.3113	28.01	-4.22	98969.440	5.5	121120.880	5.5
451.3150	24.00	-1.87	25038.610	5.0	47189.870	4.0
451.3217	24.00	-1.76	24897.550	4.0	47048.480	3.0
451.3293	24.00	-4.47	36577.730	4.0	58728.290	4.0
451.3295	25.01	-4.26	65567.070	2.0	87717.620	3.0
451.3300	74.00	-1.14	13227.833	0.0	35384.570	0.0
451.3301	24.01	-4.55	53566.220	3.5	75716.740	3.5
451.3305	17.01	-3.32	128662.500	2.0	150813.000	1.0
451.3310	75.00	.79	20325.695	0.0	42482.383	0.0
451.3312	28.00	-2.59	35639.148	3.0	57789.611	4.0
451.3435	26.02	-3.48	201178.010	1.0	223327.870	2.0
451.3478	25.01	-2.63	85952.600	3.0	108102.250	3.0
451.3486	21.00	-3.15	11557.640	2.5	33707.250	2.5
451.3525	28.01	-3.10	114052.040	3.5	136201.460	3.5
451.3564	23.00	-2.84	9636.960	1.5	31786.190	.5
451.3580	39.00	-.52	15244.271	0.0	37399.633	0.0
451.3602	8.01	-2.36	238892.960	2.5	261042.000	2.5
451.3617	23.00	-1.39	17242.050	5.5	39391.020	4.5
451.3690	90.00	-.79	9759.560	0.0	31914.382	0.0
451.3715	26.00	-3.98	20874.482	3.0	43022.969	4.0
451.3739	22.00	-.76	11531.760	2.0	33680.130	3.0
451.3747	25.01	-4.16	44745.460	2.0	66893.790	1.0
451.3753	28.02	-4.41	121412.200	2.0	143560.500	2.0
451.3833	23.00	-3.45	15062.940	6.5	37210.850	5.5
451.3857	24.00	-2.61	24940.610	2.0	47088.400	1.0
451.3872	28.00	-1.55	28569.210	2.0	50716.927	1.0
451.3886	24.00	-3.49	27223.050	2.0	49370.700	3.0
451.3979	24.00	-3.16	42564.850	4.0	64712.040	3.0
451.3994	22.01	-2.88	45673.750	4.5	67820.870	4.5
451.4010	39.00	-.32	15244.271	0.0	37397.523	0.0
451.4087	24.00	-1.74	33060.740	3.0	55207.400	4.0
451.4091	17.00	-3.32	72827.038	.5	94973.683	.5
451.4123	26.00	-2.99	34636.820	2.0	56783.306	3.0
451.4173	27.00	-.86	29948.760	2.5	52095.000	3.5
451.4185	23.00	-.81	15688.800	2.5	37834.980	1.5
451.4188	26.00	-1.95	24574.655	4.0	46720.824	4.0
451.4243	22.00	-.88	17540.205	3.0	39686.100	2.0
451.4283	15.01	-2.27	110252.000	1.0	132397.700	2.0
451.4322	8.01	.21	233544.090	1.5	255689.600	2.5
451.4348	24.00	-.01	33762.740	6.0	55908.120	6.0
451.4438	24.01	-2.65	45730.740	2.5	67875.680	3.5
451.4477	20.02	-1.77	340748.720	2.0	362893.470	2.0
451.4500	64.01	-.59	10969.423	0.0	33120.270	0.0
451.4504	26.00	-4.35	31686.342	2.0	53830.960	3.0
451.4520	24.00	-2.31	23498.840	4.0	45643.380	3.0
451.4583	25.00	-4.13	41230.300	3.5	63374.530	4.5
451.4642	25.01	-4.49	81659.500	3.0	103803.440	3.0
451.4650	22.00	-.56	20062.980	1.0	42206.880	2.0
451.4719	25.01	-3.95	43339.100	2.0	65482.660	3.0
451.4725	22.00	-3.81	26892.926	3.0	49036.460	4.0
451.4765	10.01	-2.74	280700.770	3.5	302844.110	2.5
451.4785	9.01	-.77	266498.740	1.0	288641.980	0.0
451.4883	10.01	-.56	280700.770	3.5	302843.530	3.5
451.5015	9.01	-1.47	266498.740	1.0	288640.850	1.0
451.5025	24.01	-4.34	68583.440	2.5	90725.500	3.5
451.5120	90.00	-2.11	0.000	0.0	22147.806	0.0
451.5170	70.01	-.73	26616.982	0.0	48764.542	0.0
451.5171	26.00	-3.38	23192.486	2.0	45333.834	2.0
451.5180	42.00	-.43	20164.380	0.0	42311.891	0.0
451.5190	26.01	-5.72	20516.980	2.5	42658.230	3.5
451.5266	24.01	-3.75	67334.200	3.5	89475.080	2.5
451.5280	92.01	-1.80	241.973	0.0	22388.994	0.0
451.5331	26.01	-2.66	22939.350	2.5	45079.910	2.5
451.5393	9.01	-3.35	235150.580	2.0	257290.840	2.0
451.5405	23.03	-2.54	236148.600	1.0	258288.800	1.0
451.5416	10.00	-3.20	150121.592	1.0	172261.740	1.0
451.5421	24.00	-1.24	24282.340	4.0	46422.460	4.0
451.5462	23.02	-2.97	162335.880	3.5	184475.800	4.5
451.5525	29.01	-1.28	116080.460	3.0	138220.070	4.0
451.5558	25.01	-4.24	82774.730	1.0	104914.180	0.0
451.5564	23.00	-1.66	15264.830	5.5	37404.250	6.5
451.5588	24.01	-1.45	67369.330	5.5	89508.630	5.5
451.5600	26.01	-3.36	50212.930	2.5	72352.170	3.5
451.5625	28.01	-4.55	111783.790	3.5	133922.910	4.5
451.5635	22.00	-1.99	17075.310	4.0	39214.380	3.0
451.5835	27.01	-3.27	63344.100	3.0	85482.190	4.0
451.5849	24.01	-1.73	52298.120	3.5	74436.140	2.5
451.5860	58.01	-.75	8469.040	0.0	30613.216	0.0
451.5925	25.01	-3.42	82917.780	2.0	105055.430	2.0
451.5992	29.01	-2.38	122745.770	2.0	144883.090	2.0
451.5994	24.01	-3.15	45730.740	2.5	67868.050	2.5
451.6020	6.02	-.29	317795.000	0.0	339938.392	0.0
451.6020	6.02	-.77	317795.000	0.0	339938.392	0.0
451.6051	25.01	-4.80	53781.700	3.0	75918.730	2.0
451.6057	26.01	-4.70	50076.100	1.5	72213.100	.5
451.6068	23.01	-4.82	51085.770	3.0	73222.720	4.0
451.6096	18.01	-4.17	181594.050	2.5	203730.860	1.5
451.6265	28.01	-3.18	117872.780	2.5	140008.760	3.5
451.6308	9.01	-2.21	266548.480	3.0	288684.250	2.0
451.6398	9.01	-.27	266498.740	1.0	288634.070	2.0
451.6438	26.00	-2.87	29469.010	2.0	51604.146	3.0
451.6534	9.01	-2.45	256262.460	1.0	278397.120	1.0
451.6547	24.01	-3.06	52321.300	4.5	74455.900	4.5
451.6586	20.02	-3.38	328606.780	2.0	350741.190	3.0
451.6586	18.01	-1.39	183985.940	1.5	206120.350	2.5
451.6640	75.00	.68	28714.077	0.0	50854.429	0.0
451.6659	10.01	-.98	280768.520	.5	302902.570	1.5
451.6730	92.00	-1.42	564.603	0.0	22704.514	0.0
451.6784	10.01	-4.33	302307.750	2.5	324441.190	2.5
451.6792	27.01	-2.56	27902.500	4.0	50035.900	3.0
451.6808	10.01	-3.03	302307.750	2.5	324441.070	3.5
451.6874	22.00	-3.48	25926.820	4.0	48059.820	3.0
451.6890	44.00	-.64	11372.710	0.0	33511.837	0.0
451.6927	10.00	-2.87	150121.592	1.0	172254.330	0.0
451.6930	6.02	-.07	317800.000	0.0	339938.931	0.0
451.6935	23.01	-3.45	50775.470	2.0	72908.170	3.0
451.7008	27.00	-3.73	33150.680	1.5	55283.020	2.5
451.7010	9.01	-2.37	266498.740	1.0	288631.070	1.0
451.7040	90.01	-2.43	6613.917	0.0	28752.309	0.0
451.7090	27.00	-.74	25232.790	.5	47364.730	1.5
451.7130	42.00	-.23	18228.600	0.0	40366.550	0.0
451.7179	22.00	-3.08	26892.926	3.0	49024.430	3.0
451.7310	24.00	-3.46	20517.400	2.0	42648.260	3.0
451.7327	10.01	-1.60	306687.290	2.5	328818.070	3.5
451.7331	10.01	.07	306687.290	2.5	328818.050	2.5
451.7349	27.00	-1.54	32027.500	3.5	54158.170	4.5
451.7351	24.01	-4.32	67344.420	2.5	89475.080	2.5
451.7361	23.01	-2.64	30673.140	2.0	52803.750	1.0
451.7404	10.01	-2.54	280700.770	3.5	302831.170	3.5
451.7404	10.01	.18	306687.670	3.5	328818.070	3.5
451.7408	10.01	-1.25	306687.670	3.5	328818.050	2.5
451.7410	28.01	-1.37	105861.190	2.5	127991.560	3.5
451.7410	42.00	-1.80	10646.793	0.0	32783.371	0.0
451.7476	25.01	-4.32	51553.060	5.0	73683.110	4.0
451.7486	25.01	-3.89	43528.300	5.0	65658.300	5.0
451.7518	9.01	.06	266498.740	1.0	288628.580	2.0
451.7529	26.00	-1.92	24772.019	1.0	46901.808	1.0
451.7531	26.01	-3.21	64286.440	3.5	86416.220	3.5
451.7585	26.00	-2.86	31937.308	1.0	54066.821	2.0
451.7600	59.01	-1.74	403.288	0.0	22538.935	0.0
451.7708	22.00	-6.03	11531.760	2.0	33660.671	1.0
451.7772	25.01	-4.15	49882.150	4.0	72010.750	4.0
451.7820	44.00	-.93	8952.985	0.0	31087.554	0.0
451.7835	10.01	-.35	280700.770	3.5	302829.060	4.5
451.7840	28.00	-2.38	28578.046	3.0	50706.310	4.0
451.7874	27.00	-4.55	33449.180	.5	55577.280	1.5
451.7923	27.00	-1.47	32733.070	3.5	54860.930	4.5
451.8023	22.00	-.24	6661.003	3.0	28788.372	4.0
451.8029	24.00	-2.86	20520.920	3.0	42648.260	3.0
451.8053	28.01	-4.82	94705.930	3.5	116833.150	4.5
451.8053	22.00	-1.59	18192.577	6.0	40319.800	6.0
451.8290	72.00	-.92	16050.847	0.0	38183.114	0.0
451.8292	22.01	-2.67	8710.470	1.5	30836.520	1.5
451.8360	24.01	-4.48	52298.120	3.5	74423.840	3.5
451.8374	23.01	-1.72	30641.710	3.0	52767.360	3.0
451.8421	26.00	-3.68	26105.908	6.0	48231.330	5.0
451.8440	42.00	-1.05	20003.065	0.0	42134.597	0.0
451.8489	9.01	-.83	266548.480	3.0	288673.570	4.0
451.8527	16.01	-2.62	131028.760	1.5	153153.660	.5
451.8568	26.00	-4.42	17927.378	1.0	40052.080	2.0
451.8568	23.03	.04	264161.800	5.0	286286.500	4.0
451.8570	71.00	-1.24	0.000	0.0	22130.895	0.0
451.8595	24.00	-4.55	20523.690	4.0	42648.260	3.0
451.8613	23.01	-3.32	30267.460	2.0	52391.940	3.0
451.8625	9.01	-.76	266516.430	0.0	288640.850	1.0
451.8650	24.00	-2.67	23933.900	4.0	46058.200	4.0
451.8692	22.00	.16	11531.760	2.0	33655.853	2.0
451.8760	7.01	-1.92	188909.170	1.0	211032.930	2.0
451.8827	24.01	-3.64	47354.630	2.5	69478.060	2.5
451.8858	27.00	-2.32	32781.710	2.5	54904.990	2.5
451.8890	76.00	-.90	18954.517	0.0	41083.845	0.0
451.8909	28.01	-3.07	113623.100	.5	135746.130	1.5
451.8915	24.00	-4.09	31049.330	6.0	53172.330	5.0
451.9026	25.01	-1.61	53597.130	2.0	75719.590	1.0
451.9155	18.01	-3.45	186470.280	1.5	208592.110	.5
451.9222	18.01	-2.89	186470.280	1.5	208591.780	1.5
451.9224	25.01	-4.77	44521.520	4.0	66643.010	4.0
451.9242	25.01	-2.64	43536.900	4.0	65658.300	5.0
451.9260	90.00	-1.94	3629.588	0.0	25757.104	0.0
451.9275	27.00	-.84	29948.760	2.5	52070.000	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
451.9312	28.01	-2.12	99040.750	1.5	121161.810	1.5
451.9338	27.00	-3.43	26597.640	1.5	48718.570	2.5
451.9346	25.01	-4.56	49889.860	3.0	72010.750	4.0
451.9406	15.01	-4.01	110252.000	1.0	132372.600	1.0
451.9590	58.01	-.52	10808.108	0.0	32934.009	0.0
451.9630	62.01	-.92	4355.506	0.0	26481.211	0.0
451.9636	26.02	-3.73	201207.290	4.0	223326.760	4.0
451.9647	25.01	-3.97	82936.010	3.0	105055.430	2.0
451.9660	64.00	-.25	161.315	0.0	22286.873	0.0
451.9760	75.00	.17	28714.077	0.0	50839.146	0.0
451.9784	25.02	-1.14	195948.440	3.5	218067.190	2.5
451.9831	24.00	-1.51	24303.940	3.0	46422.460	4.0
451.9979	28.00	-5.16	13521.352	2.0	35639.148	3.0
451.9983	26.00	-4.72	35856.386	2.0	57974.160	2.0
452.0017	25.00	-1.92	41230.300	3.5	63347.910	4.5
452.0037	18.01	-2.23	183985.940	1.5	206103.450	1.5
452.0070	64.01	-.98	10566.135	0.0	32689.686	0.0
452.0170	23.00	-2.23	8715.720	3.5	30832.580	2.5
452.0198	9.01	-3.82	235150.580	2.0	257267.300	1.0
452.0217	26.01	-3.09	22637.190	4.5	44753.820	3.5
452.0249	26.00	-2.27	24772.019	1.0	46888.494	2.0
452.0290	9.01	-1.95	266548.480	3.0	288664.750	3.0
452.0320	76.00	-.90	18954.517	0.0	41076.845	0.0
452.0362	22.01	-5.13	8997.690	3.5	31113.610	3.5
452.0382	23.00	-3.37	8578.520	2.5	30694.340	3.5
452.0423	14.01	-3.23	101023.310	1.5	123138.930	1.5
452.0529	9.01	-1.09	266548.480	3.0	288663.580	2.0
452.0623	9.01	-.58	266516.430	0.0	288631.070	1.0
452.0689	14.01	-2.27	101024.610	2.5	123138.930	1.5
452.0851	21.00	-1.55	14926.240	2.5	37039.770	2.5
452.0900	78.00	.16	37586.404	0.0	59705.693	0.0
452.0932	25.01	-3.78	85989.120	2.0	108102.250	3.0
452.0950	44.00	-1.23	9033.642	0.0	31152.887	0.0
452.0957	24.01	-3.59	68737.990	5.5	90851.000	4.5
452.1055	24.00	-3.97	33040.100	2.0	55152.630	2.0
452.1090	73.00	-2.26	5565.369	0.0	27683.929	0.0
452.1114	24.00	-1.40	33762.740	6.0	55874.980	5.0
452.1220	90.00	-1.54	2823.013	0.0	24940.937	0.0
452.1234	22.00	-3.38	26803.417	2.0	48915.070	2.0
452.1300	64.01	-1.82	4436.164	0.0	26553.697	0.0
452.1322	28.00	-2.71	34163.294	2.0	56274.516	2.0
452.1642	27.00	-4.33	33173.360	3.5	55283.020	2.5
452.1642	26.00	-4.45	26406.490	1.0	48516.150	1.0
452.1652	14.02	-4.72	227665.090	2.0	249774.700	3.0
452.1690	18.00	-3.26	104102.144	1.0	126211.570	1.0
452.1750	28.01	-4.72	100332.090	4.5	122441.220	4.5
452.1822	25.00	-2.69	37148.660	5.5	59257.440	4.5
452.1855	24.00	-3.17	27703.840	4.0	49812.460	3.0
452.1864	28.00	-.41	30163.140	2.0	52271.716	2.0
452.1871	24.00	-4.15	31009.000	3.0	53117.540	4.0
452.1881	28.01	-4.38	116732.510	2.5	138841.000	3.5
452.1902	28.00	-3.09	28569.210	2.0	50677.599	3.0
452.1924	21.00	-2.44	15672.550	1.5	37780.630	1.5
452.1939	12.01	-4.09	92790.510	.5	114898.720	1.5
452.1940	64.01	.07	18551.230	0.0	40665.632	0.0
452.2000	8.04	-1.99	697170.000	0.0	719284.109	0.0
452.2008	24.00	-1.25	24940.610	2.0	47048.480	3.0
452.2050	39.00	-.49	16292.819	0.0	38406.683	0.0
452.2080	58.01	-1.63	7017.204	0.0	29130.922	0.0
452.2094	18.01	-2.59	186815.960	3.5	208923.410	2.5
452.2116	28.01	-2.96	77736.790	4.5	99844.130	3.5
452.2137	9.01	-.18	266548.480	3.0	288655.720	4.0
452.2170	23.00	-2.81	15103.770	4.5	37210.850	5.5
452.2190	42.00	-.65	20003.065	0.0	42116.245	0.0
452.2215	24.00	-4.97	24940.610	2.0	47047.470	2.0
452.2311	10.01	-.51	280797.260	2.5	302903.650	2.5
452.2320	18.00	-3.85	94553.707	0.0	116660.054	1.0
452.2333	12.01	-4.39	92790.510	.5	114896.790	.5
452.2343	28.01	-1.55	99040.750	1.5	121146.980	2.5
452.2370	57.01	-.35	10001.532	0.0	32113.832	0.0
452.2454	27.00	-4.43	32841.990	4.5	54947.680	5.5
452.2470	28.01	-1.77	113407.310	2.5	135512.920	2.5
452.2483	9.01	-2.22	256262.460	1.0	278368.010	2.0
452.2491	9.01	-1.12	266548.480	3.0	288653.990	3.0
452.2507	10.01	-4.05	224087.020	1.5	246192.450	2.5
452.2532	10.01	-2.42	280797.260	2.5	302902.570	1.5
452.2550	62.00	-1.07	1451.835	0.0	23563.254	0.0
452.2570	63.01	-1.28	1613.150	0.0	23724.472	0.0
452.2624	26.01	-2.22	22939.350	2.5	45044.210	1.5
452.2708	28.00	-2.52	35639.148	3.0	57743.596	3.0
452.2718	10.01	.18	281720.280	1.5	303824.680	2.5
452.2730	75.00	.97	28714.077	0.0	50824.616	0.0
452.2757	28.01	-1.94	113408.710	1.5	135512.920	2.5
452.2796	22.00	-.25	6598.749	2.0	28702.768	3.0
452.2820	64.01	-.21	11372.710	0.0	33482.809	0.0
452.2833	28.00	-4.23	22102.349	4.0	44206.185	3.0
452.2861	12.02	-1.36	562634.200	1.0	584737.900	2.0
452.2861	12.02	-1.36	562634.200	1.0	584737.900	2.0
452.2951	26.02	-3.67	196901.270	5.0	219004.530	4.0
452.2972	24.00	-2.88	42648.260	3.0	64751.420	4.0
452.3027	25.01	-3.01	82917.780	2.0	105020.670	1.0
452.3040	62.01	-1.72	322.630	0.0	22431.654	0.0
452.3080	58.01	-.45	4113.534	0.0	26222.362	0.0
452.3096	23.00	-3.81	21963.500	3.5	44066.050	3.5
452.3098	24.01	-2.67	52321.300	4.5	74423.840	3.5
452.3127	24.01	-3.57	59130.510	1.5	81232.910	2.5
452.3130	40.00	-.41	17663.997	0.0	39772.581	0.0
452.3170	56.00	.17	13514.000	0.0	35622.389	0.0
452.3189	17.02	-4.67	179663.000	1.5	201765.100	2.5
452.3193	26.02	-3.20	201207.290	4.0	223309.370	5.0
452.3236	22.00	-2.51	20209.444	2.0	42311.310	3.0
452.3344	16.01	-2.11	129858.070	1.5	151959.410	1.5
452.3348	25.00	-1.11	37630.620	4.5	59731.940	4.5
452.3352	12.02	-2.69	584733.400	3.0	606834.700	2.0
452.3383	26.00	-4.64	29469.010	2.0	51570.160	3.0
452.3410	41.00	-1.08	1129.205	0.0	23236.421	0.0
452.3424	29.01	-4.81	95565.650	4.0	117666.600	4.0
452.3479	18.00	-3.56	104102.144	1.0	126202.820	0.0
452.3524	24.01	-4.25	52321.300	4.5	74421.760	5.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
452.3567	26.02	-3.63	200504.990	3.0	222605.240	3.0
452.3583	10.01	-1.54	302057.260	.5	324157.430	1.5
452.3695	28.00	-1.86	34163.294	2.0	56262.920	3.0
452.3710	28.00	-3.68	28578.046	3.0	50677.599	3.0
452.3825	21.00	-2.48	15756.510	2.5	37855.500	2.5
452.3880	75.00	.35	28714.077	0.0	50818.996	0.0
452.3910	62.01	-1.16	3468.273	0.0	25573.045	0.0
452.3928	26.00	-3.89	21038.987	2.0	43137.472	3.0
452.4120	41.00	-1.86	1532.493	0.0	23636.239	0.0
452.4130	8.02	-.95	378420.900	1.0	400518.400	0.0
452.4171	12.02	-1.56	584733.400	3.0	606830.700	3.0
452.4208	23.00	-.12	15264.830	5.5	37361.950	4.5
452.4220	23.00	-2.62	14514.750	1.5	36611.810	2.5
452.4230	21.00	-2.31	11610.240	3.5	33707.250	2.5
452.4273	12.02	-2.05	584737.900	2.0	606834.700	2.0
452.4282	29.01	-3.99	116080.460	3.0	138177.220	2.0
452.4294	26.02	-3.31	200514.460	4.0	222611.160	5.0
452.4340	42.01	-1.02	11775.998	0.0	33878.669	0.0
452.4372	23.00	-5.00	10892.500	3.5	32988.820	3.5
452.4449	16.01	-2.40	131186.860	2.5	153282.600	2.5
452.4499	26.01	-2.83	50142.930	2.5	72238.630	2.5
452.4519	12.03	-4.61	582571.000	2.5	604666.600	1.5
452.4562	27.00	-4.00	33173.360	3.5	55268.750	3.5
452.4609	24.01	-4.72	67379.920	1.5	89475.080	2.5
452.4619	24.00	-4.29	31280.350	5.0	53375.460	4.0
452.4660	21.00	-3.39	11520.150	1.5	33615.060	1.5
452.4662	28.01	-3.93	94729.250	2.5	116824.150	2.5
452.4677	16.01	-.76	121528.200	1.5	143623.030	1.5
452.4691	22.01	-1.77	9930.740	1.5	32025.500	2.5
452.4734	25.02	-1.99	172451.230	1.5	194545.780	.5
452.4740	50.00	-.46	17018.737	0.0	39119.454	0.0
452.4796	22.01	-4.57	44902.420	2.5	66996.670	3.5
452.4802	23.01	-3.37	30673.140	2.0	52767.360	3.0
452.4820	24.00	-.86	33113.270	4.0	55207.400	4.0
452.4850	90.01	-2.13	6936.547	0.0	29036.727	0.0
452.4870	76.00	-1.59	10969.423	0.0	33069.505	0.0
452.4925	56.01	-.54	20261.562	0.0	42361.376	0.0
452.4941	16.01	.20	121529.490	2.5	143623.030	1.5
452.4946	22.00	-4.31	19421.576	3.0	41515.090	4.0
452.5041	26.01	-2.94	50076.100	1.5	72169.150	1.5
452.5093	12.02	-.86	584737.900	2.0	606830.700	3.0
452.5100	90.01	-1.80	11050.080	0.0	33149.039	0.0
452.5112	29.00	-1.25	45894.129	0.0	67993.030	0.0
452.5138	26.00	-.45	29056.312	3.0	51148.892	2.0
452.5156	23.00	-1.05	15664.750	1.5	37757.240	.5
452.5205	22.01	-3.64	8744.270	2.5	30836.520	1.5
452.5279	24.00	-2.29	33060.740	3.0	55152.630	2.0
452.5310	57.01	-.36	15566.901	0.0	37664.835	0.0
452.5379	28.01	-3.74	114869.350	1.5	136960.750	2.5
452.5388	25.01	-2.07	48435.960	6.0	70527.320	5.0
452.5388	26.02	-3.75	200514.460	4.0	222605.820	4.0
452.5447	24.00	-4.24	31987.060	4.0	54078.130	5.0
452.5506	26.02	-4.61	200514.460	4.0	222605.240	3.0
452.5525	23.02	-1.04	162385.110	3.5	184475.800	4.5
452.5562	28.01	-4.43	114869.350	1.5	136959.860	2.5
452.5748	26.01	-9.31	16369.390	3.5	38458.990	4.5
452.5791	27.00	-7.91	4142.660	3.5	26232.050	3.5
452.5853	27.00	-2.58	31699.690	4.5	53788.780	4.5
452.5869	26.00	-3.41	23244.826	1.0	45333.834	2.0
452.6010	24.00	-1.91	24897.550	4.0	46985.870	5.0
452.6010	75.00	-.73	20325.695	0.0	42420.211	0.0
452.6030	20.00	-.04	15210.063	1.0	37298.287	2.0
452.6096	38.01	-1.52	55769.700	0.0	77863.796	0.0
452.6115	24.00	-1.03	27223.050	2.0	49310.860	3.0
452.6119	23.00	-2.92	15664.750	1.5	37752.540	2.5
452.6120	57.01	-1.13	6129.972	0.0	28223.951	0.0
452.6121	24.01	-3.45	67387.300	2.5	89475.080	2.5
452.6132	8.01	-4.31	253791.870	1.5	275879.600	2.5
452.6182	17.00	-1.01	74225.846	1.5	96313.330	1.5
452.6220	12.02	.26	559987.100	1.0	582074.400	2.0
452.6220	12.02	.26	559987.100	1.0	582074.400	2.0
452.6297	22.00	-2.14	17215.440	5.0	39302.360	4.0
452.6368	22.00	-2.30	12118.394	4.0	34204.971	4.0
452.6370	42.00	-.65	18389.915	0.0	40482.674	0.0
452.6387	26.00	-2.88	31307.235	4.0	53393.715	4.0
452.6424	26.01	-3.24	62962.260	1.5	85048.560	1.5
452.6443	24.00	-.44	20519.600	6.0	42605.810	6.0
452.6453	10.01	-3.93	283322.350	1.5	305408.510	.5
452.6457	28.01	-4.12	77332.470	2.5	99418.610	3.5
452.6457	9.01	-3.15	266548.480	3.0	288634.620	3.0
452.6465	24.00	-1.45	35501.260	3.0	57587.360	4.0
452.6484	24.00	-1.89	24282.340	4.0	46368.350	3.0
452.6496	28.01	-1.92	113407.310	2.5	135493.260	1.5
452.6500	28.01	-4.37	114869.350	1.5	136955.280	.5
452.6514	27.00	-4.30	3482.820	4.5	25568.680	5.5
452.6570	26.00	-2.85	25091.620	0.0	47177.210	1.0
452.6570	9.01	-1.42	266548.480	3.0	288634.070	2.0
452.6576	26.01	-3.58	44915.070	3.5	67000.630	2.5
452.6580	23.01	-2.17	30306.400	3.0	52391.940	3.0
452.6677	18.03	-3.07	268171.380	1.5	290256.450	1.5
452.6716	10.00	-3.47	150772.112	1.0	172856.990	1.0
452.6773	12.02	-2.87	584628.500	2.0	606713.100	1.0
452.6783	28.01	-1.39	113408.710	1.5	135493.260	1.5
452.6793	27.00	-.55	29948.760	2.5	52033.260	1.5
452.6916	26.02	-3.53	168329.670	3.0	190413.570	4.0
452.6928	20.00	-.14	21849.634	2.0	43933.477	1.0
452.6928	20.00	-1.69	21849.634	2.0	43933.477	1.0
452.6992	24.00	-1.21	25106.340	3.0	47189.870	4.0
452.7250	39.00	.26	11453.368	0.0	33541.832	0.0
452.7250	60.00	-.18	5000.766	0.0	27089.230	0.0
452.7305	22.00	-.43	6556.828	1.0	28638.832	2.0
452.7332	24.00	-.61	20523.940	5.0	42605.810	6.0
452.7332	9.01	.58	266548.480	3.0	288630.350	4.0
452.7350	58.01	-.61	2500.383	0.0	24588.359	0.0
452.7373	25.01	-2.94	82939.000	1.0	105020.670	1.0
452.7420	62.00	-1.15	806.575	0.0	22894.210	0.0
452.7453	24.01	-3.27	67393.800	3.5	89475.080	2.5
452.7462	24.00	-.63	24093.160	2.0	46174.400	3.0
452.7470	22.00	-3.47	0.000	2.0	22081.198	2.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
452.7584	9.01	.10	266548.480	3.0	288629.120	3.0
452.7617	25.00	-1.64	37737.220	3.5	59817.700	2.5
452.7650	41.01	-1.07	12743.888	0.0	34830.401	0.0
452.7671	25.02	-2.48	94771.470	2.5	116851.690	3.5
452.7695	9.01	-2.69	266548.480	3.0	288628.580	2.0
452.7712	10.00	-3.21	150772.112	1.0	172852.130	0.0
452.7716	7.01	-2.15	189335.160	3.0	211415.160	2.0
452.7785	26.00	-2.86	26224.961	3.0	48304.623	2.0
452.7800	39.00	-.08	11211.395	0.0	33297.176	0.0
452.7910	16.02	-2.14	147690.990	2.0	169770.040	1.0
452.7913	27.00	-1.46	24627.790	4.5	46706.830	3.5
452.7923	10.01	-4.85	307069.810	1.5	329148.800	1.5
452.7949	10.01	-3.97	307069.810	1.5	329148.670	2.5
452.7951	9.01	-.79	266548.480	3.0	288627.330	4.0
452.8000	7.03	-.55	465463.000	0.0	487547.806	0.0
452.8048	26.02	-4.32	200524.120	5.0	222602.500	6.0
452.8208	12.03	-4.72	582589.000	1.5	604666.600	1.5
452.8249	28.01	-4.10	101357.200	4.5	123434.600	4.5
452.8304	23.00	-3.78	21841.450	2.5	43918.580	2.5
452.8304	23.00	-2.39	15103.770	4.5	37180.900	4.5
452.8470	58.01	-.07	6936.547	0.0	29019.061	0.0
452.8481	10.01	-3.29	283322.350	1.5	305398.620	1.5
452.8493	23.01	-1.08	18353.890	3.0	40430.100	4.0
452.8526	28.00	-1.12	33500.854	3.0	55576.905	3.0
452.8528	29.01	-3.23	116326.160	3.0	138402.200	3.0
452.8594	23.02	-1.22	161923.280	2.5	183999.000	3.5
452.8617	26.00	-.78	17550.180	3.0	39625.784	4.0
452.8620	42.00	-.08	26939.612	0.0	49021.394	0.0
452.8678	7.01	-1.73	189335.160	3.0	211410.470	3.0
452.8720	45.00	-2.23	7743.122	0.0	29824.416	0.0
452.8761	26.00	-2.39	26627.612	4.0	48702.518	4.0
452.8815	26.02	-3.64	168329.670	3.0	190404.310	3.0
452.8823	26.00	-2.19	24335.764	2.0	46410.366	1.0
452.8828	14.01	-2.62	101023.310	1.5	123097.890	.5
452.8944	13.02	-.29	143713.500	1.5	165787.510	1.5
452.8970	75.00	.12	28794.735	0.0	50874.811	0.0
452.9088	23.01	-3.47	30318.630	4.0	52391.940	3.0
452.9189	13.02	.66	143713.500	1.5	165786.320	2.5
452.9308	23.00	-.60	15270.420	1.5	37342.660	2.5
452.9380	69.01	-2.60	161.315	0.0	22239.392	0.0
452.9400	42.01	-.29	20245.038	0.0	42323.017	0.0
452.9420	41.00	-1.17	11211.395	0.0	33289.277	0.0
452.9458	22.01	-1.77	12676.990	4.5	34748.500	4.5
452.9480	17.01	-1.39	127726.900	1.0	149798.300	2.0
452.9500	90.01	-1.79	12340.601	0.0	34418.093	0.0
452.9527	24.00	-2.09	24833.860	3.0	46905.030	4.0
452.9539	26.00	-3.36	31322.603	3.0	53393.715	4.0
452.9548	24.01	-2.52	66355.130	1.5	88426.200	.5
452.9554	26.01	-3.37	44929.590	2.5	67000.630	2.5
452.9581	23.00	-.25	15103.770	4.5	37174.680	3.5
452.9670	76.00	-1.35	12905.203	0.0	34981.866	0.0
452.9760	74.00	-.54	22342.133	0.0	44418.358	0.0
452.9804	25.00	-.61	38669.600	3.5	60739.420	3.5
452.9839	24.00	-1.40	20519.600	6.0	42589.250	5.0
452.9868	21.01	-1.83	39001.590	0.0	61071.100	1.0
452.9899	27.00	-4.27	23855.620	4.5	45924.980	3.5
452.9940	29.01	-3.42	122745.770	2.0	144814.930	3.0
452.9950	75.00	.35	28794.735	0.0	50870.034	0.0
453.0014	25.01	-.67	86057.400	4.0	108126.200	3.0
453.0084	24.00	-2.12	24299.890	2.0	46368.350	3.0
453.0170	26.02	-4.06	168329.670	3.0	190397.710	2.0
453.0410	7.01	.57	189335.160	3.0	211402.030	4.0
453.0470	74.00	-1.80	12098.628	0.0	34171.393	0.0
453.0494	24.00	-1.99	23933.900	4.0	46000.360	3.0
453.0552	18.01	-2.71	150147.620	2.5	172213.800	1.5
453.0578	26.01	-3.66	54063.530	.5	76129.580	1.5
453.0581	8.01	-3.17	238892.960	2.5	260959.000	1.5
453.0648	23.00	-1.73	14514.750	1.5	36580.460	1.5
453.0679	24.00	-.69	20523.690	4.0	42589.250	5.0
453.0685	27.00	-.92	31871.150	3.5	53936.680	2.5
453.0730	24.00	-.46	20523.940	5.0	42589.250	5.0
453.0785	29.00	-1.28	30811.173	0.0	52882.403	0.0
453.0814	24.00	-4.41	31009.000	3.0	53073.900	3.0
453.0833	15.01	.01	105303.190	1.0	127368.000	2.0
453.0850	44.00	-.72	14921.641	0.0	36992.555	0.0
453.0850	73.00	-1.69	5968.656	0.0	28039.570	0.0
453.0871	26.00	-3.98	22996.661	4.0	45061.287	3.0
453.0890	75.00	-.72	22019.503	0.0	44090.222	0.0
453.0915	24.00	-1.37	24303.940	3.0	46368.350	3.0
453.0954	27.00	.22	23611.780	5.5	45676.000	5.5
453.1053	23.00	-2.58	15688.800	2.5	37752.540	2.5
453.1152	26.00	-2.04	11976.239	4.0	34039.495	4.0
453.1153	25.00	-4.94	35165.050	1.5	57228.300	.5
453.1209	23.00	-2.10	14548.830	2.5	36611.810	2.5
453.1213	24.00	-2.66	24286.540	1.0	46349.500	2.0
453.1280	8.00	-2.92	86625.769	1.0	108688.400	2.0
453.1328	28.02	-4.33	121802.800	3.0	143865.200	3.0
453.1371	24.00	-2.90	31055.350	5.0	53117.540	4.0
453.1457	24.00	-1.42	33040.100	2.0	55101.870	3.0
453.1573	26.00	-2.89	31686.342	2.0	53747.547	3.0
453.1601	22.00	-.77	11639.804	3.0	33700.874	4.0
453.1616	26.00	-2.49	25899.974	4.0	47960.973	4.0
453.1639	26.00	-2.20	29313.008	6.0	51373.894	5.0
453.1695	8.00	-2.69	86627.790	2.0	108688.400	2.0
453.1792	23.01	-4.29	44098.460	3.0	66158.600	4.0
453.1839	23.01	-4.18	51085.770	3.0	73145.680	3.0
453.1860	24.01	-1.63	67448.820	4.5	89508.630	5.5
453.2006	17.01	-3.10	128621.900	1.0	150681.000	2.0
453.2014	27.00	-1.89	30102.960	2.5	52162.020	3.5
453.2074	26.01	-3.22	78690.980	2.5	100749.750	2.5
453.2107	22.00	-.39	20126.055	3.0	42184.660	4.0
453.2133	25.00	-3.68	41230.300	3.5	63288.780	3.5
453.2166	23.01	-1.59	30641.710	3.0	52700.030	2.0
453.2263	28.01	-3.91	112906.930	1.5	134964.780	1.5
453.2324	28.01	-1.20	113407.310	2.5	135464.860	3.5
453.2330	28.01	-3.91	32499.530	4.5	54557.050	4.5
453.2351	21.00	-2.52	11557.640	2.5	33615.060	1.5
453.2421	23.00	-4.20	8578.520	2.5	30635.600	2.5
453.2439	28.01	-4.23	95017.710	4.5	117074.700	3.5
453.2440	62.00	-.97	1451.835	0.0	23515.006	0.0
453.2451	8.00	-2.55	86631.466	3.0	108688.400	2.0
453.2602	8.02	-.85	378408.500	2.0	400464.700	1.0
453.2610	27.00	-4.39	14036.280	1.5	36092.440	2.5
453.2624	22.00	-2.51	26803.417	2.0	48859.510	1.0
453.2643	23.00	-3.25	8715.720	3.5	30771.720	4.5
453.2690	24.00	-2.40	35501.260	3.0	57557.030	3.0
453.2737	24.00	-1.75	27597.220	3.0	49652.760	2.0
453.2830	25.02	-1.12	195752.480	2.5	217807.570	1.5
453.2920	23.00	-7.18	11100.650	4.5	33155.300	4.5
453.2935	27.00	-3.96	32841.990	4.5	54896.570	3.5
453.3004	28.01	-.86	113407.310	2.5	135461.550	2.5
453.3130	26.00	-3.09	26406.490	1.0	48460.120	0.0
453.3239	22.00	.56	6842.964	5.0	28896.062	5.0
453.3259	24.00	-3.21	27597.220	3.0	49650.220	3.0
453.3290	90.01	-1.19	9678.902	0.0	31737.936	0.0
453.3292	28.01	-.99	113408.710	1.5	135461.550	2.5
453.3309	27.00	-4.34	18775.010	.5	40827.770	1.5
453.3586	24.00	-1.14	25177.390	4.0	47228.800	5.0
453.3670	23.00	-2.50	15264.830	5.5	37315.830	5.5
453.3677	29.01	-4.74	108335.430	2.0	130386.400	2.0
453.3712	10.01	-1.66	291968.140	.5	314018.940	.5
453.3736	26.01	-3.47	50187.950	3.5	72238.630	2.5
453.3800	62.00	-.28	2258.411	0.0	24314.964	0.0
453.3804	29.01	-2.42	116080.460	3.0	138130.810	3.0
453.3884	28.01	-2.63	99040.750	1.5	121090.710	.5
453.3888	27.00	-3.84	32464.730	4.5	54514.670	3.5
453.3954	26.00	-3.07	23783.617	5.0	45833.240	4.0
453.3956	24.00	-1.62	24299.890	2.0	46349.500	2.0
453.3962	22.01	-.70	9975.920	1.5	32025.500	2.5
453.3962	24.01	-2.66	50667.330	3.5	72716.910	4.5
453.3969	15.01	-.82	105550.450	2.0	127600.000	1.0
453.3981	27.00	-.44	25041.160	1.5	47090.650	2.5
453.4120	90.01	-1.47	10485.478	0.0	32540.474	0.0
453.4150	59.01	-.95	5000.766	0.0	27055.616	0.0
453.4162	26.01	-3.46	23031.300	1.5	45079.910	2.5
453.4294	12.01	-2.48	93799.700	3.5	115847.670	3.5
453.4294	12.01	-.94	93799.700	3.5	115847.670	4.5
453.4294	12.01	-1.05	93799.700	2.5	115847.670	3.5
453.4351	24.01	-4.74	44307.440	.5	66355.130	1.5
453.4355	27.00	-3.35	21215.900	.5	43263.570	1.5
453.4413	28.01	-4.58	113623.100	.5	135670.490	.5
453.4475	25.00	-1.37	37737.220	3.5	59784.310	3.5
453.4524	10.01	-1.96	280797.260	2.5	302844.110	2.5
453.4557	22.00	-.48	20006.032	2.0	42052.720	3.0
453.4612	26.00	-4.88	35767.546	4.0	57813.970	3.0
453.4644	10.01	-.14	280797.260	2.5	302843.530	3.5
453.4710	74.00	-.62	19680.435	0.0	41732.562	0.0
453.4778	22.00	.37	6742.757	4.0	28788.372	4.0
453.4789	24.00	-1.82	24303.940	3.0	46349.500	2.0
453.5036	25.02	-3.80	121117.140	3.5	143161.500	4.5
453.5050	74.00	-.51	19680.435	0.0	41730.909	0.0
453.5094	23.01	-3.44	50473.760	1.0	72517.840	1.0
453.5125	24.00	-.80	20520.920	3.0	42564.850	4.0
453.5139	25.00	-1.22	38351.780	.5	60395.640	1.5
453.5147	24.01	-2.46	67012.280	2.5	89056.100	2.5
453.5151	8.02	-1.07	378420.900	1.0	400464.700	1.0
453.5205	23.01	-2.38	30613.970	4.0	52657.510	4.0
453.5291	23.00	-4.41	20202.490	2.5	42245.610	3.5
453.5328	24.01	-4.48	42986.730	1.5	65029.670	.5
453.5332	25.01	-4.53	79458.380	2.0	101501.300	3.0
453.5373	10.01	-.48	280947.100	1.5	302989.820	1.5
453.5380	42.00	-.76	20003.065	0.0	42051.934	0.0
453.5486	18.01	-.83	161048.640	1.5	183090.810	1.5
453.5521	12.02	-1.80	584733.400	3.0	606775.400	4.0
453.5569	10.01	-1.03	280947.100	1.5	302988.870	.5
453.5570	22.00	.16	6661.003	3.0	28702.768	3.0
453.5590	63.00	-.10	15808.874	0.0	37856.722	0.0
453.5602	28.01	-4.80	97273.830	2.5	119315.440	2.5
453.5633	25.01	-3.54	79458.380	2.0	101499.840	2.0
453.5695	24.00	-.53	20523.690	4.0	42564.850	4.0
453.5701	24.00	-.73	33060.740	3.0	55101.870	3.0
453.5746	24.00	-1.17	20523.940	5.0	42564.850	4.0
453.5750	40.00	-.73	4113.534	0.0	26160.604	0.0
453.5830	25.01	-4.01	86061.750	3.0	108102.250	3.0
453.5866	22.00	.28	11639.804	3.0	33680.130	3.0
453.5916	22.00	-.03	6598.749	2.0	28638.832	2.0
453.5920	59.01	-1.58	0.000	0.0	22046.244	0.0
453.6043	22.00	-.13	6556.828	1.0	28596.293	1.0
453.6096	21.00	-3.63	18515.770	1.5	40554.980	2.5
453.6228	24.00	-4.47	23163.270	0.0	45201.840	1.0
453.6440	28.01	-2.96	93528.440	3.5	115565.980	2.5
453.6473	25.01	-3.91	43528.300	5.0	65565.680	4.0
453.6485	26.00	-2.97	29371.860	3.0	51409.180	4.0
453.6510	62.01	-1.88	806.575	0.0	22849.952	0.0
453.6518	28.01	-.55	113407.310	2.5	135444.470	3.5
453.6551	24.00	-2.06	26787.500	3.0	48824.500	4.0
453.6559	26.02	-3.92	201293.750	2.0	223330.710	3.0
453.6658	7.00	-3.85	93581.520	.5	115618.000	1.5
453.6660	74.00	-.37	21696.873	0.0	43739.521	0.0
453.6683	24.00	-2.62	33762.740	6.0	55799.100	7.0
453.6690	22.00	-4.26	26803.417	2.0	48839.740	3.0
453.6755	26.00	-4.75	22249.430	3.0	44285.436	2.0
453.6800	42.00	1.12	28068.817	0.0	50110.785	0.0
453.6890	58.01	-.43	12179.286	0.0	34220.817	0.0
453.6905	22.01	-4.52	44902.420	2.5	66937.700	2.5
453.7080	90.01	-1.02	14195.724	0.0	36236.332	0.0
453.7098	28.00	-2.28	30163.140	2.0	52197.482	3.0
453.7144	26.02	-4.47	201293.750	2.0	223327.870	2.0
453.7187	10.01	-.44	280797.260	2.5	302831.170	3.5
453.7301	26.00	-3.28	33412.706	3.0	55446.060	4.0
453.7453	21.00	-3.78	18571.400	2.5	40604.020	3.5
453.7486	18.01	-3.02	186890.950	2.5	208923.410	2.5
453.7586	27.00	-4.84	21920.090	4.5	43952.060	5.5
453.7613	25.01	-4.52	49291.310	3.0	71323.150	2.0
453.7620	76.00	-1.34	16131.504	0.0	38169.489	0.0
453.7644	18.01	-1.79	172829.580	1.5	194861.270	2.5
453.7657	23.00	-.79	14548.830	2.5	36580.460	1.5
453.7676	26.00	-2.52	26351.049	5.0	48382.585	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
453.7809	9.02	-.28	469561.580	1.5	491592.470	1.5
453.7809	9.02	.67	469561.580	1.5	491592.470	2.5
453.7810	64.00	-.29	483.945	0.0	22521.007	0.0
453.7880	58.01	-1.04	7823.779	0.0	29860.501	0.0
453.7941	18.01	-4.20	186890.950	2.5	208921.200	1.5
453.7950	62.01	-1.08	3871.561	0.0	25907.943	0.0
453.7994	28.01	-4.11	114869.350	1.5	136899.340	2.5
453.7996	28.01	-4.79	114869.350	1.5	136899.330	1.5
453.8027	28.01	-3.08	113623.100	.5	135652.930	1.5
453.8036	25.01	-4.86	56883.380	1.0	78913.170	2.0
453.8083	25.00	-4.50	44978.980	1.5	67008.540	2.5
453.8113	26.00	-3.61	31937.308	1.0	53966.720	2.0
453.8116	25.01	-4.42	44899.820	3.0	66929.220	2.0
453.8184	28.01	-3.15	105838.060	3.5	127867.130	4.5
453.8190	92.01	-1.73	1693.808	0.0	23729.025	0.0
453.8191	28.00	-4.26	36600.805	2.0	58629.840	2.0
453.8244	25.01	-2.89	43536.900	4.0	65565.680	4.0
453.8251	28.00	-3.88	36600.805	2.0	58629.550	3.0
453.8310	9.02	.41	469564.010	.5	491592.470	1.5
453.8338	23.00	-2.60	15724.220	3.5	37752.540	2.5
453.8452	25.00	-2.09	37789.930	2.5	59817.700	2.5
453.8568	26.00	-2.94	32133.977	2.0	54161.182	3.0
453.8620	9.02	-2.52	444202.700	5.5	466229.650	4.5
453.8633	23.01	-3.34	30673.140	2.0	52700.030	2.0
453.8639	25.02	-2.46	195948.440	3.5	217975.300	2.5
453.8652	26.00	-2.83	29798.960	4.0	51825.758	3.0
453.8692	8.02	-.95	378438.100	0.0	400464.700	1.0
453.8697	28.01	-4.77	94705.930	3.5	116732.510	2.5
453.8707	18.01	-1.80	170530.310	3.5	192556.840	2.5
453.8754	26.00	-3.28	18378.187	2.0	40404.492	1.0
453.8771	26.01	-3.61	50142.930	2.5	72169.150	1.5
453.8775	27.02	-4.14	83938.900	3.5	105965.100	2.5
453.8779	24.01	-3.80	42898.120	2.5	64924.300	3.5
453.8823	28.01	-4.53	111783.790	3.5	133809.760	3.5
453.8825	22.00	-.83	18818.230	0.0	40844.190	1.0
453.8837	26.00	-3.11	31805.059	3.0	53830.960	3.0
453.8868	27.01	-2.03	64914.710	2.0	86940.460	2.0
453.8872	28.01	-4.64	99154.810	4.5	121180.540	4.5
453.8921	38.01	-4.82	53286.310	0.0	75317.978	0.0
453.8934	26.00	-3.42	33765.291	2.0	55790.720	3.0
453.9043	11.02	-2.11	444748.100	1.5	466773.000	1.5
453.9070	58.01	-.45	10969.423	0.0	33000.368	0.0
453.9078	25.01	-4.43	48317.850	4.0	70342.580	3.0
453.9163	21.00	-3.64	15756.510	2.5	37780.830	1.5
453.9243	26.00	-4.53	36686.159	4.0	58710.090	3.0
453.9325	9.00	-3.13	115917.909	2.5	137941.440	2.5
453.9355	26.00	-4.54	21999.132	4.0	44022.518	4.0
453.9379	25.01	-4.57	81812.900	2.0	103836.170	2.0
453.9488	25.01	-4.41	81780.700	3.0	103803.440	3.0
453.9583	25.00	-2.88	37630.620	4.5	59652.900	5.5
453.9585	25.00	-2.07	38934.940	2.5	60957.210	3.5
453.9610	25.02	-4.46	193498.070	3.5	215520.220	2.5
453.9611	22.00	-2.56	26892.926	3.0	48915.070	2.0
453.9635	24.01	-3.72	32603.730	2.5	54625.760	2.5
453.9679	26.00	-3.84	29732.721	1.0	51754.534	1.0
453.9680	28.01	-3.50	108548.610	1.5	130570.420	.5
453.9684	27.00	-3.15	32430.590	5.5	54452.380	6.5
453.9695	29.00	-.69	41538.623	0.0	63566.535	0.0
453.9750	58.01	-.60	2581.041	0.0	24608.686	0.0
453.9762	24.00	-1.04	20517.400	2.0	42538.810	3.0
453.9781	24.00	-4.58	27300.190	1.0	49321.510	2.0
453.9793	24.00	-3.77	24277.060	0.0	46298.320	1.0
453.9901	25.01	-4.87	44521.520	4.0	66542.260	5.0
453.9901	24.01	-3.41	52298.120	3.5	74318.860	2.5
453.9919	22.00	-.51	19937.859	1.0	41958.510	2.0
453.9920	76.00	.18	25407.119	0.0	47433.939	0.0
453.9980	40.00	-1.52	5000.766	0.0	27027.295	0.0
454.0012	23.00	-2.11	15264.830	5.5	37285.030	4.5
454.0020	64.01	.53	18631.887	0.0	40658.222	0.0
454.0185	24.00	-1.65	25106.340	3.0	47125.700	3.0
454.0190	62.01	-1.66	2177.753	0.0	24203.263	0.0
454.0272	27.00	-2.90	32841.990	4.5	54860.930	4.5
454.0362	17.01	-2.76	128662.500	2.0	150681.000	2.0
454.0404	22.00	-.71	18825.890	1.0	40844.190	1.0
454.0410	90.01	-1.05	14679.669	0.0	36704.112	0.0
454.0488	24.00	-.58	20520.920	3.0	42538.810	3.0
454.0503	22.00	-3.37	386.874	4.0	22404.690	3.0
454.0515	24.00	-2.39	28637.000	3.0	50654.760	2.0
454.0639	21.00	-4.01	18504.050	.5	40521.210	1.5
454.0650	26.00	-2.94	24118.815	4.0	46135.920	5.0
454.0734	24.00	-.13	25038.610	5.0	47055.310	5.0
454.0781	27.00	-1.15	30443.630	1.5	52460.100	2.5
454.0816	24.00	-1.86	25038.610	5.0	47054.910	4.0
454.0857	24.00	-1.24	24093.160	2.0	46109.260	2.0
454.0868	22.00	-.74	11639.804	3.0	33655.853	2.0
454.0909	25.00	-4.18	35689.980	1.5	57705.830	.5
454.0911	23.00	-3.24	14910.040	3.5	36925.880	3.5
454.0919	23.01	-4.88	30641.710	3.0	52657.510	4.0
454.0930	72.00	-1.74	5565.369	0.0	27587.290	0.0
454.0969	29.01	-2.00	122867.530	1.0	144883.090	2.0
454.0985	7.00	-2.58	93581.520	.5	115597.000	1.5
454.1004	22.00	-.42	18287.560	4.0	40302.950	3.0
454.1018	10.01	-3.65	302425.870	1.5	324441.190	2.5
454.1060	24.00	-1.13	20523.690	4.0	42538.810	3.0
454.1095	27.00	-2.79	33150.680	1.5	55165.630	2.5
454.1113	16.01	-3.12	131186.860	2.5	153201.720	1.5
454.1225	25.00	-.64	37586.030	1.5	59600.350	2.5
454.1249	29.01	-3.99	116388.000	2.0	138402.200	3.0
454.1270	60.01	-1.38	2984.328	0.0	25004.600	0.0
454.1299	28.01	-3.92	70778.120	3.5	92792.080	3.5
454.1317	26.00	-3.22	26224.961	3.0	48238.832	2.0
454.1340	23.01	-3.38	50775.470	2.0	72789.230	3.0
454.1487	23.00	-4.77	22313.990	5.5	44327.040	6.5
454.1515	26.01	-2.92	23031.300	1.5	45044.210	1.5
454.1515	24.00	-2.74	24833.860	3.0	46846.770	3.0
454.1548	25.02	-4.28	121197.050	2.5	143209.800	2.5
454.1555	27.00	-3.42	24733.280	2.5	46746.000	2.5
454.1594	2.01	-.22	411477.918	0.0	433496.619	0.0
454.1604	24.00	-1.11	25177.390	4.0	47189.870	4.0
454.1633	27.00	-3.04	32464.730	4.5	54477.070	3.5
454.1634	11.00	-2.65	16956.172	.5	38968.510	.5
454.1749	24.00	-2.05	24286.540	1.0	46298.320	1.0
454.1790	57.00	-.79	7420.492	0.0	29438.243	0.0
454.1800	75.00	-.12	28794.735	0.0	50812.437	0.0
454.1848	27.01	-4.41	63865.200	1.0	85876.500	1.0
454.1936	26.00	-3.93	26351.049	5.0	48361.920	4.0
454.1949	22.00	-3.33	27025.652	4.0	49036.460	4.0
454.2030	64.00	-.81	161.315	0.0	22177.902	0.0
454.2060	60.00	-.95	0.000	0.0	22016.442	0.0
454.2099	29.01	-3.97	115639.020	2.0	137649.100	2.0
454.2104	28.01	-4.68	105981.500	4.5	127991.560	3.5
454.2134	29.01	-3.96	117231.690	1.0	139241.600	1.0
454.2134	28.01	-3.07	99040.750	1.5	121050.660	2.5
454.2220	40.00	-.72	5000.766	0.0	27016.432	0.0
454.2238	28.00	-3.58	34163.294	2.0	56172.704	3.0
454.2283	24.00	-4.14	31028.330	2.0	53037.520	2.0
454.2402	10.01	-2.91	306687.290	2.5	328695.900	2.5
454.2406	10.01	-.94	306687.290	2.5	328695.880	1.5
454.2421	26.00	-1.75	29356.780	2.0	51365.300	3.0
454.2481	10.01	-.82	306687.670	3.5	328695.900	2.5
454.2547	21.00	-.25	14926.240	2.5	36934.150	1.5
454.2560	28.01	-2.12	116833.150	4.5	138841.000	3.5
454.2599	24.01	-4.08	68583.440	2.5	90591.100	2.5
454.2611	9.02	.17	444470.240	1.5	466477.840	2.5
454.2634	24.01	-3.81	68843.510	3.5	90851.000	4.5
454.2636	24.00	-1.89	24897.550	4.0	46905.030	4.0
454.2685	26.00	-2.36	29732.721	1.0	51739.964	2.0
454.2800	41.00	-2.36	0.000	0.0	22012.856	0.0
454.2820	24.01	-4.54	25033.950	3.5	47040.540	2.5
454.2890	74.00	-1.40	15324.929	0.0	37337.348	0.0
454.3057	21.00	-4.22	18515.770	1.5	40521.210	1.5
454.3510	74.00	-.04	21293.585	0.0	43303.001	0.0
454.3619	24.00	-1.75	39158.630	4.0	61161.350	5.0
454.3630	92.01	-1.32	887.233	0.0	22896.067	0.0
454.3677	27.00	-3.35	31699.690	4.5	53702.130	3.5
454.3690	44.00	-1.83	9114.300	0.0	31122.844	0.0
454.3708	24.01	-3.52	67506.340	5.5	89508.630	5.5
454.3749	24.00	-1.69	24056.110	5.0	46058.200	4.0
454.3805	28.01	-4.06	99040.750	1.5	121042.570	1.5
454.3815	28.01	-2.03	99040.750	1.5	121042.520	1.5
454.3871	18.01	-1.15	161089.310	.5	183090.810	1.5
454.3908	25.01	-4.20	44899.820	3.0	66901.140	2.0
454.3950	62.01	-1.17	2661.698	0.0	24668.982	0.0
454.4003	24.00	-3.06	27597.220	3.0	49598.080	2.0
454.4020	72.00	-1.37	10485.478	0.0	32492.423	0.0
454.4024	22.01	-2.48	10024.740	2.5	32025.500	2.5
454.4121	10.01	-1.41	280989.530	1.5	302989.820	1.5
454.4150	26.01	-2.62	61726.090	3.5	83726.240	3.5
454.4230	64.00	-.60	7339.834	0.0	29345.762	0.0
454.4270	45.00	-1.53	14679.669	0.0	36685.404	0.0
454.4317	10.01	-1.99	280989.530	1.5	302988.870	.5
454.4320	39.00	-.21	15405.586	0.0	37411.079	0.0
454.4410	25.00	-.48	38669.600	3.5	60668.490	4.5
454.4433	22.00	-1.99	27025.652	4.0	49024.430	3.0
454.4478	23.00	-5.45	10892.500	3.5	32891.060	3.5
454.4490	26.00	-4.18	32133.977	2.0	54132.480	1.0
454.4492	28.01	-3.80	114052.040	3.5	136050.530	2.5
454.4494	10.00	-2.70	150858.508	2.0	172856.990	1.0
454.4505	24.00	-1.91	24299.890	2.0	46298.320	1.0
454.4511	17.01	-2.24	139350.000	1.0	161348.400	1.0
454.4520	90.01	-2.22	4436.164	0.0	26440.688	0.0
454.4552	27.00	-1.82	29269.730	4.5	51267.930	4.5
454.4604	24.00	-.57	20517.400	2.0	42515.350	2.0
454.4637	21.00	-.07	15041.980	3.5	37039.770	2.5
454.4678	27.00	-3.83	29563.170	1.5	51560.760	2.5
454.4688	22.00	-.43	6598.749	2.0	28596.293	1.0
454.4709	24.01	-3.98	25043.100	1.5	47040.540	2.5
454.4710	22.00	-2.61	20209.444	2.0	42206.880	2.0
454.4830	62.01	-2.07	2661.698	0.0	24664.721	0.0
454.4960	58.01	-1.12	3306.958	0.0	25309.352	0.0
454.5048	18.01	-.27	138243.550	1.5	160239.350	1.5
454.5118	22.01	-2.92	9118.150	4.5	31113.610	3.5
454.5166	18.02	-4.35	187171.120	1.0	209166.350	0.0
454.5170	75.00	-1.21	15647.559	0.0	37648.936	0.0
454.5172	26.01	-3.50	62689.960	2.5	84685.160	3.5
454.5184	11.00	-2.35	16973.368	1.5	38968.510	.5
454.5216	25.00	-3.16	45013.550	2.5	67008.540	2.5
454.5238	27.00	-.82	31699.690	4.5	53694.570	3.5
454.5271	25.00	-2.56	37737.220	3.5	59731.940	4.5
454.5274	12.01	-4.00	93799.700	2.5	115794.410	2.5
454.5274	12.01	-2.70	93799.700	3.5	115794.410	2.5
454.5274	12.01	-2.86	93799.700	2.5	115794.410	1.5
454.5297	17.02	-1.93	183042.700	2.5	205037.300	1.5
454.5331	24.00	-1.26	20520.920	3.0	42515.350	2.0
454.5342	25.00	-2.79	37789.930	2.5	59784.310	3.5
454.5353	20.00	-4.98	20349.260	2.0	42343.587	3.0
454.5359	12.02	-.96	562634.200	1.0	584628.500	2.0
454.5359	12.02	-.96	562634.200	1.0	584628.500	2.0
454.5360	25.02	-4.38	94697.850	3.5	116692.140	2.5
454.5385	23.00	.40	15770.720	4.5	37764.890	5.5
454.5476	24.01	-4.16	47354.630	2.5	69348.360	1.5
454.5489	17.00	-2.42	72488.568	1.5	94482.236	2.5
454.5493	29.01	-4.89	117747.450	3.0	139741.100	3.0
454.5524	24.01	-4.39	25047.040	2.5	47040.540	2.5
454.5536	26.00	-3.22	29371.860	3.0	51365.300	3.0
454.5552	28.01	-.37	113407.310	2.5	135400.670	3.5
454.5569	24.01	-3.61	67344.420	2.5	89337.700	1.5
454.5580	92.01	-1.77	2258.411	0.0	24257.804	0.0
454.5583	29.01	-3.24	116080.460	3.0	138073.670	4.0
454.5680	77.00	-1.32	12985.861	0.0	34984.770	0.0
454.5778	27.00	-4.11	33173.360	3.5	55165.630	2.5
454.5810	62.01	-2.29	5242.739	0.0	27241.019	0.0
454.5825	27.00	-1.83	30102.960	2.5	52095.000	3.5
454.5870	58.01	-1.58	5887.999	0.0	27885.988	0.0
454.5945	24.00	-1.55	7593.160	2.0	29584.620	2.0
454.5958	24.01	-1.86	67334.200	3.5	89325.600	4.5
454.5962	9.02	-3.07	444238.270	4.5	466229.650	4.5
454.6018	24.00	-2.11	28637.000	3.0	50628.110	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
454.6048	9.02	-4.37	444238.270	4.5	466229.230	3.5
454.6090	26.01	-3.56	64425.460	2.5	86416.220	3.5
454.6228	23.01	-9.64	25191.080	2.0	47181.170	3.0
454.6274	24.00	-2.35	38537.680	5.0	60527.550	6.0
454.6315	18.01	-2.63	190942.650	.5	212932.320	1.5
454.6425	29.01	-2.44	117130.360	2.0	139119.500	3.0
454.6429	23.00	-2.34	14949.300	4.5	36938.420	5.5
454.6454	26.00	-2.87	33765.291	2.0	55754.290	2.0
454.6490	74.00	-.43	18147.942	0.0	40142.932	0.0
454.6522	24.00	-4.70	31048.850	1.0	53037.520	2.0
454.6537	24.00	-1.67	33113.270	4.0	55101.870	3.0
454.6543	25.01	-3.51	79512.730	3.0	101501.300	3.0
454.6569	9.02	-1.14	444489.400	2.5	466477.840	2.5
454.6580	9.02	.26	444489.400	2.5	466477.790	3.5
454.6640	28.01	-4.84	99132.780	5.5	121120.880	5.5
454.6671	26.00	-3.10	31937.308	1.0	53925.260	1.0
454.6694	23.00	-2.51	14910.040	3.5	36897.880	4.5
454.6708	9.02	-3.36	444202.700	5.5	466190.470	4.5
454.6792	28.00	-3.74	36600.805	2.0	58588.168	3.0
454.6809	18.01	-2.70	186815.960	3.5	208803.240	4.5
454.6820	41.00	-1.07	1532.493	0.0	23525.886	0.0
454.6832	27.01	-1.97	64359.560	3.0	86346.730	3.0
454.6859	27.01	-5.30	25861.460	0.0	47848.500	1.0
454.6869	27.00	-1.74	27497.060	2.5	49484.050	3.5
454.6869	24.01	-4.07	66649.710	1.5	88636.700	1.5
454.6920	28.00	-.26	33590.159	4.0	55576.905	3.0
454.7012	25.01	-4.28	79512.730	3.0	101499.030	4.0
454.7021	26.00	-3.32	12560.933	3.0	34547.192	2.0
454.7031	25.02	-3.97	194545.780	.5	216531.990	1.5
454.7074	12.02	-2.87	584733.400	3.0	606719.400	2.0
454.7150	73.00	-2.04	9920.875	0.0	31912.672	0.0
454.7153	24.01	-2.19	67070.480	1.5	89056.100	2.5
454.7155	29.01	-3.76	117231.690	1.0	139217.300	2.0
454.7218	28.00	-1.42	29320.782	3.0	51306.085	3.0
454.7330	44.00	-1.23	7420.492	0.0	29411.419	0.0
454.7376	28.01	-3.83	99340.550	3.5	121325.090	2.5
454.7393	25.01	-2.73	83070.970	2.0	105055.430	2.0
454.7440	27.00	-1.87	29216.370	2.5	51200.600	1.5
454.7467	23.00	-3.45	15571.900	2.5	37556.000	3.5
454.7469	24.00	-1.61	35572.940	2.0	57557.030	3.0
454.7502	24.00	-2.39	24093.160	2.0	46077.090	1.0
454.7550	29.01	-3.93	115665.400	1.0	137649.100	2.0
454.7575	21.00	-4.40	18571.400	2.5	40554.980	2.5
454.7624	24.00	-2.54	28679.430	1.0	50662.770	1.0
454.7629	26.02	-4.17	168420.990	2.0	190404.310	3.0
454.7651	27.00	-2.16	29216.370	2.5	51199.580	3.5
454.7674	27.00	-4.79	33466.870	3.5	55449.970	2.5
454.7676	28.01	-4.43	114869.350	1.5	136852.440	1.5
454.7732	27.00	-4.42	8460.810	2.5	30443.630	1.5
454.7761	18.01	-.97	160239.350	1.5	182222.030	1.5
454.7827	25.01	-4.78	86190.180	2.0	108172.540	1.0
454.7827	22.00	-3.98	19573.968	4.0	41556.330	5.0
454.7828	22.00	-.92	20006.032	2.0	41988.390	3.0
454.7830	20.00	-.53	15315.943	2.0	37298.287	2.0
454.7848	25.00	-4.26	37586.030	1.5	59568.290	.5
454.7850	41.00	-1.46	8952.985	0.0	30941.397	0.0
454.7850	44.00	-.64	13873.093	0.0	35861.505	0.0
454.7851	26.00	-.86	28604.610	2.0	50586.857	3.0
454.7949	24.00	-2.10	28679.430	1.0	50661.200	0.0
454.8005	12.02	-1.29	584737.900	2.0	606719.400	2.0
454.8013	24.01	-4.03	50667.330	3.5	72648.790	3.5
454.8096	24.00	-4.51	24897.550	4.0	46878.610	3.0
454.8107	22.00	-.80	20126.055	3.0	42107.060	4.0
454.8171	18.02	-4.81	187171.120	1.0	209151.820	2.0
454.8193	24.00	-2.07	28682.180	2.0	50662.770	1.0
454.8240	60.00	-.50	3629.588	0.0	25616.115	0.0
454.8260	25.01	-1.74	86190.180	2.0	108170.450	2.0
454.8309	27.01	-4.07	63616.000	2.0	85596.030	2.0
454.8344	25.02	-3.00	121117.140	3.5	143097.000	3.5
454.8442	28.01	-3.89	114052.040	3.5	136031.430	2.5
454.8480	77.00	.37	30327.228	0.0	52312.595	0.0
454.8601	23.00	-4.06	8715.720	3.5	30694.340	3.5
454.8653	24.00	-.54	33762.740	6.0	55741.110	6.0
454.8660	76.00	-.91	14760.326	0.0	36744.823	0.0
454.8678	18.01	-2.88	182951.150	.5	204929.400	.5
454.8684	23.01	-4.11	30267.460	2.0	52245.680	2.0
454.8730	45.00	-1.55	11856.655	0.0	33840.813	0.0
454.8761	26.00	-4.63	24335.764	2.0	46313.610	2.0
454.8765	22.00	-.26	6661.003	3.0	28638.832	2.0
454.8994	26.02	-3.94	168420.990	2.0	190397.710	2.0
454.9023	23.00	-2.36	14949.300	4.5	36925.880	3.5
454.9038	25.02	-4.43	172569.270	1.5	194545.780	.5
454.9183	24.00	-3.12	27597.220	3.0	49573.030	4.0
454.9193	26.01	-1.84	47674.780	1.5	69650.540	2.5
454.9224	24.01	-3.80	47372.750	1.5	69348.360	1.5
454.9282	24.00	-4.26	28679.430	1.0	50654.760	2.0
454.9305	28.01	-2.40	113407.310	2.5	135382.530	1.5
454.9309	12.02	-2.24	584737.900	2.0	606713.100	1.0
454.9313	25.01	-2.98	82939.000	1.0	104914.180	0.0
454.9430	44.00	-1.97	7985.094	0.0	29965.870	0.0
454.9454	26.00	-1.66	31307.235	4.0	53281.735	5.0
454.9464	26.01	-2.07	22810.330	3.5	44784.780	2.5
454.9500	57.00	-.92	2984.328	0.0	24964.765	0.0
454.9595	28.01	-2.40	113408.710	1.5	135382.530	1.5
454.9622	22.01	-.22	12774.810	5.5	34748.500	4.5
454.9640	58.01	-.66	10969.423	0.0	32949.184	0.0
454.9651	27.00	-.28	24733.280	2.5	46706.830	3.5
454.9680	27.00	-1.22	29294.520	3.5	51267.930	4.5
454.9802	27.01	-1.90	63509.370	4.0	85482.190	4.0
454.9812	22.01	-2.47	9518.050	2.5	31490.820	3.5
454.9851	24.00	-2.78	28682.180	2.0	50654.760	2.0
454.9903	26.00	-3.52	29732.721	1.0	51705.052	2.0
454.9914	26.02	-3.99	168420.990	2.0	190393.270	1.0
454.9922	26.01	-8.78	23317.600	2.5	45289.840	1.5
454.9960	44.00	.12	23229.366	0.0	45207.581	0.0
454.9972	24.01	-1.65	67353.600	4.5	89325.600	4.5
455.0030	62.00	-1.10	2258.411	0.0	24236.288	0.0
455.0060	59.01	-2.02	5162.081	0.0	27139.813	0.0
455.0168	25.01	-4.17	47073.560	3.0	69044.610	2.0
455.0300	58.01	-.90	8952.985	0.0	30929.558	0.0
455.0410	76.00	-.23	14760.326	0.0	36736.368	0.0
455.0479	27.00	-2.65	26232.050	3.5	48201.600	3.5
455.0535	9.01	-3.46	236960.830	1.0	258930.110	2.0
455.0780	77.00	-1.97	12824.546	0.0	34798.801	0.0
455.0829	25.00	-3.28	38934.940	2.5	60902.800	3.5
455.0836	28.00	-2.09	31786.210	3.0	53754.036	2.0
455.0852	25.00	-4.33	45013.550	2.5	66981.300	3.5
455.0880	59.01	-2.38	1613.150	0.0	23586.922	0.0
455.0897	28.00	-4.33	28569.210	2.0	50536.742	1.0
455.0911	22.00	-1.42	25227.217	3.0	47194.680	4.0
455.0950	64.01	-1.57	5807.341	0.0	27780.775	0.0
455.0999	27.00	-2.25	30102.960	2.5	52070.000	2.5
455.1131	23.03	-1.28	236322.400	2.0	258288.800	1.0
455.1160	24.00	-.87	38537.680	5.0	60503.940	4.0
455.1200	28.01	-3.32	99154.810	4.5	121120.880	5.5
455.1217	28.00	-.95	33610.916	2.0	55576.905	3.0
455.1300	58.01	-.72	5887.999	0.0	27859.743	0.0
455.1300	76.00	-.83	14760.326	0.0	36732.070	0.0
455.1339	28.01	-4.84	100475.820	3.5	122441.220	4.5
455.1463	29.01	-4.18	128778.100	4.0	150742.900	3.0
455.1511	24.00	-1.61	39158.630	4.0	61123.200	4.0
455.1600	25.01	-2.60	86208.400	1.0	108172.540	1.0
455.1637	26.00	-2.10	31805.059	3.0	53769.020	4.0
455.1640	45.00	-1.68	10243.505	0.0	32213.608	0.0
455.1654	10.01	-1.76	281025.940	2.5	302989.820	1.5
455.1685	28.01	-3.55	108368.050	2.5	130331.780	1.5
455.1732	22.00	-2.46	19937.859	1.0	41901.360	1.0
455.1836	23.00	-1.25	14514.750	1.5	36477.750	.5
455.1850	74.00	-1.06	13227.833	0.0	35196.922	0.0
455.1873	25.01	-3.26	49427.320	4.0	71390.140	3.0
455.1877	24.00	-4.09	31048.850	1.0	53011.650	1.0
455.1888	29.01	-2.46	117747.450	3.0	139710.200	2.0
455.1950	73.00	-2.11	3871.561	0.0	25840.168	0.0
455.1970	18.00	-2.73	104102.144	1.0	126064.500	2.0
455.1980	92.00	-1.59	564.603	0.0	22533.065	0.0
455.2033	25.01	-2.63	86208.400	1.0	108170.450	2.0
455.2110	44.00	-1.70	8469.040	0.0	30436.875	0.0
455.2160	90.00	-1.13	8711.012	0.0	30678.605	0.0
455.2217	24.01	-2.70	50687.630	2.5	72648.790	3.5
455.2248	22.01	-3.55	8997.690	3.5	30958.700	2.5
455.2354	28.01	-3.80	115000.250	3.5	136960.750	2.5
455.2373	16.01	-.06	121528.200	1.5	143488.610	.5
455.2404	16.01	-1.95	130134.080	2.5	152094.340	2.5
455.2419	22.00	-4.40	12118.394	4.0	34078.580	3.0
455.2420	78.00	.50	33472.871	0.0	55439.210	0.0
455.2435	27.00	-.61	30742.650	.5	52702.760	1.5
455.2456	22.00	-.24	6742.757	4.0	28702.768	3.0
455.2522	7.01	.21	189335.160	3.0	211294.850	4.0
455.2598	10.00	-3.10	150121.592	1.0	172080.916	1.0
455.2622	14.02	.33	153377.050	1.0	175336.260	2.0
455.2660	62.01	-1.55	1935.780	0.0	23900.961	0.0
455.2684	27.00	-1.86	23152.570	3.5	45111.480	4.5
455.2889	27.00	-4.37	33449.180	.5	55407.100	1.5
455.2918	24.01	-3.68	67379.920	1.5	89337.700	1.5
455.3010	40.00	-1.22	4113.534	0.0	26077.026	0.0
455.3065	23.00	-2.36	19023.470	4.5	40980.540	4.5
455.3151	21.01	-1.36	39114.440	1.0	61071.100	1.0
455.3164	28.00	-1.50	29500.690	1.0	51457.285	0.0
455.3174	10.01	-.35	280947.100	1.5	302903.650	2.5
455.3208	27.00	-3.59	18389.570	1.5	40345.950	2.5
455.3231	24.01	-2.65	67369.330	3.5	89325.600	4.5
455.3242	26.01	-4.85	50212.930	2.5	72169.150	1.5
455.3292	20.02	-.18	339198.090	1.0	361154.070	2.0
455.3304	18.02	-4.48	187171.120	1.0	209127.040	1.0
455.3320	42.00	-.52	21212.928	0.0	43174.925	0.0
455.3331	27.00	-1.87	25568.680	3.5	47524.470	4.5
455.3398	10.01	-.80	280947.100	1.5	302902.570	1.5
455.3419	22.00	-2.11	24694.895	4.0	46650.260	3.0
455.3478	23.00	-3.82	21963.500	3.5	43918.580	2.5
455.3487	26.00	-2.71	24772.019	1.0	46727.055	2.0
455.3590	70.01	-.86	30407.885	0.0	52368.580	0.0
455.3652	23.00	-7.59	10892.500	3.5	32846.740	2.5
455.3652	23.00	-4.72	10892.500	3.5	32846.740	2.5
455.3690	73.00	-1.66	11130.738	0.0	33090.950	0.0
455.3793	26.02	-3.64	167002.000	2.0	188955.560	3.0
455.3800	42.00	-.31	25326.461	0.0	47286.143	0.0
455.3840	41.00	-1.28	5887.999	0.0	27847.488	0.0
455.3860	92.01	-2.51	887.233	0.0	22846.626	0.0
455.3912	28.01	-1.46	91800.050	4.5	113753.040	4.5
455.3945	24.00	-.93	33040.100	2.0	54992.930	2.0
455.3970	40.01	-.11	19357.805	0.0	41316.667	0.0
455.3971	9.02	-2.87	444238.270	4.5	466190.970	3.5
455.4018	22.00	-1.47	20006.032	2.0	41958.510	2.0
455.4029	56.01	.19	0.000	0.0	21958.578	0.0
455.4075	9.02	-3.48	444238.270	4.5	466190.470	4.5
455.4102	7.01	-1.35	189335.160	3.0	211287.230	3.0
455.4280	8.04	-.44	672965.000	0.0	694922.368	0.0
455.4283	17.01	-3.77	128729.800	3.0	150681.000	2.0
455.4285	28.01	-4.95	111783.790	3.5	133734.980	3.5
455.4449	24.01	-4.99	67387.300	2.5	89337.700	1.5
455.4450	62.01	-1.89	806.575	0.0	22763.123	0.0
455.4457	26.00	-3.09	23110.925	3.0	45061.287	3.0
455.4478	28.01	-3.96	109846.000	3.5	131796.260	2.5
455.4510	44.00	.15	6452.602	0.0	28408.861	0.0
455.4560	58.01	-1.92	3952.218	0.0	25908.236	0.0
455.4565	27.00	-3.82	32733.070	3.5	54682.910	4.5
455.4572	10.00	-3.81	150121.592	1.0	172071.396	2.0
455.4573	23.03	-.98	265271.600	3.0	287221.400	2.0
455.4594	25.01	-2.54	83070.970	2.0	105020.670	1.0
455.4660	20.02	-1.37	325467.670	2.0	347417.050	3.0
455.4671	24.01	-3.71	44307.440	.5	66256.770	.5
455.4694	24.00	-2.28	24897.550	4.0	46846.770	3.0
455.4820	15.01	.14	106001.990	1.0	127950.600	2.0
455.4827	23.00	-2.97	14949.300	4.5	36897.880	4.5
455.4829	24.00	-1.10	25106.340	3.0	47054.910	4.0
455.4847	7.00	-2.56	93581.520	.5	115530.000	.5
455.4847	7.00	-4.03	93581.520	.5	115530.000	1.5
455.4883	24.00	-4.40	25177.390	4.0	47125.700	3.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
455.4947	11.02	-3.27	444825.000	2.5	466773.000	1.5
455.4970	60.01	-2.39	2984.328	0.0	24938.369	0.0
455.4982	24.01	-1.53	32836.840	3.5	54784.670	3.5
455.4990	64.01	-1.15	10727.450	0.0	32681.395	0.0
455.5003	25.00	-2.73	45060.810	3.5	67008.540	2.5
455.5040	28.00	-4.42	35639.148	3.0	57586.700	2.0
455.5096	22.00	-.10	19421.576	3.0	41368.660	4.0
455.5100	92.01	-1.29	8307.725	0.0	30261.140	0.0
455.5101	24.00	-.91	25038.610	5.0	46985.870	5.0
455.5130	40.00	-.21	12421.258	0.0	34374.528	0.0
455.5193	22.00	-3.34	26892.926	3.0	48839.740	3.0
455.5225	55.00	-1.28	0.000	0.0	21952.612	0.0
455.5256	23.00	-1.64	14514.750	1.5	36461.260	2.5
455.5283	24.00	-1.51	27703.840	4.0	49650.220	3.0
455.5300	8.02	-.38	378408.500	2.0	400354.600	2.0
455.5358	23.00	-2.34	15264.830	5.5	37210.650	5.5
455.5377	24.00	-2.91	28682.180	2.0	50628.110	3.0
455.5387	10.00	-2.72	150315.861	2.0	172261.740	1.0
455.5485	22.00	-.39	6842.964	5.0	28788.372	4.0
455.5520	40.00	-.32	12663.231	0.0	34614.622	0.0
455.5522	27.01	-3.51	64401.500	4.0	86346.730	3.0
455.5595	23.00	-3.47	22121.170	4.5	44066.050	3.5
455.5750	26.00	-3.74	26406.490	1.0	48350.620	1.0
455.5810	90.00	-1.43	3790.903	0.0	25740.897	0.0
455.5819	23.03	-.53	264113.100	4.0	286056.900	3.0
455.5883	26.01	-2.51	22810.330	3.5	44753.620	3.5
455.5935	23.01	-4.31	50738.820	1.0	72682.060	2.0
455.6091	26.00	-4.43	31805.059	3.0	53747.547	3.0
455.6091	26.00	-2.59	23783.617	5.0	45726.104	5.0
455.6093	7.00	-3.23	93581.520	.5	115524.000	.5
455.6093	7.00	-2.94	93581.520	.5	115524.000	1.5
455.6140	60.01	-2.22	483.945	0.0	22432.349	0.0
455.6163	24.00	-.74	25106.340	3.0	47048.480	3.0
455.6222	25.00	-2.88	37586.030	1.5	59527.890	1.5
455.6332	25.00	-4.34	37586.030	1.5	59527.360	.5
455.6350	73.00	-1.41	11130.738	0.0	33078.130	0.0
455.6373	24.00	-2.80	25106.340	3.0	47047.470	2.0
455.6375	22.00	-3.05	19573.968	4.0	41515.090	4.0
455.6402	23.01	-3.86	51085.770	3.0	73026.760	2.0
455.6402	25.01	-3.95	44745.460	2.0	66686.450	3.0
455.6483	25.01	-4.46	81862.840	4.0	103803.440	3.0
455.6498	24.00	-3.57	31987.060	4.0	53927.590	4.0
455.6700	10.00	-3.43	150917.431	0.0	172856.990	1.0
455.6740	60.01	-2.18	1451.835	0.0	23397.349	0.0
455.6757	23.01	-1.85	30306.400	3.0	52245.680	2.0
455.6840	41.00	-1.75	4920.109	0.0	26865.141	0.0
455.6851	38.01	-3.23	53372.970	0.0	75317.949	0.0
455.6870	74.00	-.37	23793.968	0.0	45738.856	0.0
455.6926	26.00	-1.41	26224.961	3.0	48163.427	2.0
455.7023	24.00	-4.79	24940.610	2.0	46878.610	3.0
455.7111	23.00	-2.28	15000.840	5.5	36938.420	5.5
455.7138	24.00	-3.17	35398.020	4.0	57335.470	4.0
455.7190	26.00	-4.23	32873.623	4.0	54810.820	4.0
455.7242	22.00	-3.05	20209.444	2.0	42146.390	1.0
455.7264	27.00	-3.62	32430.590	5.5	54367.430	5.5
455.7507	29.01	-1.30	116326.160	3.0	138261.830	3.0
455.7551	23.01	-4.69	50738.820	1.0	72674.280	2.0
455.7588	22.00	-4.45	25102.880	2.0	47038.160	3.0
455.7850	28.01	-3.10	114052.040	3.5	135986.060	3.5
455.7850	27.00	-1.05	29269.730	4.5	51203.750	5.5
455.7852	22.00	-1.41	19937.859	1.0	41871.670	2.0
455.7875	8.02	-.85	378420.900	1.0	400354.600	2.0
455.7916	22.00	-2.15	19937.859	1.0	41871.560	0.0
455.8040	40.00	-1.01	11130.738	0.0	33069.993	0.0
455.8080	64.01	-1.54	3952.218	0.0	25891.280	0.0
455.8081	15.01	-.91	106001.990	1.0	127934.900	1.0
455.8106	22.00	.05	18911.399	2.0	40844.190	3.0
455.8106	22.00	-2.06	18911.399	2.0	40844.190	1.0
455.8106	26.00	-1.80	29371.860	3.0	51304.650	4.0
455.8110	42.00	-1.49	10888.765	0.0	32827.683	0.0
455.8230	24.00	-1.90	33060.740	3.0	54992.930	2.0
455.8287	25.00	-3.48	35689.980	1.5	57621.900	1.5
455.8312	24.01	-2.04	67393.800	3.5	89325.600	4.5
455.8457	25.01	-4.49	44745.460	2.0	66676.560	2.0
455.8460	57.01	-1.61	2581.041	0.0	24518.274	0.0
455.8472	27.01	-4.25	63665.000	1.0	85596.030	2.0
455.8484	23.01	-1.07	30673.140	2.0	52604.110	1.0
455.8531	22.00	-1.44	25107.417	2.0	47038.160	3.0
455.8576	26.01	-6.46	21308.080	1.5	43238.610	2.5
455.8592	22.01	-2.36	45673.750	4.5	67604.200	3.5
455.8600	58.01	-1.41	4839.451	0.0	26776.010	0.0
455.8623	27.00	-2.04	30102.960	2.5	52033.260	1.5
455.8642	24.01	-.69	32854.460	4.5	54784.670	3.5
455.8650	24.00	-1.25	38537.680	5.0	60467.850	5.0
455.8677	26.00	-4.53	35767.546	4.0	57697.590	4.0
455.8717	27.00	-1.87	29269.730	4.5	51199.580	3.5
455.8740	42.00	-.96	20003.065	0.0	41938.951	0.0
455.8761	24.00	-3.38	35398.020	4.0	57327.660	5.0
455.8773	24.01	-2.76	32855.090	2.5	54784.670	3.5
455.8780	28.00	-4.75	36600.805	2.0	58530.350	3.0
455.8850	9.02	-.53	444489.400	2.5	466418.610	3.5
455.8881	24.01	-3.30	68583.440	2.5	90512.500	1.5
455.8970	74.00	-1.08	17986.627	0.0	39921.406	0.0
455.9110	74.00	-1.46	14840.984	0.0	36775.090	0.0
455.9124	27.00	-2.94	21920.090	4.5	43847.980	3.5
455.9270	75.00	-1.52	15647.559	0.0	37580.895	0.0
455.9290	57.01	-1.72	6129.972	0.0	28063.212	0.0
455.9339	23.00	-4.89	15571.900	2.5	37498.760	2.5
455.9368	26.02	-3.71	167085.120	3.0	189011.840	4.0
455.9370	39.00	-.25	15082.956	0.0	37015.811	0.0
455.9379	22.00	-1.55	20126.055	3.0	42052.720	3.0
455.9460	73.00	-1.47	12743.888	0.0	34676.310	0.0
455.9546	27.00	-4.18	32430.590	5.5	54356.450	4.5
455.9567	9.02	-4.16	444552.080	3.5	466477.840	2.5
455.9576	26.01	-2.82	62945.120	3.5	84870.840	2.5
455.9578	9.02	-2.30	444552.080	3.5	466477.790	3.5
455.9669	28.01	-3.34	114052.040	3.5	135977.310	4.5
455.9670	60.00	-.36	2339.068	0.0	24270.480	0.0
455.9680	75.00	-1.61	13711.778	0.0	35643.142	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
455.9723	25.01	-4.78	49465.130	3.0	71390.140	3.0
455.9787	28.00	-4.28	36600.805	2.0	58525.507	1.0
455.9919	22.00	.41	11776.806	4.0	33700.874	4.0
455.9921	28.00	-1.89	28542.113	5.0	50466.172	4.0
455.9933	27.01	-3.80	28111.900	2.0	50035.900	3.0
455.9980	44.00	-1.24	9033.642	0.0	30963.563	0.0
455.9992	24.00	-.47	33762.740	6.0	55686.460	5.0
456.0010	27.01	-4.08	65016.830	2.0	86940.460	2.0
456.0076	26.00	-4.91	29056.312	3.0	50979.627	4.0
456.0098	10.01	-4.88	302247.780	3.5	324170.990	2.5
456.0130	42.01	-.04	23390.681	0.0	45319.880	0.0
456.0135	10.01	-3.52	302247.780	3.5	324170.810	3.5
456.0170	22.00	-3.76	25107.417	2.0	47030.280	3.0
456.0195	29.01	-4.97	116080.460	3.0	138003.200	2.0
456.0245	24.00	-2.49	27597.220	3.0	49519.720	3.0
456.0262	26.00	-2.67	22838.320	2.0	44760.739	1.0
456.0280	58.01	-.15	7259.177	0.0	29187.655	0.0
456.0430	62.01	-2.00	322.630	0.0	22250.387	0.0
456.0470	24.00	-4.10	20517.400	2.0	42438.820	2.0
456.0471	22.00	-3.65	26803.417	2.0	48724.830	1.0
456.0535	18.01	-3.37	191012.350	1.5	212933.460	2.5
456.0573	22.00	-3.60	26803.417	2.0	48724.340	2.0
456.0626	25.02	-3.06	9477.470	2.5	116692.140	2.5
456.0649	24.00	-2.25	28637.000	3.0	50557.560	4.0
456.0663	25.00	-2.72	45060.810	3.5	66981.300	3.5
456.0726	23.00	.26	15724.220	3.5	37644.410	4.5
456.0772	18.01	-3.58	191012.350	1.5	212932.320	1.5
456.0790	23.00	-5.51	8715.720	3.5	30635.600	2.5
456.0838	24.00	-3.38	39158.630	4.0	61078.280	3.0
456.0855	24.01	-4.47	67589.060	6.5	89508.630	5.5
456.0890	45.00	-1.32	16050.847	0.0	37976.392	0.0
456.0951	27.00	-3.32	22475.360	4.5	44394.470	3.5
456.0960	58.01	-.70	5484.711	0.0	27409.920	0.0
456.1013	18.01	-2.07	157673.320	2.5	179592.130	2.5
456.1188	27.00	-3.39	31871.150	3.5	53789.120	3.5
456.1190	62.01	-2.74	3468.273	0.0	25392.376	0.0
456.1202	24.00	-3.70	20520.920	3.0	42438.820	2.0
456.1259	27.00	-1.15	31871.150	3.5	53788.780	4.5
456.1340	28.01	-3.40	79823.030	3.5	101740.270	3.5
456.1360	90.00	-1.01	7178.519	0.0	29101.805	0.0
456.1393	12.00	-2.02	35051.264	1.0	56968.248	2.0
456.1408	9.02	-1.96	444552.080	3.5	466468.990	4.5
456.1411	23.01	-5.29	25191.080	2.0	47107.980	1.0
456.1421	24.00	-2.92	27703.840	4.0	49620.690	4.0
456.1480	73.00	-3.24	1935.780	0.0	23858.489	0.0
456.1496	24.00	-2.50	33040.100	2.0	54956.590	1.0
456.1583	23.00	-3.55	15264.830	5.5	37180.900	4.5
456.1662	9.02	-4.22	443625.310	2.5	465541.000	1.5
456.1860	69.01	-2.20	8711.012	0.0	30631.895	0.0
456.1881	28.01	-4.37	55417.830	3.5	77337.470	2.5
456.1943	27.00	-3.13	21215.900	.5	43130.240	.5
456.1989	10.01	-.52	280989.530	1.5	302903.650	2.5
456.2000	22.01	-3.45	44902.420	2.5	66816.490	1.5
456.2062	24.00	-2.82	27703.840	4.0	49617.610	5.0
456.2072	23.01	-4.73	30267.460	2.0	52181.180	1.0
456.2112	10.01	-3.70	302247.780	3.5	324161.310	3.5
456.2180	10.01	-2.36	302247.780	3.5	324160.980	4.5
456.2214	10.01	-.93	280989.530	1.5	302904.570	1.5
456.2232	28.00	-2.53	27414.893	2.0	49327.845	2.0
456.2260	23.00	-2.25	14910.040	3.5	36822.860	3.5
456.2297	22.00	-3.79	25227.217	3.0	47139.860	4.0
456.2341	23.00	-3.54	14548.830	2.5	36461.260	2.5
456.2341	23.00	-2.14	14548.830	2.5	36461.260	3.5
456.2360	58.01	-.07	3790.903	0.0	25709.384	0.0
456.2366	22.01	-2.20	45908.560	5.5	67820.870	4.5
456.2368	15.01	-2.54	110252.000	1.0	132164.300	2.0
456.2416	25.01	-2.72	86190.180	2.0	108102.250	3.0
456.2441	18.01	-3.60	182222.030	1.5	204133.980	2.5
456.2470	27.01	-4.97	65028.650	1.0	86940.460	2.0
456.2485	18.01	-1.24	184191.710	.5	206103.450	1.5
456.2600	44.00	-1.21	14921.641	0.0	36838.969	0.0
456.2603	26.02	-4.87	125443.580	4.0	147354.750	5.0
456.2625	22.00	-2.47	170.132	3.0	22081.198	2.0
456.2655	24.01	-4.15	67012.280	2.5	88923.200	2.5
456.2680	23.01	-4.55	25191.080	2.0	47101.880	2.0
456.2868	10.01	-2.64	302247.780	3.5	324157.680	2.5
456.2943	24.01	-2.52	66727.160	2.5	88636.700	1.5
456.2972	25.00	-3.05	41230.400	3.5	63139.700	2.5
456.3018	27.00	-1.18	32027.500	3.5	53936.680	2.5
456.3143	26.01	-3.23	62962.260	1.5	84870.840	2.5
456.3245	24.00	-1.00	31055.350	5.0	52963.440	4.0
456.3255	28.01	-2.72	114052.040	3.5	135960.080	4.5
456.3270	10.01	-3.53	307240.700	3.5	329148.670	2.5
456.3316	18.01	-3.12	181594.050	2.5	203501.800	2.5
456.3376	27.00	-5.43	4690.180	2.5	26597.640	1.5
456.3380	58.01	-1.63	6291.287	0.0	28204.869	0.0
456.3430	24.00	-2.19	24093.160	2.0	46000.360	3.0
456.3438	22.00	.09	19573.968	4.0	41481.130	5.0
456.3532	25.02	-1.66	193756.790	4.5	215663.500	3.5
456.3557	23.01	-2.52	50775.470	2.0	72682.060	2.0
456.3590	74.00	-.57	19680.435	0.0	41593.008	0.0
456.3647	24.00	-1.64	24940.610	2.0	46846.770	3.0
456.3660	90.00	-1.13	8065.752	0.0	29977.989	0.0
456.3747	18.01	-1.34	174409.830	1.5	196315.510	2.5
456.3764	22.01	-.86	9850.900	.5	31756.500	1.5
456.3876	27.00	-1.53	29294.520	3.5	51199.580	3.5
456.3945	28.01	-3.54	109846.000	3.5	131750.730	3.5
456.3982	27.00	-1.17	29269.730	4.5	51174.280	5.5
456.4000	70.00	-.80	19599.777	0.0	41510.382	0.0
456.4030	26.01	-4.82	64806.520	.5	86710.840	1.5
456.4100	62.01	-2.64	0.000	0.0	21910.125	0.0
456.4151	24.00	.10	38537.680	5.0	60441.420	6.0
456.4190	90.01	-1.96	10566.135	0.0	32475.828	0.0
456.4197	28.01	-4.81	109038.840	1.5	130942.360	1.5
456.4212	23.01	-4.71	51123.310	2.0	73026.760	2.0
456.4238	22.00	-.76	11776.806	4.0	33680.130	3.0
456.4268	23.00	-1.49	15571.900	2.5	37475.080	3.5
456.4326	27.00	-4.90	33674.380	2.5	55577.280	1.5
456.4368	27.00	-3.88	32464.730	4.5	54367.430	5.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
456.4408	18.01	-.84	161048.640	1.5	182951.150	.5
456.4412	9.02	-.78	444575.350	2.5	466477.840	2.5
456.4422	9.02	-.88	444575.350	2.5	466477.790	3.5
456.4432	23.00	-3.94	19078.150	3.5	40980.540	4.5
456.4530	41.00	.09	12017.970	0.0	33926.031	0.0
456.4568	23.00	-4.18	14514.750	1.5	36416.490	1.5
456.4578	22.01	-3.74	44914.800	1.5	66816.490	1.5
456.4587	23.01	-1.31	18293.870	2.0	40195.520	3.0
456.4590	64.00	-.56	10808.108	0.0	32715.881	0.0
456.4622	7.00	-3.43	93581.520	.5	115483.000	.5
456.4622	7.00	-3.73	93581.520	.5	115483.000	1.5
456.4690	44.00	-1.70	8952.985	0.0	30860.278	0.0
456.4718	23.02	.98	162335.880	3.5	184236.900	4.5
456.4760	7.01	-1.96	164610.760	1.0	186511.580	2.0
456.4815	9.00	-2.01	116040.883	1.5	137941.440	2.5
456.4826	26.00	-4.44	24772.019	1.0	46672.523	0.0
456.4845	27.00	-1.13	29269.730	4.5	51170.140	4.5
456.4872	26.01	-4.68	50142.930	2.5	72043.210	1.5
456.4941	25.02	-3.87	121197.050	2.5	143097.000	3.5
456.4972	27.01	-5.85	24886.500	2.0	46786.300	1.0
456.4994	22.00	-4.92	26772.965	5.0	48672.660	4.0
456.5072	25.01	-4.22	44745.460	2.0	66644.780	1.0
456.5080	9.02	-2.26	444578.510	4.5	466477.790	3.5
456.5081	28.01	-3.77	99418.610	3.5	121317.890	3.5
456.5148	28.00	-2.54	27414.893	2.0	49313.851	3.0
456.5179	23.01	-2.93	50775.470	2.0	72674.280	2.0
456.5190	45.00	-1.88	11856.655	0.0	33761.548	0.0
456.5209	9.01	-4.42	243458.900	1.0	265357.560	1.0
456.5247	7.00	-3.77	93581.520	.5	115480.000	.5
456.5247	7.00	-3.16	93581.520	.5	115480.000	1.5
456.5255	10.01	-4.52	224699.270	.5	246597.710	.5
456.5262	15.01	-.61	106001.990	1.0	127900.400	0.0
456.5297	23.01	-3.52	44098.460	3.0	65996.700	3.0
456.5300	75.00	-1.59	15082.956	0.0	36987.322	0.0
456.5320	26.00	-2.34	26406.490	1.0	48304.623	2.0
456.5320	74.00	-1.47	14840.984	0.0	36745.254	0.0
456.5357	26.00	-3.47	26224.961	3.0	48122.913	3.0
456.5452	27.01	-5.47	24074.600	2.0	45972.100	3.0
456.5470	40.00	-.88	12259.943	0.0	34163.493	0.0
456.5498	24.00	-1.96	7927.470	2.0	29824.750	3.0
456.5527	28.01	-3.14	114869.350	1.5	136766.490	2.5
456.5548	23.00	-2.79	15000.840	5.5	36897.880	4.5
456.5554	10.01	-1.59	280947.100	1.5	302844.110	2.5
456.5558	28.01	-3.43	99559.330	2.5	121456.320	1.5
456.5577	27.00	-.18	24326.110	3.5	46223.010	4.5
456.5639	23.03	-.32	263902.300	3.0	285798.900	2.0
456.5660	26.00	-2.61	26140.164	3.0	48036.667	2.0
456.5664	22.00	-2.36	20062.980	1.0	41959.460	0.0
456.5721	22.00	-2.74	17369.590	1.0	39265.800	2.0
456.5721	23.00	-3.26	19023.470	4.5	40919.680	5.5
456.5754	25.00	-3.67	35725.850	2.5	57621.900	1.5
456.5771	24.01	-3.24	32603.730	2.5	54499.700	1.5
456.5823	23.00	-3.46	10892.500	3.5	32788.220	4.5
456.5840	58.01	-.16	8711.012	0.0	30612.787	0.0
456.5850	73.00	-1.30	9598.245	0.0	31499.972	0.0
456.5905	22.00	-2.27	20006.032	2.0	41901.360	1.0
456.5933	27.01	-2.07	63587.000	3.0	85482.190	4.0
456.5940	72.00	-1.48	5565.369	0.0	27466.664	0.0
456.6019	9.01	-3.91	243462.780	2.0	265357.560	1.0
456.6021	25.00	-.65	37586.030	1.5	59480.800	2.5
456.6085	22.00	-.46	14105.680	3.0	36000.144	4.0
456.6200	29.01	-3.10	116326.160	3.0	138220.070	4.0
456.6210	62.01	-1.41	2661.698	0.0	24561.698	0.0
456.6284	24.00	-4.39	42908.570	4.0	64802.080	5.0
456.6290	23.00	-2.82	14514.750	1.5	36408.230	1.5
456.6510	26.00	-2.31	26623.726	2.0	48516.150	1.0
456.6524	28.01	-3.24	114052.040	3.5	135944.400	3.5
456.6524	72.00	-4.19	25388.334	4.0	47280.690	5.0
456.6586	24.00	-2.49	24282.340	4.0	46174.400	3.0
456.6605	27.00	-.62	30742.650	.5	52634.620	.5
456.6640	27.01	-8.79	25147.200	4.0	47039.000	3.0
456.6657	27.00	-4.04	32464.730	4.5	54356.450	4.5
456.6660	90.01	-2.12	7743.122	0.0	29640.964	0.0
456.6665	18.01	-2.95	182222.030	1.5	204113.710	1.5
456.6678	26.00	-4.39	20641.110	4.0	42532.729	3.0
456.6770	62.00	-1.08	1451.835	0.0	23349.150	0.0
456.6820	23.01	-5.18	26839.820	3.0	48730.760	4.0
456.6860	73.00	-.10	25810.406	0.0	47707.289	0.0
456.6916	9.02	-2.13	444578.510	4.5	466468.990	4.5
456.6928	29.01	-3.09	116371.410	4.0	138261.830	3.0
456.6993	26.00	-2.65	27543.000	1.0	49433.108	2.0
456.7006	9.02	-.49	444578.510	4.5	466468.560	5.5
456.7026	24.00	-.65	38537.680	5.0	60427.630	5.0
456.7099	29.01	-4.85	128853.300	2.0	150742.900	3.0
456.7398	23.00	-4.39	11100.650	4.5	32988.820	3.5
456.7407	28.00	-2.64	28578.046	3.0	50466.172	4.0
456.7517	25.02	-3.69	115711.600	4.5	137599.200	3.5
456.7523	27.00	-4.33	32464.730	4.5	54352.300	3.5
456.7590	23.02	1.08	162760.280	4.5	184647.530	5.5
456.7610	60.01	-2.17	1613.150	0.0	23506.438	0.0
456.7680	42.00	-.44	20245.038	0.0	42137.990	0.0
456.7690	92.01	-2.04	1693.808	0.0	23586.712	0.0
456.7709	24.00	-4.72	24833.860	3.0	46720.540	4.0
456.7740	24.01	-4.06	53923.570	4.5	75810.100	4.5
456.7761	23.01	-3.58	32040.760	2.0	53927.190	3.0
456.7841	14.02	.10	153377.050	1.0	175263.100	1.0
456.7910	57.00	-.57	3468.273	0.0	25360.123	0.0
456.7928	28.01	-3.96	105981.500	4.5	127867.130	4.5
456.7934	23.00	-4.32	15571.900	2.5	37457.500	1.5
456.7974	25.00	-4.03	38934.940	2.5	60820.350	2.5
456.8043	27.00	-2.90	32430.590	5.5	54315.670	5.5
456.8090	77.00	-1.81	10485.478	0.0	32376.465	0.0
456.8143	23.03	-1.17	264401.900	4.0	286286.500	4.0
456.8195	26.01	-6.83	20516.980	2.5	42401.330	1.5
456.8229	9.00	-2.27	115917.909	2.5	137802.100	2.5
456.8345	22.01	-3.45	9872.870	.5	31756.500	1.5
456.8401	26.00	-3.02	26406.490	1.0	48289.852	1.0
456.8550	59.01	-2.14	5000.766	0.0	26889.549	0.0
456.8607	26.00	-2.75	31686.342	2.0	53568.720	2.0
456.8688	24.01	-4.45	68843.510	3.5	90725.500	3.5
456.8761	26.00	-2.64	26339.682	2.0	48221.323	1.0
456.8769	10.01	-3.54	306687.290	2.5	328568.890	1.5
456.8836	26.00	-2.10	29320.050	1.0	51201.330	2.0
456.8901	22.00	-3.67	20062.980	1.0	41943.950	1.0
456.8903	27.00	-4.91	33674.380	2.5	55555.340	2.5
456.9000	45.00	-1.33	9114.300	0.0	31000.927	0.0
456.9020	42.01	-.63	23551.996	0.0	45438.527	0.0
456.9057	10.01	.14	281720.280	1.5	303600.500	2.5
456.9080	26.00	-3.61	22946.810	1.0	44826.920	0.0
456.9101	25.02	-4.81	115760.230	2.5	137660.240	3.5
456.9141	24.00	-2.41	27597.220	3.0	49477.040	2.0
456.9166	17.02	-4.08	217850.200	2.5	239729.900	2.5
456.9173	28.00	-4.59	30392.052	1.0	52271.716	2.0
456.9312	27.01	-2.49	27469.200	5.0	49348.200	4.0
456.9458	17.01	-.27	131754.800	1.0	153633.100	1.0
456.9525	24.00	-2.20	37244.170	4.0	59122.150	3.0
456.9538	24.00	-.93	25177.390	4.0	47055.310	5.0
456.9580	62.00	-1.19	2258.411	0.0	24142.260	0.0
456.9581	10.01	-1.05	281025.940	2.5	302903.650	2.5
456.9621	24.00	-.79	25177.390	4.0	47054.910	4.0
456.9632	25.02	-4.04	194545.780	.5	216423.250	.5
456.9640	28.00	-1.91	30163.140	2.0	52040.568	2.0
456.9646	8.02	.07	370900.600	2.0	392778.000	1.0
456.9761	26.02	-2.05	117950.320	4.0	139827.170	4.0
456.9776	24.01	-2.25	67448.820	4.5	89325.600	4.5
456.9807	10.01	-2.26	281025.940	2.5	302902.570	1.5
456.9910	92.01	-2.07	241.973	0.0	22124.242	0.0
456.9926	28.01	-2.80	99418.610	3.5	121294.670	4.5
456.9951	25.01	-4.68	84643.860	6.0	106519.800	7.0
457.0018	27.00	-.37	29294.520	3.5	51170.140	4.5
457.0020	57.00	-.39	4032.876	0.0	25914.618	0.0
457.0020	77.00	-.55	23148.708	0.0	45030.450	0.0
457.0047	23.00	-2.44	15062.940	6.5	36938.420	5.5
457.0056	25.01	-4.78	79592.140	6.0	101467.580	6.0
457.0098	25.01	-4.93	84643.860	6.0	106519.100	5.0
457.0130	42.00	-.65	20164.380	0.0	42045.596	0.0
457.0250	24.00	-2.08	24299.890	2.0	46174.400	3.0
457.0317	26.02	-3.22	109570.840	2.0	131445.030	2.0
457.0338	24.00	-2.59	26787.500	3.0	48661.590	3.0
457.0392	29.01	-2.33	116388.000	2.0	138261.830	3.0
457.0421	23.00	-.66	15770.720	4.5	37644.410	4.5
457.0440	8.03	-1.97	552495.100	2.5	574368.700	2.5
457.0440	8.03	-.67	552495.100	3.5	574368.700	2.5
457.0440	8.03	-.82	552495.100	2.5	574368.700	1.5
457.0449	23.00	-3.76	14949.300	4.5	36822.860	3.5
457.0505	24.00	-1.61	24093.160	2.0	45966.450	2.0
457.0515	27.00	-4.27	33439.720	4.5	55312.960	4.5
457.0570	59.01	-2.07	1693.808	0.0	23572.917	0.0
457.0660	74.00	.09	22906.736	0.0	44785.414	0.0
457.0893	22.00	-.16	19322.988	2.0	41194.420	3.0
457.0950	9.00	-2.14	115917.909	2.5	137789.070	3.5
457.0950	41.00	-.98	12905.203	0.0	34782.493	0.0
457.0965	24.00	-1.77	25177.390	4.0	47048.480	3.0
457.0980	64.01	-1.33	10324.163	0.0	32201.310	0.0
457.0990	92.01	-1.86	6210.629	0.0	28087.728	0.0
457.1096	24.00	-3.68	24303.940	3.0	46174.400	3.0
457.1096	12.00	-5.26	0.000	0.0	21870.464	1.0
457.1101	26.02	-4.24	167085.120	3.0	188955.560	3.0
457.1159	28.01	-3.58	113623.100	.5	135493.260	1.5
457.1218	24.01	-4.19	25035.640	.5	46905.520	1.5
457.1236	9.00	-3.01	115917.909	2.5	137787.700	1.5
457.1287	24.00	-4.96	27597.220	3.0	49466.770	2.0
457.1299	25.01	-2.58	43696.190	3.0	65565.680	4.0
457.1349	24.01	-4.64	53051.550	1.5	74920.800	.5
457.1357	26.00	-3.36	29798.960	4.0	51668.175	4.0
457.1362	24.00	-2.43	27703.840	4.0	49573.030	4.0
457.1443	26.00	-3.43	23192.486	2.0	45061.287	3.0
457.1632	25.01	-4.53	86302.550	3.0	108170.450	2.0
457.1669	24.00	-.46	20519.600	6.0	42387.320	7.0
457.1682	23.00	-1.72	14548.830	2.5	36416.490	1.5
457.1778	23.00	.12	15688.800	2.5	37556.000	3.5
457.1832	24.00	-.86	31048.000	7.0	52914.940	6.0
457.1918	9.02	-3.00	444552.080	3.5	466418.610	3.5
457.1933	29.01	-3.56	123016.630	3.0	144883.090	2.0
457.1941	24.00	-1.76	25038.610	5.0	46905.030	4.0
457.1951	22.01	-.32	12676.990	4.5	34543.360	3.5
457.2021	9.02	-.01	444552.080	3.5	466418.120	4.5
457.2041	28.00	-1.42	34408.574	1.0	56274.516	2.0
457.2044	14.00	-4.56	57798.072	2.0	79664.000	1.0
457.2063	22.00	-1.97	20006.032	2.0	41871.670	2.0
457.2092	17.01	-.75	131767.400	0.0	153633.100	1.0
457.2110	24.00	-2.45	31049.330	6.0	52914.940	6.0
457.2123	22.00	-2.75	20062.980	1.0	41928.528	2.0
457.2125	20.02	.74	326186.320	3.0	348051.860	4.0
457.2173	24.00	-2.26	26796.280	2.0	48661.590	3.0
457.2190	23.01	-3.72	51085.770	3.0	72951.000	4.0
457.2200	64.00	-.54	6936.547	0.0	28807.856	0.0
457.2217	17.01	-.06	131768.000	2.0	153633.100	1.0
457.2278	25.00	-1.88	44978.980	1.5	66843.790	1.5
457.2280	58.01	-1.20	5484.711	0.0	27355.638	0.0
457.2468	27.01	-3.36	27484.300	3.0	49348.200	4.0
457.2524	25.02	-3.70	194849.100	1.5	216712.730	2.5
457.2575	28.01	-3.69	114869.350	1.5	136732.740	1.5
457.2605	10.01	-4.96	302307.750	2.5	324170.990	2.5
457.2629	25.00	-2.26	37737.220	3.5	59600.350	2.5
457.2643	10.01	-3.48	302307.750	2.5	324170.810	3.5
457.2670	4.00	-.24	42565.000	0.0	64434.061	0.0
457.2777	24.01	-4.49	25043.100	1.5	46905.520	1.5
457.2790	58.01	-.47	11856.655	0.0	33725.142	0.0
457.2795	22.00	-1.82	20126.055	3.0	41988.390	3.0
457.2898	18.01	-2.10	161089.310	.5	182951.150	.5
457.2905	28.01	-3.88	109038.840	1.5	130900.650	2.5
457.2999	24.00	-4.84	25106.340	3.0	46967.700	2.0
457.3069	22.00	-4.79	26910.705	6.0	48771.730	5.0
457.3080	41.00	-.83	2097.096	0.0	23964.197	0.0
457.3114	23.01	-7.08	25191.080	2.0	47051.890	3.0
457.3246	26.02	-3.79	114339.950	4.0	136200.130	3.0
457.3248	27.00	-2.21	32654.500	2.5	54514.670	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
457.3290	73.00	-1.55	12179.286	0.0	34045.382	0.0
457.3321	26.02	-3.39	114325.350	5.0	136185.170	5.0
457.3380	26.00	-3.12	31686.342	2.0	53545.882	3.0
457.3401	25.00	-1.29	23296.670	3.5	45156.110	2.5
457.3409	23.00	-1.83	14548.830	2.5	36408.230	1.5
457.3560	39.00	-.28	16696.107	0.0	38560.913	0.0
457.3564	25.00	-2.98	44978.980	1.5	66837.640	2.5
457.3602	24.01	-4.31	25047.040	2.5	46905.520	1.5
457.3610	29.01	-3.39	116080.460	3.0	137938.900	4.0
457.3690	92.01	-1.74	2258.411	0.0	24122.595	0.0
457.3698	25.01	-3.91	49465.130	3.0	71323.150	2.0
457.3711	29.01	-2.61	117883.140	4.0	139741.100	3.0
457.3790	72.01	-1.26	17260.709	0.0	39124.415	0.0
457.3810	64.00	-1.22	0.000	0.0	21863.610	0.0
457.3850	56.00	-.04	12636.000	0.0	34499.419	0.0
457.3911	25.01	-4.03	84307.200	4.0	106164.200	4.0
457.3945	26.02	-4.97	166252.740	3.0	188109.580	3.0
457.3970	24.00	-3.21	27597.220	3.0	49453.940	4.0
457.3977	28.00	-2.99	27414.893	2.0	49271.578	3.0
457.4223	26.00	-2.88	25899.974	4.0	47755.485	3.0
457.4250	9.01	-3.31	207699.070	1.0	229554.450	0.0
457.4310	73.00	-2.19	0.000	0.0	21861.221	0.0
457.4330	41.00	-1.32	10969.423	0.0	32830.548	0.0
457.4389	9.02	-2.09	444623.120	3.5	466477.840	2.5
457.4399	9.02	-1.08	444623.120	3.5	466477.790	3.5
457.4418	10.01	-.16	280989.530	1.5	302844.110	2.5
457.4460	24.00	-2.56	24833.860	3.0	46688.240	3.0
457.4480	42.00	-.10	25487.776	0.0	47348.184	0.0
457.4497	23.03	-1.08	265879.200	1.0	287733.400	2.0
457.4497	23.03	-.47	265879.200	2.0	287733.400	2.0
457.4500	40.01	-.45	19519.120	0.0	41379.433	0.0
457.4508	7.00	-3.28	94770.850	.5	116625.000	1.5
457.4529	27.00	-3.53	31871.150	3.5	53725.200	4.5
457.4625	28.01	-3.40	99340.550	3.5	121194.140	2.5
457.4631	10.01	-3.45	302307.750	2.5	324161.310	3.5
457.4671	23.00	-2.59	14910.040	3.5	36763.410	2.5
457.4687	26.00	-3.07	31307.235	4.0	53160.530	3.0
457.4722	26.00	-2.64	18378.187	2.0	40231.312	2.0
457.4757	14.02	-.38	153377.050	1.0	175230.010	0.0
457.4807	24.01	-3.37	67070.480	1.5	88923.200	2.5
457.4807	9.01	-3.43	207699.070	1.0	229551.790	1.0
457.4820	28.01	-3.26	115108.090	2.5	136960.750	2.5
457.4826	22.01	-3.53	44914.800	1.5	66767.430	.5
457.4840	41.00	-2.05	80.658	0.0	21939.346	0.0
457.4880	57.01	-1.76	1371.178	0.0	23229.675	0.0
457.4935	27.00	-3.66	7442.410	3.5	29294.520	3.5
457.5002	23.02	-.77	162385.110	3.5	184236.900	4.5
457.5006	28.01	-3.37	99340.550	3.5	121192.320	3.5
457.5092	24.00	-1.05	27176.220	1.0	49027.580	2.0
457.5138	25.00	-1.89	45130.160	4.5	66981.300	3.5
457.5142	26.02	-4.40	202200.510	3.0	224051.630	3.0
457.5155	29.01	-2.40	116326.160	3.0	138177.220	2.0
457.5159	9.01	-3.21	207699.070	1.0	229550.110	2.0
457.5172	25.00	-3.42	41230.300	3.5	63081.280	2.5
457.5180	29.01	-2.95	117130.360	2.0	138981.300	2.0
457.5180	27.00	-2.55	32464.730	4.5	54315.670	5.5
457.5270	90.01	-3.09	1451.835	0.0	23308.469	0.0
457.5272	22.00	-2.45	25926.820	4.0	47777.320	5.0
457.5316	10.01	-1.64	291801.880	1.5	313652.170	1.5
457.5370	41.00	-1.12	10162.848	0.0	32019.004	0.0
457.5392	10.01	-1.71	302307.750	2.5	324157.680	2.5
457.5394	28.01	-3.59	114052.040	3.5	135901.960	2.5
457.5425	22.01	-2.49	40330.250	.5	62180.020	1.5
457.5429	9.01	-3.31	207702.040	0.0	229551.790	1.0
457.5430	90.01	-1.52	14195.724	0.0	36051.593	0.0
457.5494	24.00	-3.15	39158.630	4.0	61008.070	5.0
457.5520	40.00	-1.36	0.000	0.0	21855.439	0.0
457.5626	25.02	-4.34	195112.810	3.5	216961.620	3.5
457.5657	29.01	-1.48	116371.410	4.0	138220.070	4.0
457.5745	28.01	-4.71	100592.980	3.5	122441.220	4.5
457.5752	26.02	-4.06	114351.920	3.0	136200.130	3.0
457.5769	26.00	-3.56	26627.612	4.0	48475.740	3.0
457.5796	9.01	-3.21	207703.790	2.0	229551.790	1.0
457.5818	26.00	-3.52	31307.235	4.0	53155.130	4.0
457.5910	64.00	.06	7904.437	0.0	29758.014	0.0
457.6148	9.01	-2.73	207703.790	2.0	229550.110	2.0
457.6160	27.00	-4.14	33674.380	2.5	55520.640	3.5
457.6196	27.00	-4.63	33466.870	3.5	55312.960	4.5
457.6200	40.00	-1.03	11534.025	0.0	33386.217	0.0
457.6210	70.00	-.13	17905.969	0.0	39758.113	0.0
457.6242	9.02	-.87	444623.120	3.5	466468.990	4.5
457.6320	59.01	-1.87	3387.616	0.0	25239.235	0.0
457.6330	22.01	-2.29	40425.800	1.5	62271.250	2.5
457.6334	26.01	-2.90	22939.350	2.5	44784.780	2.5
457.6378	26.02	-4.66	114339.950	4.0	136185.170	5.0
457.6480	58.01	-.92	9678.902	0.0	31529.757	0.0
457.6485	22.00	-.17	18825.890	1.0	40670.600	2.0
457.6500	42.00	-1.13	11372.710	0.0	33223.469	0.0
457.6518	26.00	-2.47	29356.780	2.0	51201.330	2.0
457.6640	92.00	-1.54	564.603	0.0	22414.694	0.0
457.6788	9.02	-.98	444575.350	2.5	466418.610	3.5
457.6801	24.00	-1.59	24833.860	3.0	46677.060	2.0
457.6875	24.00	-4.23	42908.570	4.0	64751.420	4.0
457.7064	22.00	-2.49	17423.853	2.0	39265.800	2.0
457.7092	20.02	-2.21	326186.320	3.0	348028.130	3.0
457.7130	23.01	-2.25	18353.890	3.0	40195.520	3.0
457.7162	25.02	-2.69	94850.660	1.5	116692.140	2.5
457.7168	23.00	-1.14	0.000	1.5	21841.450	2.5
457.7279	27.00	-4.15	32841.990	4.5	54682.910	4.5
457.7315	28.01	-4.71	115120.000	2.5	136960.750	2.5
457.7354	28.01	-2.90	109846.000	3.5	131686.560	4.5
457.7451	9.02	-3.61	444578.510	4.5	466418.610	3.5
457.7474	28.01	-2.23	99340.550	3.5	121180.540	4.5
457.7493	24.01	-2.05	67334.200	3.5	89174.100	3.5
457.7501	28.01	-3.44	115120.000	2.5	136959.860	2.5
457.7553	9.02	-1.15	444578.510	4.5	466418.120	4.5
457.7568	24.00	-1.66	35862.820	4.0	57702.360	5.0
457.7572	25.00	-2.53	37630.620	4.5	59470.140	3.5
457.7581	24.00	-4.33	35398.020	4.0	57237.500	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
457.7610	10.01	-4.11	307309.460	.5	329148.800	1.5
457.7671	23.00	-1.32	17242.050	5.5	39081.100	6.5
457.7690	62.01	-1.40	1935.780	0.0	23780.859	0.0
457.7767	18.01	-1.47	183090.810	1.5	204929.400	.5
457.7778	26.01	-5.77	25787.600	1.5	47626.140	.5
457.7780	42.00	-1.21	18147.942	0.0	39992.592	0.0
457.7889	28.01	-2.42	99340.550	3.5	121178.560	3.5
457.7906	26.00	-2.90	31322.603	3.0	53160.530	3.0
457.7954	26.01	-3.33	64286.440	3.5	86124.140	4.5
457.8044	23.01	-4.59	44159.430	2.0	65996.700	3.0
457.8059	25.00	-1.19	37420.240	5.5	59257.440	4.5
457.8140	59.01	-2.00	2984.328	0.0	24827.260	0.0
457.8143	17.02	-3.54	179495.200	2.5	201332.000	1.5
457.8178	17.00	-2.54	72827.038	.5	94663.670	1.5
457.8182	27.00	-3.95	29216.370	2.5	51052.980	3.5
457.8207	22.00	-3.12	25107.417	2.0	46943.910	2.0
457.8298	24.00	-.96	31049.330	6.0	52885.390	5.0
457.8404	22.00	-4.31	24694.895	4.0	46530.450	4.0
457.8434	23.00	-3.95	19145.130	5.5	40980.540	4.5
457.8551	20.00	-1.15	20335.360	1.0	42170.214	2.0
457.8593	23.00	-3.82	15103.770	4.5	36936.420	5.5
457.8684	24.00	-3.48	27703.840	4.0	49538.060	5.0
457.8686	24.00	-3.95	35501.260	3.0	57335.470	4.0
457.8725	26.00	-3.23	36686.159	4.0	58520.180	4.0
457.8728	23.00	.02	15664.750	1.5	37498.760	2.5
457.8788	21.00	-4.77	16021.780	1.5	37855.500	2.5
457.8942	27.00	-2.31	31871.150	3.5	53704.140	2.5
457.8986	21.00	-2.05	16022.720	2.5	37855.500	2.5
457.8993	26.00	-4.30	32133.977	2.0	53966.720	2.0
457.9039	26.00	-4.30	31322.603	3.0	53155.130	4.0
457.9040	76.00	-.82	19761.092	0.0	41599.731	0.0
457.9054	22.00	-2.48	20126.055	3.0	41958.510	2.0
457.9077	26.00	-2.48	26406.490	1.0	48238.832	2.0
457.9193	25.02	-4.20	173920.690	1.5	195752.480	2.5
457.9195	23.00	-.57	15724.220	3.5	37556.000	3.5
457.9246	7.00	-2.69	94793.460	1.5	116625.000	1.5
457.9246	7.00	-2.34	94793.460	1.5	116625.000	2.5
457.9256	9.02	-.08	444957.110	1.5	466788.600	2.5
457.9272	22.00	-3.06	26892.926	3.0	48724.340	2.0
457.9302	26.00	-2.38	29798.960	4.0	51630.230	5.0
457.9336	26.00	-3.18	22845.856	5.0	44676.963	4.0
457.9347	18.01	-.24	139258.250	.5	161089.310	.5
457.9363	27.00	-.95	31871.150	3.5	53702.130	3.5
457.9450	41.01	-.97	13631.121	0.0	35467.804	0.0
457.9510	26.01	-2.37	50212.930	2.5	72043.210	1.5
457.9518	25.00	-2.57	45013.550	2.5	66843.790	1.5
457.9544	25.00	-1.79	37586.030	1.5	59416.150	1.5
457.9560	24.00	-2.32	31055.350	5.0	52885.390	5.0
457.9636	24.01	-2.39	67344.420	2.5	89174.100	3.5
457.9640	56.00	.45	13514.000	0.0	35349.777	0.0
457.9680	26.00	-3.54	29371.860	3.0	51201.330	2.0
457.9772	27.00	-4.73	33439.720	4.5	55268.750	3.5
457.9793	26.00	-4.86	18378.187	2.0	40207.120	3.0
457.9824	26.00	-3.59	24772.019	1.0	46600.800	1.0
457.9862	28.02	-4.12	97841.400	2.0	119670.000	2.0
458.0016	23.01	-4.90	32040.760	2.0	53868.630	2.0
458.0034	22.01	-2.13	40581.800	2.5	62409.580	3.5
458.0043	24.00	-1.85	7593.160	2.0	29420.900	1.0
458.0049	26.01	-3.48	20830.520	2.5	42658.230	3.5
458.0060	57.01	-1.53	5646.026	0.0	27479.801	0.0
458.0070	44.00	-1.14	11695.340	0.0	33529.067	0.0
458.0131	27.00	-2.88	7442.410	3.5	29269.730	4.5
458.0169	23.02	-3.33	140933.140	3.5	162760.280	4.5
458.0278	23.00	-1.94	17181.980	4.5	39008.600	5.5
458.0309	28.01	-2.76	99559.330	2.5	121385.800	1.5
458.0383	23.00	-1.00	137.380	2.5	21963.500	3.5
458.0431	27.00	-4.24	29216.370	2.5	51042.260	2.5
458.0458	22.01	-3.44	9930.740	1.5	31756.500	1.5
458.0462	26.00	-2.04	22838.320	2.0	44664.061	2.0
458.0484	17.00	-3.16	72488.568	1.5	94314.206	1.5
458.0496	27.00	-1.84	29735.180	3.5	51560.760	2.5
458.0548	16.01	-3.28	130134.080	2.5	151959.410	1.5
458.0565	26.00	-2.18	29469.010	2.0	51294.262	3.0
458.0604	28.00	-1.80	29481.020	4.0	51306.085	3.0
458.0680	75.00	-1.65	11534.025	0.0	33364.845	0.0
458.0690	73.00	-2.08	9598.245	0.0	31429.017	0.0
458.0809	25.00	-1.71	45013.550	2.5	66837.640	2.5
458.0949	27.00	-2.45	31871.150	3.5	53694.570	3.5
458.0979	27.01	-4.27	63344.100	3.0	85167.380	3.0
458.1040	24.00	-3.02	24897.550	4.0	46720.540	4.0
458.1090	64.01	-1.53	5242.739	0.0	27071.605	0.0
458.1096	24.00	-1.27	24286.540	1.0	46109.260	2.0
458.1128	27.00	-1.11	32654.500	2.5	54477.070	3.5
458.1164	23.01	-2.46	51085.770	3.0	72908.170	3.0
458.1187	28.01	-2.80	99418.610	3.5	121240.900	3.5
458.1224	23.00	-2.07	15103.770	4.5	36925.880	3.5
458.1256	28.01	-4.76	100619.260	4.5	122441.220	4.5
458.1273	26.01	-4.26	50142.930	2.5	71964.810	2.5
458.1290	64.00	-.60	967.890	0.0	22795.803	0.0
458.1320	39.00	-.70	15244.271	0.0	37072.041	0.0
458.1374	27.00	-1.35	25269.250	3.5	47090.650	2.5
458.1395	20.00	-.98	20349.260	2.0	42170.558	3.0
458.1414	28.00	-3.19	29013.228	2.0	50834.435	2.0
458.1428	24.00	-3.26	27500.370	3.0	49321.510	2.0
458.1467	20.00	-1.88	20349.260	2.0	42170.214	2.0
458.1487	27.00	-.43	30443.630	1.5	52264.490	1.5
458.1498	26.00	-2.06	26140.164	3.0	47960.973	4.0
458.1563	24.01	-2.72	67353.600	4.5	89174.100	3.5
458.1580	62.00	-.47	806.575	0.0	22634.106	0.0
458.1588	27.00	-.13	23855.620	4.5	45676.000	5.5
458.1620	41.00	.26	12421.258	0.0	34247.599	0.0
458.1707	15.01	-1.23	101636.490	1.0	123456.300	1.0
458.1712	28.01	-2.50	93390.060	2.5	115209.850	3.5
458.1730	62.00	.10	3952.218	0.0	25778.035	0.0
458.1770	39.00	-.77	15244.271	0.0	37069.897	0.0
458.1840	25.00	-1.36	38008.700	5.5	59827.880	5.5
458.1884	25.02	-4.13	115780.230	2.5	137599.200	3.5
458.1917	28.00	-3.54	29013.228	2.0	50832.039	3.0
458.1975	10.00	-2.96	151038.452	1.0	172856.990	1.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
458.1995	10.01	-2.55	281171.380	2.5	302989.820	1.5
458.2029	24.00	-2.49	27816.880	5.0	49635.160	6.0
458.2052	10.01	-2.04	281025.940	2.5	302844.110	2.5
458.2096	24.00	-3.10	35884.400	5.0	57702.360	5.0
458.2098	25.02	-4.37	194894.780	1.5	216712.730	2.5
458.2113	26.01	-6.74	20516.980	2.5	42334.860	2.5
458.2134	24.00	-2.70	31987.060	4.0	53804.840	3.0
458.2174	10.01	-.49	281025.940	2.5	302843.530	3.5
458.2182	15.01	-.04	105550.450	2.0	127368.000	2.0
458.2249	26.02	-4.11	167207.300	4.0	189024.530	5.0
458.2264	22.00	-2.99	20006.032	2.0	41823.190	3.0
458.2290	40.00	-.24	14679.669	0.0	36502.819	0.0
458.2290	41.00	-1.34	5887.999	0.0	27711.149	0.0
458.2335	28.01	-3.27	115120.000	2.5	136936.820	3.5
458.2350	42.00	.15	31375.775	0.0	53198.639	0.0
458.2360	70.00	-.63	17905.969	0.0	39728.785	0.0
458.2380	64.01	-.89	10001.532	0.0	31824.253	0.0
458.2426	28.01	-4.60	79923.880	4.5	101740.270	3.5
458.2432	24.01	-3.06	52298.120	3.5	74114.480	3.5
458.2451	10.00	-2.07	149657.042	3.0	171473.313	2.0
458.2453	27.00	-4.44	33173.360	3.5	54989.620	3.5
458.2466	17.01	-2.25	131754.800	1.0	153571.000	1.0
458.2476	27.00	-3.95	33466.870	3.5	55283.020	2.5
458.2500	42.00	-.85	21051.613	0.0	42873.762	0.0
458.2500	58.01	-.55	5565.369	0.0	27387.518	0.0
458.2530	64.01	-.96	8469.040	0.0	30291.047	0.0
458.2533	24.00	-3.46	27703.840	4.0	49519.720	3.0
458.2594	9.02	.35	445006.130	2.5	466821.720	3.5
458.2625	28.01	-3.92	95017.710	4.5	116833.150	4.5
458.2829	26.01	-3.30	22939.350	2.5	44753.820	3.5
458.2909	22.00	-2.94	27025.652	4.0	48839.740	3.0
458.2943	26.00	-2.31	22946.810	1.0	44760.739	1.0
458.2957	28.01	-.92	98467.250	3.5	120281.110	4.5
458.2996	10.00	-3.27	151038.452	1.0	172852.130	0.0
458.3070	64.00	.20	7420.492	0.0	29239.927	0.0
458.3170	73.00	-2.31	9194.957	0.0	31013.916	0.0
458.3247	9.01	-3.03	266270.110	2.0	288082.590	1.0
458.3319	27.00	-2.25	31699.690	4.5	53511.830	5.5
458.3415	22.01	-2.83	9395.760	1.5	31207.440	2.5
458.3541	28.01	-4.75	100309.290	5.5	122120.370	5.5
458.3570	22.00	-.25	25227.217	3.0	47038.160	3.0
458.3680	25.00	-3.13	37789.930	2.5	59600.350	2.5
458.3729	26.00	-2.67	25091.620	0.0	46901.808	1.0
458.3730	21.00	-3.39	18711.030	.5	40521.210	1.5
458.3737	7.00	-3.68	94770.850	.5	116581.000	.5
458.3777	23.00	-.70	15688.800	2.5	37498.760	2.5
458.3831	26.01	-1.92	22637.190	4.5	44446.890	3.5
458.3854	25.01	-4.43	81993.850	4.0	103803.440	3.0
458.3901	24.00	-1.86	24299.890	2.0	46109.260	2.0
458.3939	28.01	-3.52	99418.610	3.5	121227.800	2.5
458.3991	26.01	-4.06	21812.040	1.5	43620.980	1.5
458.4041	25.02	-4.28	94771.470	2.5	116580.170	1.5
458.4088	24.00	-2.13	25177.390	4.0	46985.870	5.0
458.4240	40.00	-.69	11856.655	0.0	33670.522	0.0
458.4260	64.00	-.10	10485.478	0.0	32299.249	0.0
458.4308	24.00	-4.97	24897.550	4.0	46704.980	5.0
458.4370	90.01	-1.55	12340.601	0.0	34153.849	0.0
458.4378	28.01	-2.46	108763.320	.5	130570.420	.5
458.4440	44.00	-.17	7985.094	0.0	29798.009	0.0
458.4519	28.01	-3.80	99340.550	3.5	121146.980	2.5
458.4536	22.00	-.10	25388.334	4.0	47194.680	4.0
458.4626	27.00	-4.70	33462.830	2.5	55268.750	3.5
458.4706	26.00	-4.54	29056.312	3.0	50861.850	3.0
458.4752	24.00	-4.18	24303.940	3.0	46109.260	2.0
458.4756	8.02	-.50	370415.700	1.0	392221.000	2.0
458.4760	28.01	-2.96	98467.250	3.5	120272.530	4.5
458.4764	9.02	-4.45	444470.240	1.5	466275.500	2.5
458.4771	10.01	-1.76	281025.940	2.5	302831.170	3.5
458.4818	26.00	-4.24	29056.312	3.0	50861.320	2.0
458.4830	62.01	-1.24	3468.273	0.0	25279.333	0.0
458.4850	92.01	-2.29	1693.808	0.0	23504.772	0.0
458.4861	13.01	-2.65	121365.200	0.0	143170.000	1.0
458.4878	28.01	-2.98	98467.250	3.5	120271.970	2.5
458.4882	22.00	-2.97	26657.409	4.0	48462.110	5.0
458.4916	26.02	-3.62	167207.300	4.0	189011.840	4.0
458.4918	24.00	-1.34	27223.050	2.0	49027.580	2.0
458.4929	25.00	-1.21	38934.940	2.5	60739.420	3.5
458.4994	25.02	-4.57	89307.220	5.5	111111.390	4.5
458.5070	24.00	-1.24	27816.880	5.0	49620.690	4.0
458.5114	17.01	-2.83	131767.400	0.0	153571.000	1.0
458.5227	22.00	-3.26	25227.217	3.0	47030.280	3.0
458.5240	17.01	-4.25	131768.000	2.0	153571.000	1.0
458.5461	24.00	-3.53	39158.630	4.0	60960.580	4.0
458.5475	27.00	-3.80	33466.870	3.5	55268.750	3.5
458.5543	28.01	-2.17	98467.250	3.5	120268.810	3.5
458.5581	26.00	-2.94	24335.764	2.0	46137.140	3.0
458.5648	26.01	-3.00	78690.980	2.5	100492.040	3.5
458.5717	24.00	-2.62	27816.880	5.0	49617.610	5.0
458.5770	27.01	-3.66	63366.900	2.0	85167.380	3.0
458.5808	13.01	-.64	121480.300	3.0	143280.600	4.0
458.5865	24.00	-1.44	24277.060	0.0	46077.090	1.0
458.5865	20.00	-.82	20371.000	3.0	42171.026	4.0
458.5934	25.01	-1.56	86302.550	3.0	108102.250	3.0
458.5934	38.01	-2.39	56057.900	0.0	77863.709	0.0
458.5957	23.00	-1.90	10892.500	3.5	32692.090	3.5
458.5964	20.00	-1.88	20371.000	3.0	42170.558	3.0
458.5971	28.00	-3.99	32973.414	4.0	54772.940	3.0
458.6020	27.00	-3.67	33150.680	1.5	54949.970	1.5
458.6036	20.00	-3.43	20371.000	3.0	42170.214	2.0
458.6060	42.01	-.28	25729.749	0.0	47534.959	0.0
458.6147	24.00	-1.81	25106.340	3.0	46905.030	4.0
458.6203	25.00	-2.03	37586.030	1.5	59384.450	1.5
458.6208	12.02	-.71	562939.500	2.0	584737.900	2.0
458.6208	12.02	-.71	562939.500	2.0	584737.900	2.0
458.6229	29.01	-2.84	123016.630	3.0	144814.930	3.0
458.6344	23.00	-.86	323.420	3.5	22121.170	4.5
458.6468	23.00	-5.06	11100.650	4.5	32897.810	5.5
458.6569	28.01	-4.09	115739.150	4.5	137535.830	5.5
458.6570	42.01	-.72	22100.161	0.0	43902.946	0.0
458.6666	27.00	-3.63	33150.680	1.5	54946.900	2.5
458.6715	25.00	-3.46	35689.980	1.5	57485.970	2.5
458.6734	22.01	-2.00	40798.370	3.5	62594.270	4.5
458.6786	24.00	-4.31	27382.180	2.0	49177.830	3.0
458.6820	9.02	-.50	444623.120	3.5	466418.610	3.5
458.6850	74.00	-1.90	9436.930	0.0	31238.384	0.0
458.6923	27.01	-4.46	27902.500	4.0	49697.500	4.0
458.6923	9.02	-1.31	444623.120	3.5	466418.120	4.5
458.6938	27.00	-4.37	4142.660	3.5	25937.590	4.5
458.6946	22.00	-.67	19573.968	4.0	41368.860	4.0
458.6970	29.00	-.22	41135.335	0.0	62936.219	0.0
458.6980	24.00	-2.43	24286.540	1.0	46081.270	0.0
458.6994	26.00	-3.19	24118.815	4.0	45913.480	3.0
458.7056	24.00	-2.55	31377.960	4.0	53172.330	5.0
458.7093	25.00	-2.26	45060.810	3.5	66855.000	4.5
458.7100	44.00	-1.32	11695.340	0.0	33495.606	0.0
458.7104	7.00	-3.71	94830.860	2.5	116625.000	1.5
458.7104	7.00	-2.48	94830.860	2.5	116625.000	2.5
458.7110	23.00	-3.68	15103.770	4.5	36897.880	4.5
458.7122	26.00	-1.49	28819.966	5.0	50614.020	4.0
458.7155	12.02	-2.19	562939.500	2.0	584733.400	3.0
458.7155	12.02	-2.19	562939.500	2.0	584733.400	3.0
458.7306	24.01	-1.76	52321.300	4.5	74114.480	3.5
458.7397	23.00	-2.78	15664.750	1.5	37457.500	1.5
458.7548	28.01	-4.18	115739.150	4.5	137531.180	4.5
458.7705	26.00	-3.15	32133.977	2.0	53925.260	1.0
458.7712	28.01	-4.74	115108.090	2.5	136899.340	2.5
458.7714	28.01	-3.91	115108.090	2.5	136899.330	1.5
458.7742	27.00	-3.24	32654.500	2.5	54445.610	2.5
458.7766	22.00	-1.90	20126.055	3.0	41917.050	4.0
458.7820	23.00	-4.55	14910.040	3.5	36700.780	2.5
458.7830	24.00	-1.65	24897.550	4.0	46688.240	3.0
458.7860	24.00	-1.60	24286.540	1.0	46077.090	1.0
458.7889	23.00	-4.41	11100.650	4.5	32891.060	3.5
458.7893	18.01	-1.91	139258.250	.5	161048.640	1.5
458.7933	25.00	-3.92	38351.780	.5	60141.980	.5
458.7940	28.01	-3.72	100010.170	.5	121800.340	1.5
458.8040	15.01	.58	103340.010	2.0	125129.700	3.0
458.8059	15.02	-2.04	178653.200	2.5	200442.800	2.5
458.8059	15.02	-.74	178653.200	3.5	200442.800	2.5
458.8059	15.02	-.90	178653.200	2.5	200442.800	1.5
458.8080	13.01	-2.05	121480.300	3.0	143269.800	3.0
458.8135	10.01	-.25	281720.280	1.5	303509.520	2.5
458.8140	29.01	-1.96	116388.000	2.0	138177.220	2.0
458.8203	24.01	-.88	32836.840	3.5	54625.760	2.5
458.8207	13.01	-1.15	121480.900	2.0	143269.800	3.0
458.8222	9.02	-4.11	443625.310	2.5	465414.140	2.5
458.8354	10.01	-1.29	281720.280	1.5	303508.480	1.5
458.8397	24.01	-4.41	25035.640	.5	46823.640	.5
458.8409	9.02	-3.46	443753.060	2.5	465541.000	1.5
458.8411	28.00	-2.45	32973.414	4.0	54761.346	4.0
458.8493	7.00	-3.68	94793.460	1.5	116581.000	.5
458.8493	7.00	-2.76	94793.460	1.5	116581.000	1.5
458.8493	7.00	-2.44	94793.460	1.5	116581.000	2.5
458.8550	28.01	-4.18	115108.090	2.5	136895.360	3.5
458.8649	24.01	-2.49	67387.300	2.5	89174.100	3.5
458.8685	25.01	-4.26	44899.820	3.0	66686.450	3.0
458.8719	25.01	-3.87	43696.190	3.0	65482.660	3.0
458.8727	27.00	-4.19	3482.820	4.5	25269.250	3.5
458.8750	74.00	.56	26052.379	0.0	47844.806	0.0
458.8759	23.00	-2.44	15688.800	2.5	37475.080	3.5
458.8769	8.00	-2.76	86625.769	1.0	108412.000	2.0
458.8797	9.02	-4.41	444489.400	2.5	466275.500	2.5
458.8970	23.00	-2.21	15770.720	4.5	37556.000	3.5
458.8984	22.01	-4.82	12758.150	2.5	34543.360	3.5
458.9028	13.01	-2.78	124792.000	2.0	146577.000	1.0
458.9058	28.01	-2.53	99340.550	3.5	121125.410	4.5
458.9163	28.01	-4.65	115739.150	4.5	137523.510	3.5
458.9195	8.00	-2.54	86627.790	2.0	108412.000	2.0
458.9220	70.00	-.22	25084.489	0.0	46874.684	0.0
458.9285	18.00	-2.64	95399.870	1.0	117183.654	2.0
458.9292	26.00	-3.71	21715.735	5.0	43499.485	4.0
458.9397	27.00	-1.76	29269.730	4.5	51052.980	3.5
458.9412	9.02	-3.32	443630.980	3.5	465414.140	2.5
458.9414	28.01	-2.75	108548.610	1.5	130331.780	1.5
458.9450	9.02	-3.36	444470.240	1.5	466253.240	1.5
458.9467	28.01	-1.24	98467.250	3.5	120250.170	3.5
458.9503	22.00	-4.77	15877.180	2.0	37659.927	3.0
458.9562	9.02	-.64	445006.130	2.5	466788.600	2.5
458.9576	13.01	-3.23	121480.300	3.0	143262.700	2.0
458.9671	23.00	-4.65	2153.200	1.5	23935.150	2.5
458.9703	13.01	-1.68	121480.900	2.0	143262.700	2.0
458.9720	29.01	-3.69	117928.480	1.0	139710.200	2.0
458.9745	27.00	-2.21	32733.070	3.5	54514.670	3.5
458.9766	13.01	-.95	121481.200	1.0	143262.700	2.0
458.9823	15.01	.35	103166.370	1.0	124947.600	2.0
458.9899	18.01	.30	148620.070	1.5	170400.940	2.5
458.9905	24.01	-2.64	32844.920	1.5	54625.760	2.5
458.9960	22.01	-1.72	9975.920	1.5	31756.500	1.5
458.9968	24.01	-4.37	25043.100	1.5	46823.640	.5
458.9970	8.00	-2.39	86631.466	3.0	108412.000	2.0
459.0019	24.01	-1.89	67393.800	3.5	89174.100	3.5
459.0160	40.00	-1.32	11534.025	0.0	33319.758	0.0
459.0221	28.01	-3.97	115120.000	2.5	136899.340	2.5
459.0289	23.01	-4.60	50738.920	1.0	72517.840	1.0
459.0308	24.00	-1.37	31393.400	5.0	53172.330	5.0
459.0398	28.01	-3.62	113321.950	4.5	135100.450	3.5
459.0510	23.01	-2.09	30613.970	4.0	52391.940	3.0
459.0550	40.00	-1.35	4355.506	0.0	26139.388	0.0
459.0658	28.00	-2.95	28569.210	2.0	50346.477	2.0
459.0672	24.00	-3.41	24299.890	2.0	46077.090	1.0
459.0744	26.01	-4.38	50187.950	3.5	71964.810	2.5
459.0750	25.00	-2.56	45060.810	3.5	66837.640	2.5
459.0769	25.01	-4.32	44899.820	3.0	66676.560	2.0
459.0822	22.00	-1.90	19937.859	1.0	41714.350	2.0
459.0822	24.01	-4.13	66649.710	1.5	88426.200	.5
459.0913	11.01	-2.04	308864.540	0.0	330640.600	1.0
459.0913	11.01	-2.04	308864.540	0.0	330640.600	1.0
459.0955	24.00	-3.60	24282.340	4.0	46056.200	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
459.1010	8.01	.37	206971.300	2.5	228746.900	3.5
459.1018	24.00	-4.14	20517.400	2.0	42292.960	1.0
459.1024	26.01	-2.90	63273.030	2.5	85048.560	1.5
459.1060	28.01	-3.25	115120.000	2.5	136895.360	3.5
459.1094	17.02	-.58	196137.900	2.5	217913.100	1.5
459.1100	44.00	-1.24	9114.300	0.0	30895.572	0.0
459.1102	24.00	-4.72	35501.260	3.0	57276.420	3.0
459.1120	58.01	-.67	8872.327	0.0	30653.505	0.0
459.1201	25.00	-1.64	37586.030	1.5	59360.720	2.5
459.1231	23.00	-2.00	19145.130	5.5	40919.680	5.5
459.1233	23.00	-2.03	15724.220	3.5	37498.760	2.5
459.1254	25.00	-4.29	30354.210	3.5	52128.650	2.5
459.1256	26.01	-7.02	20340.360	5.5	42114.790	4.5
459.1355	27.00	-5.26	7442.410	3.5	29216.370	2.5
459.1389	24.00	-1.66	7810.820	1.0	29584.620	2.0
459.1425	24.00	-1.97	35813.730	3.0	57587.360	4.0
459.1444	27.00	-4.17	33173.360	3.5	54946.900	2.5
459.1457	24.00	-1.86	27597.220	3.0	49370.700	3.0
459.1591	22.00	-.73	19421.576	3.0	41194.420	3.0
459.1680	75.00	-1.25	20325.695	0.0	42104.216	0.0
459.1712	24.00	-4.83	25106.340	3.0	46878.610	3.0
459.1739	27.00	-2.38	32654.500	2.5	54426.640	1.5
459.1779	10.02	-4.17	352662.050	1.0	374434.000	2.0
459.1820	56.00	-1.59	9215.000	0.0	30992.857	0.0
459.1820	62.01	-1.77	1451.835	0.0	23229.692	0.0
459.1826	28.01	-3.00	99418.610	3.5	121190.340	4.5
459.1954	21.00	-3.80	16009.710	.5	37780.830	1.5
459.1965	24.00	-3.39	26787.500	3.0	48558.570	2.0
459.2030	23.00	-1.07	15571.900	2.5	37342.660	2.5
459.2049	24.01	-1.48	32855.090	2.5	54625.760	2.5
459.2210	42.00	0.00	26455.667	0.0	48231.675	0.0
459.2232	17.01	-1.60	137804.400	1.0	159574.200	2.0
459.2296	25.00	-2.32	45013.550	2.5	66783.050	3.5
459.2406	26.02	-4.43	202282.650	2.0	224051.630	3.0
459.2420	74.00	-.60	19519.120	0.0	41294.132	0.0
459.2465	23.00	-2.96	15688.800	2.5	37457.500	1.5
459.2520	44.00	-.92	10566.135	0.0	32340.673	0.0
459.2522	28.00	-.32	28578.046	3.0	50346.477	2.0
459.2541	24.00	-.92	35934.020	6.0	57702.360	5.0
459.2560	28.01	-3.16	98276.700	4.5	120044.950	4.5
459.2580	74.00	-1.50	13227.833	0.0	35002.086	0.0
459.2598	29.01	-4.50	117130.360	2.0	138898.430	1.0
459.2655	26.00	-2.34	12560.933	3.0	34328.733	3.0
459.2663	23.00	-4.91	10892.500	3.5	32660.260	2.5
459.2918	23.00	-3.50	17242.050	5.5	39008.600	5.5
459.2971	28.01	-3.37	117074.700	3.5	138841.000	3.5
459.2971	11.02	-1.99	443261.600	.5	465027.900	1.5
459.2984	28.01	-4.33	115000.250	3.5	136766.490	2.5
459.3030	26.02	-4.22	114351.920	3.0	136117.940	2.0
459.3085	28.01	-2.82	99559.330	2.5	121325.090	2.5
459.3108	55.00	-2.00	0.000	0.0	21771.750	0.0
459.3121	9.02	-.13	445006.130	2.5	466771.720	3.5
459.3132	26.01	-4.08	62945.120	3.5	84710.660	3.5
459.3180	9.02	-.03	444957.110	1.5	466722.420	2.5
459.3234	10.00	-2.81	150315.861	2.0	172080.916	1.0
459.3334	24.01	-3.97	66872.120	.5	88636.700	1.5
459.3367	22.00	-2.80	26564.385	3.0	48328.810	4.0
459.3444	18.01	-2.54	158167.710	1.5	179931.770	1.5
459.3469	18.01	-3.06	191169.520	1.5	212933.460	2.5
459.3484	26.02	-3.17	183431.280	5.0	205195.150	5.0
459.3490	9.02	-4.44	444489.400	2.5	466253.240	1.5
459.3528	26.00	-2.63	31805.059	3.0	53568.720	2.0
459.3540	62.01	-1.47	2984.328	0.0	24754.031	0.0
459.3647	28.01	-4.15	32499.530	4.5	54262.630	3.5
459.3710	18.01	-3.98	191169.520	1.5	212932.320	1.5
459.3774	22.00	-4.74	21469.494	3.0	43231.990	4.0
459.3813	26.01	-7.53	23317.600	2.5	45079.910	2.5
459.3818	24.00	-2.42	26796.280	2.0	48558.570	2.0
459.3930	58.01	-.26	5565.369	0.0	27333.224	0.0
459.3959	27.00	-3.77	32027.500	3.5	53789.120	3.5
459.4030	63.00	.33	0.000	0.0	21767.381	0.0
459.4031	27.00	-1.21	32027.500	3.5	53788.780	4.5
459.4044	9.00	-1.96	116040.883	1.5	137802.100	2.5
459.4062	23.00	-6.61	9636.960	1.5	31398.090	2.5
459.4096	23.00	-.73	553.020	4.5	22313.990	5.5
459.4276	25.00	-2.91	35725.850	2.5	57485.970	2.5
459.4335	27.00	-5.88	4690.180	2.5	26450.020	2.5
459.4392	23.00	-2.28	15770.720	4.5	37530.290	5.5
459.4421	28.01	-2.68	113623.100	.5	135382.530	1.5
459.4428	29.01	-2.48	116371.410	4.0	138130.610	3.0
459.4450	60.01	-2.17	1613.150	0.0	23378.541	0.0
459.4470	22.00	-.65	18911.399	2.0	40670.600	2.0
459.4502	21.00	-2.56	16021.780	1.5	37780.830	1.5
459.4588	21.00	-1.41	.6096.860	1.5	37855.500	2.5
459.4626	27.00	-.02	29294.520	3.5	51052.980	3.5
459.4660	28.01	-4.41	96535.870	3.5	118294.170	3.5
459.4700	21.00	-3.24	16022.720	2.5	37780.830	1.5
459.4787	28.02	-3.47	121802.800	3.0	143560.500	2.0
459.4806	28.01	-2.92	71770.830	2.5	93528.440	3.5
459.4894	28.01	-4.42	118248.980	5.5	140006.170	4.5
459.4930	25.02	-4.08	173835.070	.5	195592.090	1.5
459.4948	26.00	-3.11	26406.490	1.0	48163.427	2.0
459.5011	24.00	-2.60	26801.930	1.0	48558.570	2.0
459.5040	76.00	.62	29198.022	0.0	50960.618	0.0
459.5084	28.00	-4.36	27414.893	2.0	49171.187	1.0
459.5114	24.00	-3.22	27816.880	5.0	49573.030	4.0
459.5160	42.00	-1.36	11050.080	0.0	32812.108	0.0
459.5196	26.00	-2.86	29313.008	6.0	51068.770	5.0
459.5243	10.00	-3.01	150315.861	2.0	172071.396	2.0
459.5290	62.01	-1.20	3871.561	0.0	25632.973	0.0
459.5363	26.00	-2.12	26627.612	4.0	48382.585	5.0
459.5420	90.00	-1.39	3629.588	0.0	25390.385	0.0
459.5429	26.00	-4.48	27543.000	1.0	49297.660	1.0
459.5502	15.01	-1.35	106001.990	1.0	127756.300	2.0
459.5503	27.00	-1.39	33150.680	1.5	54904.990	2.5
459.5513	24.00	-3.28	24303.940	3.0	46058.200	4.0
459.5522	22.01	-2.89	40425.800	1.5	62180.020	1.5
459.5559	26.00	-3.60	31307.235	4.0	53061.280	5.0
459.5579	24.00	.09	33762.740	6.0	55516.690	6.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
459.5678	26.01	-4.28	23031.300	1.5	44784.760	2.5
459.5735	24.00	-2.47	31364.330	3.0	53117.540	4.0
459.5737	24.01	-4.06	67868.050	2.5	89621.250	3.5
459.5870	59.01	-2.05	5081.424	0.0	26840.090	0.0
459.5990	8.01	-1.01	206971.300	2.5	228723.300	2.5
459.6016	26.01	-2.00	50212.930	2.5	71964.810	2.5
459.6025	9.00	-2.64	116040.883	1.5	137792.720	2.5
459.6045	26.00	-4.07	29056.312	3.0	50808.053	4.0
459.6079	27.00	-3.32	26450.020	2.5	48201.600	3.5
459.6091	22.00	-3.55	25388.334	4.0	47139.860	4.0
459.6092	18.00	-2.65	95399.870	1.0	117151.387	1.0
459.6109	22.00	-2.17	20006.032	2.0	41757.470	3.0
459.6172	9.02	-1.33	444957.110	1.5	466708.250	1.5
459.6202	8.01	.22	206972.300	1.5	228723.300	2.5
459.6217	18.01	-3.39	181594.050	2.5	203344.980	1.5
459.6223	17.02	-1.40	194959.500	2.5	216710.400	3.5
459.6232	23.00	-3.31	15724.220	3.5	37475.080	3.5
459.6365	23.01	-3.25	30641.710	3.0	52391.940	3.0
459.6383	28.00	-1.45	32982.280	1.0	54732.425	2.0
459.6384	7.00	-2.38	94830.860	2.5	116581.000	1.5
459.6384	7.00	-2.11	94830.860	2.5	116581.000	2.5
459.6392	24.00	-1.70	27703.840	4.0	49453.940	4.0
459.6527	28.01	-4.28	99442.860	4.5	121192.320	3.5
459.6534	25.01	-4.82	79739.880	5.0	101489.310	5.0
459.6550	39.00	.01	17018.737	0.0	38774.184	0.0
459.6597	24.00	-2.02	35807.900	2.0	57557.030	3.0
459.6629	18.01	-1.01	187589.230	2.5	209338.210	3.5
459.6710	44.00	.27	23310.023	0.0	45064.713	0.0
459.6754	28.01	-2.87	99154.810	4.5	120903.200	3.5
459.6891	27.00	.06	29294.520	3.5	51042.260	2.5
459.6914	24.00	-3.93	24940.610	2.0	46688.240	3.0
459.6921	12.02	.18	559987.100	1.0	581734.700	1.0
459.6921	12.02	.18	559987.100	1.0	581734.700	1.0
459.6923	24.01	-3.81	68843.510	3.5	90591.100	2.5
459.6929	28.00	-4.50	29084.478	4.0	50832.039	3.0
459.6940	29.01	-.52	116326.160	3.0	138073.670	4.0
459.6980	64.01	-1.27	4194.191	0.0	25947.603	0.0
459.7020	60.01	-1.79	1613.150	0.0	23366.373	0.0
459.7061	26.00	-6.06	7985.783	2.0	29732.721	1.0
459.7086	9.00	-3.10	116040.883	1.5	137787.700	1.5
459.7160	76.00	-1.45	11292.053	0.0	33044.613	0.0
459.7298	22.00	-3.69	20126.055	3.0	41871.870	2.0
459.7350	24.01	-3.03	67875.680	3.5	89621.250	3.5
459.7445	10.01	-2.43	302425.870	1.5	324170.990	2.5
459.7646	28.00	-4.75	27414.893	2.0	49159.060	2.0
459.7682	27.00	-2.57	32733.070	3.5	54477.070	3.5
459.7766	28.01	-3.85	72985.650	1.5	94729.250	2.5
459.7770	25.00	-3.84	37737.220	3.5	59480.800	2.5
459.7830	24.00	-2.91	35813.730	3.0	57557.030	3.0
459.7849	7.00	-4.48	94881.790	3.5	116625.000	2.5
459.7880	42.01	.06	29923.940	0.0	51673.094	0.0
459.7910	64.01	-1.02	4758.794	0.0	26507.806	0.0
459.7933	29.01	-.89	116388.000	2.0	138130.810	3.0
459.7935	26.01	-4.48	44929.590	2.5	66672.390	3.5
459.8026	23.01	-4.36	50775.470	2.0	72517.840	1.0
459.8114	26.00	-1.85	26479.366	1.0	48221.323	1.0
459.8187	26.00	-4.65	26224.961	3.0	47966.571	3.0
459.8193	25.02	-4.09	194971.150	2.5	216712.730	2.5
459.8195	22.00	-4.45	21588.496	4.0	43330.070	5.0
459.8250	42.01	-.20	27746.187	0.0	49493.591	0.0
459.8302	10.02	-3.76	352692.930	2.0	374434.000	2.0
459.8326	26.00	-5.67	7728.058	3.0	29469.010	2.0
459.8335	28.00	-2.41	29013.228	2.0	50754.137	2.0
459.8350	62.01	-2.15	2661.698	0.0	24408.629	0.0
459.8354	26.00	-3.06	31805.059	3.0	53545.882	3.0
459.8370	70.01	-.68	31779.063	0.0	53525.899	0.0
459.8437	24.00	-2.29	25106.340	3.0	46846.770	3.0
459.8498	23.01	-4.03	26839.820	3.0	48579.960	3.0
459.8498	24.00	-2.74	40906.460	1.0	62646.600	2.0
459.8519	26.01	-1.89	62945.120	3.5	84685.160	3.5
459.8564	9.02	-1.12	444489.400	2.5	466229.230	3.5
459.8587	28.01	-4.84	113225.060	.5	134964.780	1.5
459.8616	24.00	-1.67	31377.960	4.0	53117.540	4.0
459.8720	28.01	-3.86	32523.540	3.5	54262.630	3.5
459.8761	18.01	-3.42	150474.900	1.5	172213.800	1.5
459.8800	72.00	-1.88	0.000	0.0	21744.803	0.0
459.8900	64.00	.15	7017.204	0.0	28761.534	0.0
459.8951	26.02	-3.93	183457.150	4.0	205195.150	5.0
459.8959	25.00	-3.17	37789.930	2.5	59527.890	1.5
459.8985	22.00	-.48	18818.230	0.0	40556.070	1.0
459.9006	24.00	-1.42	24940.610	2.0	46678.350	1.0
459.9018	28.01	-3.64	99442.860	4.5	121180.540	4.5
459.9020	69.00	-1.63	0.000	0.0	21743.763	0.0
459.9080	44.00	-.58	10566.135	0.0	32309.614	0.0
459.9160	42.00	-.75	20245.038	0.0	41988.139	0.0
459.9258	23.00	-1.00	15078.250	.5	36814.800	1.5
459.9279	24.00	-2.07	24940.610	2.0	46677.060	2.0
459.9323	28.01	-1.87	98467.250	3.5	120203.490	2.5
459.9323	24.00	-3.56	35501.260	3.0	57237.500	4.0
459.9437	28.01	-4.26	99442.860	4.5	121178.560	3.5
459.9480	41.00	-1.42	9356.272	0.0	31097.860	0.0
459.9690	22.00	-3.32	20209.444	2.0	41943.950	1.0
459.9732	26.00	-4.35	26627.612	4.0	48361.920	4.0
459.9750	56.00	-.50	12636.000	0.0	34376.312	0.0
459.9960	74.00	.31	24600.544	0.0	46339.863	0.0
460.0017	27.00	-2.19	32781.710	2.5	54514.670	3.5
460.0026	25.00	-2.01	37737.220	3.5	59470.140	3.5
460.0068	27.00	-4.62	33674.380	2.5	55407.100	1.5
460.0100	24.00	-.36	20519.600	6.0	42252.170	6.0
460.0163	10.01	-2.02	281171.380	2.5	302903.650	2.5
460.0184	23.01	-1.46	18269.490	1.0	40001.660	2.0
460.0210	41.00	-.45	12421.258	0.0	34159.396	0.0
460.0261	10.01	-1.51	302425.870	1.5	324157.680	2.5
460.0271	22.01	-3.61	10024.740	2.5	31756.500	1.5
460.0299	27.00	-3.26	33173.360	3.5	54904.990	2.5
460.0313	10.01	-4.48	302425.870	1.5	324157.430	1.5
460.0355	28.00	-.40	29013.228	2.0	50744.593	1.0
460.0392	10.01	-1.97	281171.380	2.5	302902.570	1.5
460.0400	7.00	-3.50	94770.850	.5	116502.000	.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
460.0400	7.00	-1.90	94770.850	.5	116502.000	1.5
460.0440	74.00	-1.13	18147.942	0.0	39884.993	0.0
460.0468	27.01	-4.99	63865.200	1.0	85596.030	2.0
460.0606	22.00	-.63	18825.890	1.0	40556.070	1.0
460.0612	26.02	-3.44	117950.320	4.0	139680.470	3.0
460.0657	28.01	-1.33	93390.060	2.5	115120.000	2.5
460.0741	24.00	-1.18	8095.210	3.0	29824.750	3.0
460.0748	25.02	-3.22	94850.660	1.5	116580.170	1.5
460.0775	24.00	-1.86	23933.900	4.0	45663.280	5.0
460.0936	26.00	-4.29	26105.908	6.0	47834.529	5.0
460.0977	17.00	-1.76	74865.667	.5	96594.096	.5
460.1019	24.00	-1.14	20523.940	5.0	42252.170	6.0
460.1050	64.01	-1.03	4436.164	0.0	26170.333	0.0
460.1130	92.01	-2.40	887.233	0.0	22621.024	0.0
460.1144	24.00	-1.81	25177.390	4.0	46905.030	4.0
460.1156	27.00	-3.33	32430.590	5.5	54158.170	4.5
460.1257	14.00	-2.12	40991.884	1.0	62718.990	0.0
460.1285	28.01	-4.51	115209.850	3.5	136936.820	3.5
460.1290	69.01	-2.27	8872.327	0.0	30605.363	0.0
460.1302	26.00	-2.64	26623.726	2.0	48350.620	1.0
460.1337	26.00	-3.66	32873.623	4.0	54600.350	3.0
460.1362	26.01	-7.02	23317.600	2.5	45044.210	1.5
460.1370	58.01	-1.02	10566.135	0.0	32298.793	0.0
460.1398	28.00	-3.22	32973.414	4.0	54699.852	3.0
460.1420	73.00	-1.20	15808.874	0.0	37541.296	0.0
460.1449	21.01	-1.18	39344.900	2.0	61071.100	1.0
460.1451	28.01	-1.54	92325.850	3.5	114052.040	3.5
460.1457	28.01	-3.90	98276.700	4.5	120002.860	3.5
460.1478	7.01	-.52	148940.170	1.0	170666.230	0.0
460.1518	23.01	-4.48	44159.430	2.0	65885.300	2.0
460.1643	24.01	-2.98	67448.820	4.5	89174.100	3.5
460.1682	25.02	-4.61	115711.600	4.5	137436.700	4.5
460.1686	7.01	-.71	189335.160	3.0	211060.240	4.0
460.1718	26.02	-3.38	167299.600	5.0	189024.530	5.0
460.1737	25.00	-1.60	45130.160	4.5	66855.000	4.5
460.1760	44.00	-1.26	11372.710	0.0	33103.526	0.0
460.1800	24.00	-2.16	35862.820	4.0	57587.360	4.0
460.1822	10.01	-3.31	301801.090	3.5	323525.530	4.5
460.1857	25.00	-3.19	45013.550	2.5	66737.620	3.5
460.1885	24.00	-2.14	31393.400	5.0	53117.540	4.0
460.1915	24.01	-4.11	30219.040	4.5	51943.040	4.5
460.2004	26.00	-2.97	12968.552	2.0	34692.130	1.0
460.2038	9.02	-4.42	444552.080	3.5	466275.500	2.5
460.2050	57.00	-.74	7985.094	0.0	29714.541	0.0
460.2059	8.01	.41	234402.480	1.5	256125.800	2.5
460.2076	25.00	-3.00	38008.700	5.5	59731.940	4.5
460.2082	27.00	-3.94	33173.360	3.5	54896.570	3.5
460.2093	15.01	.73	103668.740	3.0	125391.900	4.0
460.2190	73.00	-1.87	9598.245	0.0	31327.031	0.0
460.2271	10.01	-2.23	301801.090	3.5	323523.410	2.5
460.2287	25.00	-1.61	45060.810	3.5	66783.050	3.5
460.2341	9.01	-.95	266360.600	1.0	288082.590	1.0
460.2359	24.01	-3.31	67334.200	3.5	89056.100	2.5
460.2432	28.01	-4.26	100078.780	1.5	121800.340	1.5
460.2512	24.00	-1.52	27816.880	5.0	49538.060	5.0
460.2529	7.01	-.75	189335.160	3.0	211056.260	3.0
460.2550	21.00	-7.27	11557.640	2.5	33278.640	3.5
460.2570	40.00	.35	15002.299	0.0	36729.291	0.0
460.2578	14.03	-1.61	305641.100	.5	327361.970	1.5
460.2630	63.00	-.43	15970.189	0.0	37696.897	0.0
460.2747	26.01	-6.46	20516.980	2.5	42237.050	3.5
460.2826	25.01	-4.52	62587.500	3.0	84307.200	4.0
460.2860	41.00	-2.07	4920.109	0.0	26645.732	0.0
460.2900	3.00	-.14	14904.000	0.0	36629.434	0.0
460.2900	90.01	-2.08	6936.547	0.0	28661.981	0.0
460.2930	64.00	-.84	967.890	0.0	22693.182	0.0
460.2945	26.00	-1.99	11976.239	4.0	33695.378	5.0
460.2955	23.00	-2.07	15103.770	4.5	36822.860	3.5
460.2956	22.00	-3.60	20209.444	2.0	41928.528	2.0
460.3040	24.00	-2.43	31355.210	2.0	53073.900	3.0
460.3044	22.00	-4.92	16106.080	4.0	37824.748	4.0
460.3180	28.01	-2.77	93390.060	2.5	115108.090	2.5
460.3182	24.00	-3.32	24282.340	4.0	46000.360	3.0
460.3186	25.00	-2.22	37148.660	5.5	58866.660	4.5
460.3203	28.01	-2.48	94067.140	1.5	115785.060	1.5
460.3211	22.01	-3.71	43740.770	3.5	65458.650	3.5
460.3237	24.01	-3.14	45669.540	1.5	67387.300	2.5
460.3345	26.00	-1.66	22946.810	1.0	44664.061	2.0
460.3434	24.00	-2.69	35870.530	4.0	57587.360	4.0
460.3463	22.00	-4.01	25227.217	3.0	46943.910	2.0
460.3483	23.00	-6.93	9824.580	2.5	31541.180	3.5
460.3548	9.02	-.70	445006.130	2.5	466722.420	2.5
460.3610	25.00	-3.55	35769.970	3.5	57485.970	2.5
460.3658	10.01	-4.60	224699.270	.5	246415.040	1.5
460.3660	92.01	-1.83	2258.411	0.0	23980.258	0.0
460.3712	23.02	.56	162760.280	4.5	184475.800	4.5
460.3818	23.00	-4.13	2220.130	2.5	23935.150	2.5
460.3820	60.00	-.27	5000.766	0.0	26721.858	0.0
460.3830	7.04	-.28	456134.000	0.0	477855.045	0.0
460.3918	22.00	-2.94	26494.322	2.0	48208.870	3.0
460.3936	21.00	-.26	16141.040	2.5	37855.500	2.5
460.3944	26.00	-2.51	24118.815	4.0	45833.240	4.0
460.4017	10.01	-1.26	301801.090	3.5	323515.170	3.5
460.4064	24.01	-4.70	53271.070	2.5	74984.930	1.5
460.4110	24.00	-2.89	27597.220	3.0	49310.860	3.0
460.4180	62.01	-2.04	322.630	0.0	22042.024	0.0
460.4204	24.00	-4.07	23512.000	1.0	45225.200	2.0
460.4210	58.01	-1.51	8227.067	0.0	29946.320	0.0
460.4245	26.00	-2.29	22838.320	2.0	44551.325	3.0
460.4280	73.00	-.75	22261.476	0.0	43980.398	0.0
460.4371	10.01	-1.92	301801.090	3.5	323513.500	3.5
460.4394	17.02	-1.70	196137.900	2.5	217850.200	2.5
460.4420	40.00	-1.38	4113.534	0.0	25831.796	0.0
460.4458	24.00	-1.33	39158.630	4.0	60870.630	4.0
460.4471	10.01	-.67	301801.090	3.5	323513.030	4.5
460.4480	77.00	.34	34924.706	0.0	56642.685	0.0
460.4526	24.01	-1.87	67344.420	2.5	89056.100	2.5
460.4611	24.00	-2.97	26796.280	2.0	48507.560	1.0
460.4655	24.00	-2.98	31009.000	3.0	52720.070	4.0
460.4723	28.01	-2.55	98561.220	2.5	120271.970	2.5
460.4734	23.01	-3.81	32040.760	2.0	53751.460	1.0
460.4779	28.00	-.76	34163.294	2.0	55873.780	2.0
460.4800	39.00	-.35	15244.271	0.0	36960.741	0.0
460.4802	24.01	-2.00	45669.540	1.5	67379.920	1.5
460.4844	26.00	-3.31	29313.008	6.0	51023.190	6.0
460.4850	73.00	-.28	23793.968	0.0	45510.202	0.0
460.4859	28.01	-2.55	99340.550	3.5	121050.660	2.5
460.4889	25.00	-2.15	23549.200	2.5	45259.170	1.5
460.4936	10.00	-3.17	150772.112	1.0	172481.860	1.0
460.4973	24.00	-1.82	31364.330	3.0	53073.900	3.0
460.4980	56.00	-1.61	9033.000	0.0	30748.621	0.0
460.4982	28.00	-.19	28068.091	4.0	49777.619	3.0
460.4998	26.00	-3.83	34017.084	1.0	55726.540	0.0
460.5040	76.00	-1.36	16131.504	0.0	37846.842	0.0
460.5086	25.00	-3.95	30419.610	2.5	52128.650	2.5
460.5095	26.00	-2.36	23051.744	0.0	44760.739	1.0
460.5109	25.00	-4.69	37630.620	4.5	59339.550	3.5
460.5128	28.01	-4.62	115827.120	3.5	137535.960	3.5
460.5150	92.01	-1.80	5726.684	0.0	27441.503	0.0
460.5192	7.00	-2.90	94793.460	1.5	116502.000	.5
460.5192	7.00	-2.48	94793.460	1.5	116502.000	1.5
460.5198	15.01	-2.31	101636.490	1.0	123345.000	0.0
460.5222	28.01	-4.52	106283.160	2.5	127991.560	3.5
460.5239	22.00	-2.71	20006.032	2.0	41714.350	2.0
460.5280	22.00	-3.27	17369.590	1.0	39077.713	1.0
460.5351	23.01	-2.30	18293.870	2.0	40001.660	2.0
460.5370	25.00	.31	38120.180	4.5	59827.880	5.5
460.5390	71.00	-.59	18712.545	0.0	40426.233	0.0
460.5393	28.01	-2.28	98561.220	2.5	120268.810	3.5
460.5396	26.01	-2.61	63465.190	1.5	85172.770	.5
460.5455	30.02	-1.37	215340.500	2.0	237047.800	2.0
460.5480	58.01	-1.19	9275.615	0.0	30988.878	0.0
460.5660	44.00	-.98	14921.641	0.0	36634.056	0.0
460.5730	75.00	-1.34	14115.066	0.0	35827.151	0.0
460.5770	72.01	-1.92	12017.970	0.0	33729.866	0.0
460.5774	13.01	-1.51	124792.000	2.0	146497.800	3.0
460.5780	57.01	-1.70	5646.026	0.0	27357.875	0.0
460.5809	24.00	-2.46	26801.930	1.0	48507.560	1.0
460.5816	23.03	-4.65	263593.000	2.0	285298.600	1.0
460.5920	25.02	-3.31	174243.330	3.5	195948.440	3.5
460.5939	26.00	-3.66	26224.961	3.0	47929.981	4.0
460.6079	23.00	-1.49	15770.720	4.5	37475.080	3.5
460.6140	23.00	-2.00	137.380	2.5	21841.450	2.5
460.6219	28.00	-3.90	29013.228	2.0	50716.927	1.0
460.6236	25.01	-3.58	82099.820	4.0	103803.440	3.0
460.6242	25.02	-3.43	174048.890	2.5	195752.480	2.5
460.6270	23.01	-2.95	51085.770	3.0	72789.230	3.0
460.6291	25.01	-3.80	62564.700	1.0	84268.060	1.0
460.6323	10.00	-3.88	150772.112	1.0	172475.323	2.0
460.6376	24.00	-1.13	35884.400	5.0	57587.360	4.0
460.6400	58.01	-.35	7259.177	0.0	28968.104	0.0
460.6404	25.00	-3.11	37148.660	5.5	58851.490	5.5
460.6410	27.00	-4.76	33462.830	2.5	55165.630	2.5
460.6510	62.01	-1.96	0.000	0.0	21708.408	0.0
460.6520	90.01	-2.20	7904.437	0.0	29612.798	0.0
460.6525	29.01	-2.31	116371.410	4.0	138073.670	4.0
460.6555	9.02	-2.33	445006.130	2.5	466708.250	1.5
460.6582	23.01	-5.06	17910.980	4.0	39612.970	5.0
460.6629	23.00	-3.06	14910.040	3.5	36611.810	2.5
460.6696	10.01	-.60	291202.030	3.5	312903.480	2.5
460.6745	24.00	-4.74	25177.390	4.0	46878.610	3.0
460.6770	41.00	-.56	2742.356	0.0	24449.539	0.0
460.6828	18.01	-3.97	186890.950	2.5	208591.780	1.5
460.6905	24.00	-3.84	24299.890	2.0	46000.360	3.0
460.6972	9.02	-1.93	444575.350	2.5	466275.500	2.5
460.7023	10.01	-2.77	322348.010	3.5	344047.920	3.5
460.7023	10.01	1.08	322348.010	4.5	344047.920	3.5
460.7072	26.00	-2.86	27543.000	1.0	49242.680	2.0
460.7153	7.01	-.57	148908.590	0.0	170607.890	1.0
460.7170	21.00	-3.60	18855.760	1.5	40554.980	2.5
460.7268	27.00	-4.45	33466.870	3.5	55165.630	2.5
460.7321	25.01	-4.66	79800.520	4.0	101499.030	4.0
460.7330	38.00	-.57	0.000	0.0	21704.545	0.0
460.7340	79.00	.29	46781.362	0.0	68485.860	0.0
460.7380	60.01	-2.13	4436.164	0.0	26140.473	0.0
460.7471	27.00	-3.31	32654.500	2.5	54352.300	3.5
460.7478	7.01	-3.52	189335.160	3.0	211032.930	2.0
460.7493	27.00	-3.85	32027.500	3.5	53725.200	4.5
460.7588	25.00	-.35	23296.670	3.5	44993.920	3.5
460.7613	22.00	-3.91	20126.055	3.0	41823.190	3.0
460.7645	26.00	-1.68	26339.682	2.0	48036.667	2.0
460.7645	26.00	-2.94	32133.977	2.0	53830.960	3.0
460.7684	8.02	-.03	370524.200	2.0	392221.000	2.0
460.7726	17.01	-3.45	137877.600	2.0	159574.200	2.0
460.7765	24.00	-3.86	24303.940	3.0	46000.360	3.0
460.7828	18.01	-1.77	182222.030	1.5	203918.150	1.5
460.7866	24.00	-2.10	31377.960	4.0	53073.900	3.0
460.7883	25.01	-3.74	62572.200	2.0	84268.060	1.0
460.7990	27.00	-3.41	32781.710	2.5	54477.070	3.5
460.8030	64.01	-.24	19277.147	0.0	40978.395	0.0
460.8085	7.01	-.64	189335.160	3.0	211030.070	3.0
460.8090	72.00	-1.82	6533.259	0.0	28234.224	0.0
460.8120	45.00	-1.40	13873.093	0.0	35573.917	0.0
460.8123	25.00	-3.19	37148.660	5.5	58843.390	6.5
460.8151	23.03	-.39	264591.900	5.0	286286.500	4.0
460.8168	28.01	-4.42	112686.300	2.5	134380.820	3.5
460.8169	28.00	-3.55	32973.414	4.0	54667.928	4.0
460.8193	17.02	-.43	196155.800	3.5	217850.200	2.5
460.8234	24.00	-3.46	35862.820	4.0	57557.030	3.0
460.8397	27.00	-2.68	32464.730	4.5	54156.170	4.5
460.8510	29.01	-.76	116371.410	4.0	138064.320	5.0
460.8512	19.01	-.28	166461.500	1.0	188154.400	2.0
460.8566	22.00	-2.76	20126.055	3.0	41818.700	4.0
460.8580	41.00	-.97	13066.518	0.0	34765.176	0.0
460.8580	64.00	-1.84	483.945	0.0	22182.603	0.0
460.8710	42.00	-.98	20003.065	0.0	41701.111	0.0
460.8763	28.01	-4.61	72375.420	1.5	94067.140	1.5
460.8897	27.00	-2.99	15184.040	2.5	36875.130	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
460.8944	25.00	-3.02	37789.930	2.5	59480.600	2.5
460.8986	24.00	-.91	40971.290	2.0	62661.960	3.0
460.9046	28.01	-2.44	70635.460	2.5	92325.850	3.5
460.9080	24.00	-2.15	35398.020	4.0	57088.250	5.0
460.9109	27.01	-3.18	63792.100	4.0	85482.190	4.0
460.9150	17.01	-2.74	158177.100	1.0	179867.000	1.0
460.9150	40.00	-1.15	12663.231	0.0	34359.205	0.0
460.9162	24.00	-4.65	23512.000	1.0	45201.840	1.0
460.9192	13.01	-2.34	121480.300	3.0	143170.000	2.0
460.9245	22.01	-2.77	40581.800	2.5	62271.250	2.5
460.9258	22.01	-3.54	9518.050	2.5	31207.440	2.5
460.9290	40.00	-2.07	5162.081	0.0	26857.396	0.0
460.9310	22.00	-1.77	26772.965	5.0	48462.110	5.0
460.9320	13.01	-2.69	121480.900	2.0	143170.000	1.0
460.9320	13.01	-3.08	121480.900	2.0	143170.000	2.0
460.9341	12.02	-2.86	562939.500	2.0	584628.500	2.0
460.9341	12.02	-2.86	562939.500	2.0	584628.500	2.0
460.9352	28.01	-2.32	98561.220	2.5	120250.170	3.5
460.9371	23.01	-4.44	25191.080	2.0	46879.940	2.0
460.9373	8.01	.67	234454.450	2.5	256143.300	3.5
460.9381	29.01	-2.45	117130.360	2.0	138819.170	3.0
460.9384	13.01	-3.17	121481.200	1.0	143170.000	1.0
460.9384	13.01	-2.96	121481.200	1.0	143170.000	0.0
460.9384	13.01	-4.26	121481.200	1.0	143170.000	2.0
460.9409	29.01	-4.49	125247.800	2.0	146936.480	2.0
460.9479	25.00	-3.22	37164.250	6.5	58852.600	7.5
460.9500	26.02	-3.71	166421.330	4.0	188109.580	3.0
460.9535	10.02	-4.11	352745.910	3.0	374434.000	2.0
460.9566	18.01	.46	148842.370	2.5	170530.310	3.5
460.9645	27.00	-2.86	33173.360	3.5	54860.930	4.5
460.9645	23.00	-2.00	11100.650	4.5	32788.220	4.5
460.9715	25.00	-2.42	37164.250	6.5	58851.490	5.5
460.9830	40.00	-2.11	4839.451	0.0	26532.225	0.0
460.9870	60.00	-.75	1048.548	0.0	22741.134	0.0
460.9872	24.00	-1.23	35870.530	4.0	57557.030	3.0
460.9880	42.00	-.17	18147.942	0.0	39840.481	0.0
460.9905	28.00	-1.90	32973.414	4.0	54659.759	5.0
460.9915	24.00	-2.79	26801.930	1.0	48488.230	0.0
460.9920	74.00	-.85	15324.929	0.0	37017.279	0.0
460.9985	28.01	-4.69	115592.250	1.5	137278.220	1.5
460.9998	24.00	-2.59	33113.270	4.0	54799.180	5.0
461.0110	40.00	-2.17	4355.506	0.0	26046.962	0.0
461.0119	24.00	-4.17	35501.260	3.0	57186.600	3.0
461.0151	10.01	-1.14	291495.040	2.5	313180.230	1.5
461.0166	8.01	-.17	234402.480	1.5	256087.600	2.5
461.0170	24.00	-2.57	31352.420	1.0	53037.520	2.0
461.0266	29.01	-4.30	115359.800	4.0	137044.450	4.0
461.0332	22.00	-4.29	15975.590	3.0	37659.927	3.0
461.0397	10.01	-2.78	291968.140	.5	313652.170	1.5
461.0410	21.00	-.45	16096.860	1.5	37780.830	1.5
461.0552	18.03	-2.58	268151.380	2.5	289834.680	2.5
461.0578	25.01	-3.22	59537.400	4.0	81220.580	3.0
461.0584	26.01	-3.88	44929.590	2.5	66612.740	1.5
461.0640	25.02	-3.18	194849.100	1.5	216531.990	1.5
461.0690	41.00	-1.34	10808.108	0.0	32496.836	0.0
461.0712	28.01	-3.98	99442.860	4.5	121125.410	4.5
461.0763	24.00	-2.03	31355.210	2.0	53037.520	2.0
461.0844	24.00	-2.47	25038.610	5.0	46720.540	4.0
461.0867	28.01	-3.70	77736.790	4.5	99418.610	3.5
461.0867	10.01	-2.19	302475.610	.5	324157.430	1.5
461.0914	11.02	-1.24	442710.500	1.5	464392.100	2.5
461.0918	23.00	-2.38	8412.940	.5	30094.520	1.5
461.0955	28.01	-2.34	93528.440	3.5	115209.850	3.5
461.1037	8.01	-1.56	234402.480	1.5	256083.500	1.5
461.1046	24.00	-1.46	23933.900	4.0	45614.880	4.0
461.1064	26.00	-4.25	26623.726	2.0	48304.623	2.0
461.1150	42.00	-1.00	18228.600	0.0	39915.164	0.0
461.1169	24.01	-4.69	69170.600	5.5	90851.000	4.5
461.1190	26.00	-3.07	22996.661	4.0	44676.963	4.0
461.1210	25.00	-3.45	37789.930	2.5	59470.140	3.5
461.1246	18.01	-1.81	174409.830	1.5	196089.870	2.5
461.1250	62.00	-1.08	806.575	0.0	22492.669	0.0
461.1274	24.00	-3.65	24286.540	1.0	45966.450	2.0
461.1279	26.00	-.61	29469.010	2.0	51148.892	2.0
461.1284	26.00	-4.99	29469.010	2.0	51148.870	3.0
461.1318	14.03	-1.35	305682.270	1.5	327361.970	2.5
461.1318	14.03	-2.31	305682.270	1.5	327361.970	1.5
461.1350	26.00	-5.54	7376.762	4.0	29056.312	3.0
461.1437	25.00	-2.54	37164.250	6.5	58843.390	6.5
461.1469	24.00	-4.45	40982.970	2.0	62661.960	3.0
461.1540	22.00	-3.88	21469.494	3.0	43148.150	3.0
461.1560	58.01	-.44	12259.943	0.0	33944.579	0.0
461.1635	22.00	-3.10	18037.225	4.0	39715.437	3.0
461.1676	28.01	-3.49	99442.860	4.5	121120.880	5.5
461.1699	23.00	-1.96	15664.750	1.5	37342.660	2.5
461.1703	9.02	-1.06	444575.350	2.5	466253.240	1.5
461.1771	9.02	-.66	444552.080	3.5	466229.650	4.5
461.1795	24.00	-1.93	27500.370	3.0	49177.830	3.0
461.1861	9.02	-2.22	444552.080	3.5	466229.230	3.5
461.1890	25.00	-2.75	45060.810	3.5	66737.820	3.5
461.1956	24.00	-1.32	27163.200	0.0	48839.900	1.0
461.1969	27.00	-3.14	32027.500	3.5	53704.140	2.5
461.2067	24.01	-2.34	67379.920	1.5	89056.100	2.5
461.2070	59.01	-2.00	0.000	0.0	21682.238	0.0
461.2120	41.00	-1.13	11130.738	0.0	32812.741	0.0
461.2146	24.00	-3.05	33060.740	3.0	54736.550	4.0
461.2171	9.02	-3.34	443865.310	1.5	465541.000	.5
461.2171	9.02	-2.92	443865.310	1.5	465541.000	1.5
461.2252	24.00	-1.07	40971.290	2.0	62646.600	2.0
461.2301	26.01	-3.38	54902.420	1.5	76577.500	.5
461.2320	44.00	-2.02	8469.040	0.0	30150.103	0.0
461.2344	24.01	-4.04	45669.540	1.5	67344.420	2.5
461.2350	26.02	-3.56	117950.320	4.0	139625.170	4.0
461.2397	27.00	-1.09	32027.500	3.5	53702.130	3.5
461.2470	60.01	-2.72	483.945	0.0	22164.303	0.0
461.2510	26.01	-4.10	44915.070	3.5	66589.170	4.5
461.2560	90.01	-2.01	9517.587	0.0	31197.522	0.0
461.2591	25.02	-2.89	94906.450	.5	116580.170	1.5
461.2595	28.02	-2.89	97996.300	3.0	119670.000	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
461.2601	28.01	-4.65	114874.880	2.5	136548.550	2.5
461.2618	23.00	-2.66	15264.830	5.5	36938.420	5.5
461.2643	26.00	-3.11	22838.320	2.0	44511.795	2.0
461.2703	24.00	-2.11	31364.330	3.0	53037.520	2.0
461.2801	10.01	-1.18	281171.380	2.5	302644.110	2.5
461.2812	27.00	-3.53	32841.990	4.5	54314.670	3.5
461.2889	9.02	-1.60	443868.680	2.5	465541.000	1.5
461.2903	28.01	-4.59	114874.880	2.5	136547.130	3.5
461.2925	10.01	-2.45	281171.380	2.5	302843.530	3.5
461.2940	20.02	-1.51	341349.190	1.0	363021.270	2.0
461.3000	39.00	-.69	15405.586	0.0	37083.453	0.0
461.3020	58.01	-1.16	7017.204	0.0	28694.977	0.0
461.3084	25.02	-3.36	173920.690	1.5	195592.090	1.5
461.3084	22.00	-1.65	26657.409	4.0	48328.810	4.0
461.3095	8.01	-.38	234454.450	2.5	256125.800	2.5
461.3140	7.00	-4.08	94830.860	2.5	116502.000	1.5
461.3200	26.00	-1.87	26550.466	0.0	48221.323	1.0
461.3231	28.01	-3.97	115209.850	3.5	136880.560	4.5
461.3320	74.00	-1.90	6129.972	0.0	27806.335	0.0
461.3357	24.00	-1.57	7750.780	0.0	29420.900	1.0
461.3390	57.01	-1.29	5646.026	0.0	27322.060	0.0
461.3487	16.02	-1.58	148397.800	1.0	170067.310	2.0
461.3500	62.01	-2.23	2661.698	0.0	24337.216	0.0
461.3514	24.00	-2.53	25177.390	4.0	46846.770	3.0
461.3596	17.02	-4.66	179663.000	1.5	201332.000	1.5
461.3638	24.01	-3.17	67387.300	2.5	89056.100	2.5
461.3640	26.02	-4.28	114339.950	4.0	136008.740	3.0
461.3670	8.01	-1.04	234454.450	2.5	256123.100	3.5
461.3723	21.00	-2.76	11610.240	3.5	33278.640	3.5
461.3868	7.01	-.76	148940.170	1.0	170607.890	1.0
461.3873	10.01	-1.44	301855.710	2.5	323523.410	2.5
461.3887	23.00	-2.61	20812.990	1.5	42480.620	.5
461.3936	28.01	-4.26	114874.880	2.5	136542.280	3.5
461.4006	27.00	-.70	32027.500	3.5	53694.570	3.5
461.4051	24.00	-3.12	27703.840	4.0	49370.700	3.0
461.4089	28.01	-4.72	70706.770	1.5	92373.450	2.5
461.4115	24.00	-4.56	24299.890	2.0	45966.450	2.0
461.4115	18.01	-2.42	174409.830	1.5	196076.390	1.5
461.4149	22.00	-1.19	17995.750	0.0	39662.150	1.0
461.4155	24.00	-4.16	25038.610	5.0	46704.980	5.0
461.4207	26.00	-2.73	26623.726	2.0	48289.852	1.0
461.4291	22.00	-2.85	19421.576	3.0	41087.310	3.0
461.4298	29.01	-4.81	129116.900	3.0	150782.600	2.0
461.4351	21.00	-4.24	18855.760	1.5	40521.210	1.5
461.4390	10.00	-2.47	149824.221	2.0	171489.485	1.0
461.4415	7.00	-3.03	94770.850	.5	116436.000	1.5
461.4500	64.00	.20	6694.574	0.0	28365.394	0.0
461.4507	24.00	-3.70	31055.350	5.0	52720.070	4.0
461.4581	28.00	-1.81	29013.228	2.0	50677.599	3.0
461.4632	25.00	-2.64	38120.180	4.5	59784.310	3.5
461.4660	75.00	-1.64	17180.052	0.0	38850.121	0.0
461.4728	24.00	-1.41	27176.220	1.0	48839.900	1.0
461.4809	18.03	-3.71	268171.380	1.5	289834.680	2.5
461.4848	23.02	.47	162335.880	3.5	183999.000	3.5
461.4860	24.01	-4.77	45730.740	2.5	67393.800	3.5
461.4860	74.00	-1.13	19438.462	0.0	41107.592	0.0
461.4937	25.02	-4.29	115774.000	3.5	137436.700	4.5
461.4941	24.00	-2.89	33542.110	2.0	55204.790	3.0
461.4978	24.00	-3.64	24303.940	3.0	45966.450	2.0
461.5022	24.01	-2.77	67393.800	3.5	89056.100	2.5
461.5037	18.01	-2.11	187589.230	2.5	209251.460	3.5
461.5069	26.00	-4.81	37162.729	3.0	58824.810	2.0
461.5070	57.00	-1.02	7178.519	0.0	28846.663	0.0
461.5156	28.01	-3.34	98561.220	2.5	120222.890	1.5
461.5166	22.00	-3.82	15877.180	2.0	37538.804	2.0
461.5246	26.02	-4.47	183431.280	5.0	205092.530	4.0
461.5282	9.02	-2.94	443753.060	2.5	465414.140	2.5
461.5284	28.01	-4.47	112719.750	3.5	134380.820	3.5
461.5291	28.01	-2.32	100609.010	2.5	122270.050	3.5
461.5327	24.00	-2.80	39158.630	4.0	60819.500	3.0
461.5344	25.00	-3.22	30354.210	3.5	52015.000	3.5
461.5370	26.01	-4.33	62065.570	3.5	83726.240	3.5
461.5427	7.02	-.89	320287.500	3.5	341947.900	2.5
461.5440	62.01	-1.42	4355.506	0.0	26021.913	0.0
461.5491	28.01	-4.93	111783.790	3.5	133443.890	2.5
461.5557	10.01	-.43	281171.380	2.5	302831.170	3.5
461.5595	25.00	-1.34	37630.620	4.5	59290.230	3.5
461.5627	10.01	-.89	301855.710	2.5	323515.170	3.5
461.5657	18.01	-1.66	187589.230	2.5	209248.550	2.5
461.5676	24.00	-2.14	31352.420	1.0	53011.650	1.0
461.5690	62.01	-1.57	1451.835	0.0	23117.068	0.0
461.5853	28.01	-2.63	115108.090	2.5	136766.490	2.5
461.5936	27.01	-4.21	63509.370	4.0	85167.380	3.0
461.5983	10.01	-2.67	301855.710	2.5	323513.500	3.5
461.6094	10.01	-.13	281332.550	.5	302989.820	1.5
461.6120	24.00	-1.11	7927.470	2.0	29584.620	2.0
461.6170	41.00	-1.53	1532.493	0.0	23195.473	0.0
461.6190	26.02	-4.36	114351.920	3.0	136008.740	3.0
461.6245	24.01	-1.45	45730.740	2.5	67387.300	2.5
461.6271	24.00	-2.35	31355.210	2.0	53011.650	1.0
461.6297	10.01	-2.47	281332.550	.5	302988.870	.5
461.6390	77.00	-1.38	12098.628	0.0	33760.576	0.0
461.6454	23.00	-5.28	9544.540	.5	31200.120	1.5
461.6490	62.01	-2.96	0.000	0.0	21661.479	0.0
461.6569	27.00	-4.34	13795.520	2.5	35450.560	3.5
461.6578	23.03	-.43	264401.900	4.0	286056.900	3.0
461.6620	42.00	-.32	25407.119	0.0	47067.988	0.0
461.6625	24.01	-1.59	32844.920	1.5	54499.700	1.5
461.6717	24.00	-1.79	37205.880	3.0	58860.230	2.0
461.6780	76.00	-1.22	10969.423	0.0	32629.541	0.0
461.6817	9.02	-1.75	444575.350	2.5	466229.230	3.5
461.6821	22.00	-1.84	17423.853	2.0	39077.713	1.0
461.6821	23.00	-1.64	15688.800	2.5	37342.660	2.5
461.6845	25.01	-3.42	81051.620	3.0	102705.370	3.0
461.6885	28.01	-4.49	78955.450	1.5	100609.010	2.5
461.6945	28.01	-3.17	109148.050	4.5	130801.330	4.5
461.7002	25.01	-2.41	86449.240	4.0	108102.250	3.0
461.7028	25.00	-2.91	45130.160	4.5	66783.050	3.5
461.7041	25.02	-2.63	195308.790	4.5	216961.620	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
461.7137	9.02	-.90	444623.120	3.5	466275.500	2.5
461.7159	28.00	-1.86	30619.440	2.0	52271.716	2.0
461.7254	22.00	.44	14105.680	3.0	35757.510	4.0
461.7277	25.01	-2.63	81051.620	3.0	102703.340	4.0
461.7378	24.00	-2.03	24056.110	5.0	45707.360	6.0
461.7401	9.02	-2.34	444578.510	4.5	466229.650	4.5
461.7427	25.01	-2.66	81054.350	2.0	102705.370	3.0
461.7491	9.02	-4.31	444578.510	4.5	466229.230	3.5
461.7501	26.02	-4.23	114339.950	4.0	135990.620	4.0
461.7533	24.00	-3.21	36552.130	3.0	58202.650	3.0
461.7555	23.00	-2.88	20830.200	.5	42480.620	.5
461.7681	22.00	-1.23	25388.334	4.0	47038.160	3.0
461.7685	27.00	-4.78	23207.760	1.5	44857.570	.5
461.7819	24.01	-3.31	45730.740	2.5	67379.920	1.5
461.7838	10.00	-2.75	149824.221	2.0	171473.313	2.0
461.7862	28.00	-1.65	33112.368	3.0	54761.346	4.0
461.7872	25.01	-3.55	49291.310	3.0	70940.240	2.0
461.7950	42.01	-.65	22745.421	0.0	44400.051	0.0
461.7961	28.00	-1.90	30392.052	1.0	52040.568	2.0
461.8120	23.01	-3.90	18353.890	3.0	40001.660	2.0
461.8128	24.00	-4.77	35572.940	2.0	57220.670	2.0
461.8169	7.00	-3.25	94793.460	1.5	116441.000	.5
461.8169	7.00	-3.93	94793.460	1.5	116441.000	1.5
461.8169	7.00	-2.99	94793.460	1.5	116441.000	2.5
461.8393	28.01	-3.78	115120.000	2.5	136766.490	2.5
461.8489	10.01	-3.26	322348.010	3.5	343994.050	4.5
461.8489	10.01	.08	322348.010	4.5	343994.050	4.5
461.8491	10.01	-1.10	322348.010	4.5	343994.040	5.5
461.8521	23.01	-4.23	44657.990	2.0	66303.880	3.0
461.8532	25.02	-3.49	195315.780	2.5	216961.620	3.5
461.8722	21.00	-3.00	17012.980	2.5	38657.930	2.5
461.8760	26.00	-2.20	23783.617	5.0	45428.385	4.0
461.8781	22.00	-1.81	18911.399	2.0	40556.070	1.0
461.8794	24.01	-1.10	32855.090	2.5	54499.700	1.5
461.8801	23.00	-2.70	8476.200	1.5	30120.780	2.5
461.8821	22.00	-1.68	26564.385	3.0	48208.870	3.0
461.8867	24.01	-4.14	30298.770	5.5	51943.040	4.5
461.8882	25.00	-3.78	38008.700	5.5	59652.900	5.5
461.8898	9.00	-1.99	116143.579	.5	137787.700	1.5
461.8903	24.00	-3.47	36558.550	2.0	58202.650	3.0
461.9032	22.00	-3.04	21588.496	4.0	43231.990	4.0
461.9086	9.02	-1.64	443770.900	3.5	465414.140	2.5
461.9110	25.01	-4.69	82193.040	2.0	103836.170	2.0
461.9140	64.00	-.28	10162.848	0.0	31811.900	0.0
461.9236	7.00	-2.91	94793.460	1.5	116436.000	1.5
461.9236	7.00	-2.30	94793.460	1.5	116436.000	2.5
461.9276	26.00	-1.94	29056.312	3.0	50698.666	2.0
461.9294	28.01	-2.55	98561.220	2.5	120203.490	2.5
461.9319	27.00	-4.61	8460.810	2.5	30102.960	2.5
461.9363	22.00	-4.25	25388.334	4.0	47030.280	3.0
461.9375	27.00	-3.32	24733.280	2.5	46375.170	1.5
461.9390	17.00	-4.31	72827.038	.5	94468.857	.5
461.9510	73.00	-1.18	9194.957	0.0	30842.275	0.0
461.9530	24.00	-.56	24093.160	2.0	45734.320	2.0
461.9546	22.00	-.80	18825.890	1.0	40466.979	2.0
461.9629	29.01	-2.44	116388.000	2.0	138028.700	1.0
461.9761	23.00	-1.90	323.420	3.5	21963.500	3.5
461.9823	21.00	-1.40	16141.040	2.5	37780.630	1.5
461.9880	57.01	-.26	14034.408	0.0	35679.992	0.0
461.9900	7.04	-.58	456134.000	0.0	477779.490	0.0
461.9920	56.00	-1.05	12266.000	0.0	33911.396	0.0
461.9921	25.00	-4.74	41031.480	4.5	62670.810	4.5
462.0015	9.02	-4.81	444552.080	3.5	466190.970	3.5
462.0030	66.01	-2.08	806.575	0.0	22451.456	0.0
462.0060	26.01	-3.67	64040.960	3.5	85679.640	2.5
462.0131	26.00	-2.63	24772.019	1.0	46410.366	1.0
462.0145	24.01	-3.23	65029.670	.5	86667.950	1.5
462.0207	25.00	-.51	38351.780	.5	59989.770	1.5
462.0214	28.01	-3.25	98561.220	2.5	120199.180	1.5
462.0230	92.00	-.12	6210.629	0.0	27854.573	0.0
462.0263	23.00	-3.07	15724.220	3.5	37361.950	4.5
462.0265	18.01	-1.94	189934.550	.5	211572.270	1.5
462.0327	27.00	-3.83	29563.170	1.5	51200.600	1.5
462.0383	28.00	-2.27	29668.918	3.0	51306.085	3.0
462.0406	24.00	-2.78	27816.880	5.0	49453.940	4.0
462.0419	13.01	-4.18	125706.200	1.0	147343.200	2.0
462.0498	28.01	-4.47	98276.700	4.5	119913.330	4.5
462.0513	26.01	-3.15	22810.330	3.5	44446.890	3.5
462.0550	74.00	-.98	19438.462	0.0	41080.907	0.0
462.0666	26.02	-1.40	183456.690	3.0	205092.530	4.0
462.0765	26.02	-2.69	183457.150	4.0	205092.530	4.0
462.0818	27.00	-2.09	21920.090	4.5	43555.220	3.5
462.0829	27.00	-4.71	32841.990	4.5	54477.070	3.5
462.0860	72.00	-1.67	4516.821	0.0	26157.814	0.0
462.0886	28.01	-1.42	99559.330	2.5	121194.140	2.5
462.0944	27.00	-3.86	28470.510	1.5	50105.050	1.5
462.0948	25.00	-3.59	41789.480	4.5	63424.000	3.5
462.0997	23.02	-4.06	140750.820	2.5	162385.110	3.5
462.1029	24.00	-1.76	20519.600	6.0	42153.740	5.0
462.1089	21.00	-4.56	11520.150	1.5	33154.010	2.5
462.1241	8.01	-1.15	234454.450	2.5	256087.600	2.5
462.1262	23.00	-1.91	15264.830	5.5	36897.880	4.5
462.1275	28.01	-.98	99559.330	2.5	121192.320	3.5
462.1365	21.00	-4.11	17025.360	1.5	38657.930	2.5
462.1380	42.00	-.70	18728.600	0.0	39867.158	0.0
462.1380	75.00	-.50	21616.215	0.0	43254.773	0.0
462.1393	7.01	-.46	148940.170	1.0	170572.610	2.0
462.1408	23.00	-1.97	18805.050	.5	40437.420	1.5
462.1410	24.01	-5.44	29952.080	.5	51584.440	1.5
462.1419	14.01	-.56	101023.310	1.5	122655.630	2.5
462.1429	26.02	-2.77	179661.480	3.0	201293.750	2.0
462.1429	24.01	-4.44	30156.940	3.5	51789.210	3.5
462.1435	25.01	-3.19	43850.420	2.0	65482.660	3.0
462.1461	24.00	-2.80	23933.900	4.0	45566.020	3.0
462.1612	26.00	-3.76	31937.308	1.0	53568.720	2.0
462.1612	22.00	-3.11	20126.055	3.0	41757.470	3.0
462.1619	27.00	-4.10	33945.900	2.5	55577.280	1.5
462.1697	14.01	-1.71	101024.610	2.5	122655.630	2.5
462.1721	14.01	-.41	101024.610	2.5	122655.510	3.5
462.1903	24.00	-1.14	20523.690	4.0	42153.740	5.0
462.1940	24.00	-.37	31048.000	7.0	52677.880	7.0
462.1940	60.00	-.12	2339.068	0.0	23975.004	0.0
462.1957	24.00	-.59	20523.940	5.0	42153.740	5.0
462.1989	28.01	-2.71	118379.110	2.5	140008.760	3.5
462.2117	8.01	-2.61	234454.450	2.5	256083.500	1.5
462.2189	9.01	-.83	266453.880	2.0	288082.590	1.0
462.2224	24.00	-3.25	31049.330	6.0	52677.880	7.0
462.2226	23.00	-1.44	14910.040	3.5	36538.580	4.5
462.2292	27.00	-1.08	32654.500	2.5	54282.730	2.5
462.2395	26.01	-8.84	20340.360	5.5	41968.110	5.5
462.2416	24.00	-3.68	41043.350	3.0	62671.000	4.0
462.2427	8.01	-4.74	254481.500	3.5	276109.100	4.5
462.2430	92.01	-2.00	5162.081	0.0	26795.724	0.0
462.2453	24.00	-.09	28637.000	3.0	50264.480	3.0
462.2457	26.02	-1.58	179579.830	5.0	201207.290	4.0
462.2514	25.02	-3.45	173835.070	.5	195462.260	.5
462.2594	25.00	-1.76	37630.620	4.5	59257.440	4.5
462.2690	27.00	-.81	30443.630	1.5	52070.000	2.5
462.2700	72.01	-.46	20003.065	0.0	41635.444	0.0
462.2722	25.00	-1.66	37789.930	2.5	59416.150	1.5
462.2731	26.00	-4.53	24338.766	3.0	45964.944	2.0
462.2748	22.00	-3.23	25317.813	1.0	46943.910	2.0
462.2760	24.00	-1.03	24093.160	2.0	45719.200	1.0
462.2942	26.02	-4.30	201207.290	4.0	222832.480	5.0
462.2960	73.00	-2.06	9920.875	0.0	31552.038	0.0
462.3000	24.00	-1.78	36577.730	4.0	58202.650	3.0
462.3025	27.00	-1.32	25739.930	2.5	47364.730	1.5
462.3077	22.00	-.55	18061.540	1.0	39686.100	2.0
462.3094	22.00	.20	14028.470	2.0	35652.950	3.0
462.3107	24.01	-3.51	67012.280	2.5	88636.700	1.5
462.3151	10.01	-2.13	302816.980	1.5	324441.190	2.5
462.3243	23.00	-5.25	2311.370	3.5	23935.150	2.5
462.3303	25.00	-2.14	37737.220	3.5	59360.720	2.5
462.3329	27.00	-4.99	32733.070	3.5	54356.450	4.5
462.3335	10.00	-4.54	150858.508	2.0	172481.860	1.0
462.3350	24.00	-2.84	33113.270	4.0	54736.550	4.0
462.3460	42.00	-.32	25407.119	0.0	47035.942	0.0
462.3660	28.00	-4.17	29084.478	4.0	50706.310	4.0
462.3690	74.00	-1.43	16292.819	0.0	37920.567	0.0
462.3938	17.00	-2.75	74865.667	.5	96486.198	1.5
462.3955	22.00	-2.51	19573.968	4.0	41194.420	3.0
462.4040	28.00	-3.08	33112.368	3.0	54732.425	2.0
462.4052	28.01	-2.94	108368.050	2.5	129988.050	2.5
462.4140	90.01	-1.83	11050.080	0.0	32675.723	0.0
462.4216	28.01	-.94	99559.330	2.5	121178.560	3.5
462.4216	28.01	-4.18	71770.830	2.5	93390.060	2.5
462.4240	42.00	0.00	29036.707	0.0	50661.882	0.0
462.4262	10.01	-1.07	292033.150	2.5	313652.170	1.5
462.4281	25.00	-4.51	35769.970	3.5	57388.900	4.5
462.4349	24.00	-3.36	41043.350	3.0	62661.960	3.0
462.4385	23.00	-.83	15724.220	3.5	37342.660	2.5
462.4411	23.00	-1.57	8476.200	1.5	30094.520	1.5
462.4420	64.00	-.39	6452.602	0.0	28076.935	0.0
462.4429	26.00	-4.85	36079.353	3.0	57697.590	4.0
462.4507	26.00	-4.01	33507.102	3.0	55124.974	3.0
462.4642	23.00	-3.32	15078.250	.5	36695.490	.5
462.4649	28.01	-4.15	109148.050	4.5	130765.260	3.5
462.4668	25.02	-.95	194545.780	.5	216162.900	1.5
462.4723	26.02	-2.70	179676.890	2.0	201293.750	2.0
462.4726	24.00	-2.87	27223.050	2.0	48839.900	1.0
462.4733	10.00	-2.98	150858.508	2.0	172475.323	2.0
462.4884	23.02	-2.83	141144.170	4.5	162760.280	4.5
462.4900	58.01	-.15	8952.985	0.0	30575.074	0.0
462.4959	24.00	-3.30	36552.130	3.0	58167.890	4.0
462.4970	62.01	-1.81	10162.848	0.0	31784.610	0.0
462.5053	26.00	-1.65	26140.164	3.0	47755.485	3.0
462.5079	29.01	-1.53	116388.000	2.0	138003.200	2.0
462.5099	26.00	-3.17	26623.726	2.0	48238.832	2.0
462.5293	24.00	-2.77	25106.340	3.0	46720.540	4.0
462.5359	23.02	-1.49	162385.110	3.5	183999.000	3.5
462.5404	24.01	-4.39	45730.740	2.5	67344.420	2.5
462.5408	24.00	-3.76	35572.940	2.0	57186.600	3.0
462.5427	26.00	-3.72	32133.977	2.0	53747.547	3.0
462.5504	26.01	-2.47	63559.560	.5	85174.770	.5
462.5528	22.00	-1.85	26494.322	2.0	48107.420	2.0
462.5599	28.01	-3.01	98276.700	4.5	119889.470	5.5
462.5605	29.01	-4.36	116326.160	3.0	137938.900	4.0
462.5618	26.02	-3.47	201164.210	2.0	222776.890	1.0
462.5633	24.00	-1.76	31048.000	7.0	52660.610	6.0
462.5665	9.02	-4.08	444578.510	4.5	466190.970	3.5
462.5763	27.00	-.33	29948.760	2.5	51560.760	2.5
462.5772	9.02	-3.86	444578.510	4.5	466190.470	4.5
462.5886	22.00	-4.51	21469.494	3.0	43080.920	2.0
462.5911	26.01	-2.62	48039.230	2.5	69650.540	2.5
462.5918	24.00	-.43	31049.330	6.0	52660.610	6.0
462.5933	22.01	-2.84	40798.370	3.5	62409.580	3.5
462.5960	75.00	-1.84	15647.559	0.0	37264.694	0.0
462.6018	26.02	-3.50	179682.940	1.0	201293.750	2.0
462.6040	24.00	-1.91	36552.130	3.0	58162.840	2.0
462.6144	26.00	-3.10	29798.960	4.0	51409.180	4.0
462.6151	28.01	-4.12	93390.060	2.5	115000.250	3.5
462.6161	7.00	-2.80	94830.860	2.5	116441.000	1.5
462.6161	7.00	-2.71	94830.860	2.5	116441.000	2.5
462.6174	24.00	-1.24	7810.820	1.0	29420.900	1.0
462.6189	26.02	-2.92	201164.210	2.0	222774.220	2.0
462.6307	28.01	-4.10	109148.050	4.5	130757.510	4.5
462.6342	26.00	-4.55	26224.961	3.0	47834.260	3.0
462.6410	40.00	.10	14921.641	0.0	36536.673	0.0
462.6470	42.00	-.78	12259.943	0.0	33874.695	0.0
462.6472	28.01	-4.21	112686.300	2.5	134294.990	2.5
462.6483	27.00	-4.28	33674.380	2.5	55283.020	2.5
462.6485	23.00	-1.64	8412.940	.5	30021.570	.5
462.6500	60.00	-.83	1048.548	0.0	22663.159	0.0
462.6530	25.00	.34	38008.700	5.5	59617.120	6.5
462.6560	69.01	-2.93	0.000	0.0	21614.331	0.0
462.6648	26.02	-3.31	201166.350	3.0	222774.220	2.0
462.6693	25.00	-3.67	45130.160	4.5	66737.820	3.5
462.6707	15.01	-.40	103340.010	2.0	124947.600	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
462.6772	26.00	-3.95	24118.815	4.0	45726.104	5.0
462.6780	26.01	-4.05	44915.070	3.5	66522.320	2.5
462.6798	24.00	-1.39	24056.110	5.0	45663.280	5.0
462.6827	24.01	-2.82	67868.050	2.5	89475.080	2.5
462.6830	24.00	-2.36	27703.840	4.0	49310.860	3.0
462.6853	25.00	-1.42	23549.200	2.5	45156.110	2.5
462.6934	9.02	-3.07	444623.120	3.5	466229.650	4.5
462.6959	22.00	-3.51	27418.015	2.0	49024.430	3.0
462.7020	28.01	-4.83	114942.420	1.5	136548.550	2.5
462.7024	9.02	-2.73	444623.120	3.5	466229.230	3.5
462.7050	59.01	-2.13	3871.561	0.0	25483.603	0.0
462.7080	92.01	-1.28	4516.821	0.0	26128.723	0.0
462.7149	28.01	-4.37	113177.610	3.5	134783.140	2.5
462.7180	26.00	-4.98	21715.735	5.0	43321.120	6.0
462.7198	28.01	-4.51	98561.220	2.5	120166.520	1.5
462.7207	24.00	-2.93	31055.350	5.0	52660.610	6.0
462.7220	63.00	.25	0.000	0.0	21611.248	0.0
462.7232	7.00	-3.02	94830.860	2.5	116436.000	1.5
462.7232	7.00	-2.45	94830.860	2.5	116436.000	2.5
462.7326	19.02	-.52	242165.300	1.5	263770.000	.5
462.7352	24.01	-3.38	67870.500	1.5	89475.080	2.5
462.7383	14.00	-1.52	40991.884	1.0	62596.320	2.0
462.7414	24.00	-4.92	36558.550	2.0	58162.840	2.0
462.7423	27.00	-1.39	32654.500	2.5	54258.750	2.5
462.7480	42.00	-.70	18228.600	0.0	39838.634	0.0
462.7483	23.01	-1.01	30641.710	3.0	52245.680	2.0
462.7537	26.00	-3.47	26627.612	4.0	48231.330	5.0
462.7592	24.01	-4.69	45730.740	2.5	67334.200	3.5
462.7607	18.01	-2.83	181594.050	2.5	203197.440	3.5
462.7637	24.00	-3.17	41043.350	3.0	62646.600	2.0
462.7695	28.01	-2.65	109148.050	4.5	130751.030	5.5
462.7720	40.00	-1.25	11856.655	0.0	33465.568	0.0
462.7738	23.00	-4.84	15571.900	2.5	37174.680	3.5
462.7802	28.01	-2.03	99559.330	2.5	121161.610	1.5
462.7834	25.00	-3.61	37737.220	3.5	59339.550	3.5
462.7858	26.01	-6.95	25787.600	1.5	47389.820	1.5
462.7871	24.00	-4.42	35618.510	1.0	57220.670	2.0
462.7924	10.01	-3.08	302839.280	2.5	324441.190	2.5
462.7941	26.02	-2.96	201164.210	2.0	222766.040	3.0
462.7950	10.01	-1.77	302839.280	2.5	324441.070	3.5
462.7980	60.00	-.60	2339.068	0.0	23946.767	0.0
462.8048	21.00	-1.93	11677.310	4.5	33278.640	3.5
462.8160	58.01	-.14	4113.534	0.0	25720.393	0.0
462.8203	22.00	-2.26	18061.540	1.0	39662.150	1.0
462.8330	56.00	-1.24	9215.000	0.0	30821.065	0.0
462.8351	25.02	-2.59	195112.810	3.5	216712.730	2.5
462.8400	26.02	-3.88	201166.350	3.0	222766.040	3.0
462.8415	26.02	-2.81	201166.350	3.0	222765.970	4.0
462.8437	18.00	-2.50	95399.870	1.0	116999.389	2.0
462.8460	26.02	-3.16	204907.130	1.0	226506.540	1.0
462.8462	24.01	-4.69	67875.680	3.5	89475.080	2.5
462.8471	24.00	-1.54	25359.620	4.0	46958.980	5.0
462.8492	22.00	-1.00	25438.898	2.0	47038.160	3.0
462.8524	24.00	-4.75	31364.330	3.0	52963.440	4.0
462.8573	26.02	-3.40	201178.010	1.0	222776.890	1.0
462.8576	27.00	-2.65	24326.110	3.5	45924.980	3.5
462.8715	22.01	-4.02	40581.800	2.5	62180.020	1.5
462.8750	59.01	-1.65	403.288	0.0	22007.393	0.0
462.8760	15.01	-.15	106001.990	1.0	127600.000	1.0
462.8803	26.01	-2.00	63273.030	2.5	84870.840	2.5
462.8867	27.00	-.68	30443.630	1.5	52041.140	.5
462.8918	27.00	-4.38	4142.660	3.5	25739.930	2.5
462.9070	40.01	-.12	19922.407	0.0	41525.018	0.0
462.9111	21.00	-2.80	11557.640	2.5	33154.010	2.5
462.9128	23.01	-3.56	51085.770	3.0	72682.060	2.0
462.9146	26.02	-3.70	201178.010	1.0	222774.220	2.0
462.9159	7.00	-3.11	94770.850	.5	116367.000	.5
462.9159	7.00	-2.02	94770.850	.5	116367.000	1.5
462.9276	17.01	-2.36	153257.000	2.0	174852.600	3.0
462.9285	22.01	-3.51	9518.050	2.5	31113.610	3.5
462.9321	25.00	-4.94	30419.610	2.5	52015.000	1.5
462.9321	22.00	-.22	13981.750	1.0	35577.140	2.0
462.9336	26.01	-2.50	22637.190	4.5	44232.510	4.5
462.9358	27.00	-.16	24627.790	4.5	46223.010	4.5
462.9430	62.00	-1.09	3952.218	0.0	25553.149	0.0
462.9482	20.02	-1.49	322663.280	0.0	344257.920	1.0
462.9540	27.00	-2.04	33674.380	2.5	55268.750	3.5
462.9604	26.02	-4.01	201164.210	2.0	222758.280	2.0
462.9683	13.01	-2.00	121365.200	0.0	142958.900	1.0
462.9791	17.02	-3.87	217913.100	1.5	239506.300	1.5
462.9892	26.01	-4.91	44929.590	2.5	66522.320	2.5
462.9911	24.00	-3.34	27728.870	2.0	49321.510	2.0
462.9971	28.00	-1.97	32982.280	1.0	54574.640	1.0
463.0018	26.01	-4.31	64087.500	2.5	85679.640	2.5
463.0020	42.00	-1.02	18147.942	0.0	39746.121	0.0
463.0044	23.00	-4.79	9636.960	1.5	31228.980	2.5
463.0110	41.00	-.04	11453.368	0.0	33051.127	0.0
463.0125	26.00	-2.40	18378.187	2.0	39969.830	3.0
463.0143	28.01	-2.84	93528.440	3.5	115120.000	2.5
463.0168	23.00	-3.60	11100.650	4.5	32692.090	3.5
463.0181	22.00	-3.49	25438.898	2.0	47030.280	3.0
463.0210	62.01	-2.16	806.575	0.0	22403.868	0.0
463.0213	23.00	-3.06	15770.720	4.5	37361.950	4.5
463.0401	22.00	-2.38	21739.713	5.0	43330.070	5.0
463.0443	24.00	-2.02	36577.730	4.0	58167.890	4.0
463.0557	27.00	-1.42	30443.630	1.5	52033.260	1.5
463.0610	72.00	-.57	19196.490	0.0	40791.917	0.0
463.0632	23.00	-1.93	14949.300	4.5	36538.580	4.5
463.0670	28.01	-2.71	115000.250	3.5	136589.350	3.5
463.0692	24.01	-3.96	67334.200	3.5	88923.200	2.5
463.0726	28.01	-4.55	114942.420	1.5	136531.260	1.5
463.0765	26.00	-2.56	31805.059	3.0	53393.715	4.0
463.0777	24.00	-4.64	24833.860	3.0	46422.460	4.0
463.0795	21.00	-2.89	17012.980	2.5	38601.500	1.5
463.0797	23.01	-4.34	51085.770	3.0	72674.280	2.0
463.0820	75.00	-1.26	16212.162	0.0	37806.610	0.0
463.0843	22.00	-4.17	20126.055	3.0	41714.350	2.0
463.0878	12.01	-2.44	93310.590	2.5	114898.720	1.5
463.0928	23.03	-3.60	263111.400	4.0	284699.300	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
463.0981	28.01	-1.27	99559.330	2.5	121146.980	2.5
463.0990	12.01	-3.40	93311.110	1.5	114898.720	1.5
463.0994	9.02	-.80	444957.110	1.5	466544.700	1.5
463.1017	28.00	-1.78	33112.368	3.0	54699.852	3.0
463.1020	26.00	-3.52	33095.922	4.0	54683.390	4.0
463.1090	26.00	-4.51	26224.961	3.0	47812.104	4.0
463.1146	27.00	-2.73	25937.590	4.5	47524.470	4.5
463.1241	24.00	-3.58	35501.260	3.0	57067.700	2.0
463.1273	14.03	-.58	293718.990	3.5	315305.280	3.5
463.1273	14.03	.96	293718.990	3.5	315305.280	4.5
463.1273	14.03	.85	293718.990	2.5	315305.280	3.5
463.1286	25.02	-3.32	194971.150	2.5	216557.380	3.5
463.1331	26.02	-3.16	201164.210	2.0	222750.230	3.0
463.1404	25.01	-3.73	79913.350	4.0	101499.030	4.0
463.1404	12.01	-2.70	93311.110	1.5	114896.790	.5
463.1447	24.00	-3.35	31377.960	4.0	52963.440	4.0
463.1477	26.00	-2.45	36686.159	4.0	58271.500	5.0
463.1537	23.02	-2.75	140750.820	2.5	162335.880	3.5
463.1606	24.00	-.82	41086.260	3.0	62671.000	4.0
463.1620	92.00	-1.00	0.000	0.0	21590.718	0.0
463.1717	26.01	-2.68	64832.000	4.5	86416.220	3.5
463.1736	23.01	-4.59	13609.000	4.0	35193.130	5.0
463.1760	90.01	-1.20	10082.190	0.0	31672.255	0.0
463.1790	26.02	-2.71	201166.350	3.0	222750.230	3.0
463.1797	29.01	-4.24	117747.450	3.0	139331.300	3.0
463.1797	9.01	-.27	266498.740	1.0	288082.590	1.0
463.1830	76.00	-.71	15082.956	0.0	36672.695	0.0
463.1893	8.03	-.52	554001.600	4.5	575585.000	4.5
463.1893	8.03	1.21	554001.600	4.5	575585.000	5.5
463.1893	8.03	1.12	554001.600	3.5	575585.000	4.5
463.1900	26.01	-2.56	63465.190	1.5	85048.560	1.5
463.2054	22.00	-3.21	11531.760	2.0	33114.412	2.0
463.2065	13.01	-4.63	125706.200	1.0	147288.800	0.0
463.2091	22.00	-.99	12118.394	4.0	33700.874	4.0
463.2129	24.00	-.56	28682.180	2.0	50264.480	3.0
463.2129	13.01	-2.29	125700.500	0.0	147282.800	1.0
463.2150	26.00	-3.75	28604.610	2.0	50186.814	2.0
463.2215	24.00	-2.58	25106.340	3.0	46688.240	3.0
463.2537	12.02	-.24	559987.100	1.0	581567.500	0.0
463.2537	12.02	-.24	559987.100	1.0	581567.500	0.0
463.2565	26.02	-3.51	201178.010	1.0	222758.280	2.0
463.2591	7.00	-3.42	94770.850	.5	116351.000	.5
463.2591	7.00	-2.90	94770.850	.5	116351.000	1.5
463.2640	60.01	-2.41	1613.150	0.0	23199.114	0.0
463.2672	25.00	-2.81	35725.850	2.5	57305.620	3.5
463.2698	28.01	-2.07	93528.440	3.5	115108.090	2.5
463.2698	25.00	-4.37	33825.490	2.5	55405.140	2.5
463.2784	28.01	-4.53	115956.710	2.5	137535.960	3.5
463.2852	26.00	-3.78	26351.049	5.0	47929.981	4.0
463.2855	20.02	-.42	343784.960	1.0	365363.880	1.0
463.2885	24.01	-4.88	67344.420	2.5	88923.200	2.5
463.2915	26.00	-2.83	12968.552	2.0	34547.192	2.0
463.2954	29.01	-4.88	123304.630	1.0	144883.090	2.0
463.3021	26.00	-4.40	19552.474	1.0	41130.620	1.0
463.3043	28.00	-3.99	30619.440	2.0	52197.482	3.0
463.3051	26.00	-5.96	8154.713	1.0	29732.721	1.0
463.3060	73.00	-1.94	9920.875	0.0	31504.882	0.0
463.3069	10.01	-2.21	327774.480	4.5	349352.400	4.5
463.3100	42.00	.08	28149.475	0.0	49733.296	0.0
463.3113	26.00	-4.50	24335.764	2.0	45913.480	3.0
463.3138	29.01	-4.30	118163.500	2.0	139741.100	3.0
463.3204	10.01	-.57	327775.110	3.5	349352.400	4.5
463.3205	26.00	-4.84	33801.555	2.0	55378.842	2.0
463.3258	24.00	-1.13	25206.020	3.0	46783.060	4.0
463.3353	13.01	-2.42	125706.200	1.0	147282.800	1.0
463.3353	13.01	-1.94	125706.200	1.0	147282.800	2.0
463.3370	26.01	-4.22	62689.960	2.5	84266.480	2.5
463.3370	26.02	-2.06	179630.770	4.0	201207.290	4.0
463.3394	23.00	-3.29	20828.480	2.5	42404.890	3.5
463.3490	25.01	-4.62	79913.350	4.0	101489.310	5.0
463.3535	22.00	-3.83	17540.205	3.0	39115.958	4.0
463.3546	24.00	-2.01	41086.260	3.0	62661.960	3.0
463.3600	58.01	-1.47	7017.204	0.0	28598.696	0.0
463.3608	10.01	-2.00	301948.000	1.5	323523.410	2.5
463.3711	26.00	-2.37	29798.960	4.0	51373.894	5.0
463.3744	28.01	-4.96	114942.420	1.5	136517.200	.5
463.3752	27.00	-4.51	33945.900	2.5	55520.640	3.5
463.3758	26.00	-2.54	24338.766	3.0	45913.480	3.0
463.3782	19.02	-.77	225051.000	2.5	246625.600	1.5
463.3791	26.00	-2.97	33801.555	2.0	55376.117	1.0
463.3890	23.03	-3.56	264482.800	2.0	286056.900	3.0
463.3939	24.00	-1.83	28637.000	3.0	50210.870	4.0
463.3976	17.01	-3.27	126032.000	2.0	147605.700	3.0
463.3980	40.00	-1.17	564.603	0.0	22144.325	0.0
463.4010	7.00	-3.73	94793.460	1.5	116367.000	.5
463.4010	7.00	-2.52	94793.460	1.5	116367.000	1.5
463.4010	7.00	-1.93	94793.460	1.5	116367.000	2.5
463.4017	23.00	-7.91	9824.580	2.5	31398.090	2.5
463.4092	24.01	-1.25	32844.920	1.5	54418.080	.5
463.4169	7.02	-.07	245665.700	.5	267238.500	1.5
463.4225	23.01	-1.76	30673.140	2.0	52245.680	2.0
463.4240	60.00	-.20	0.000	0.0	21576.511	0.0
463.4362	20.02	-2.33	326186.320	3.0	347758.220	2.0
463.4597	26.01	-5.37	20830.520	2.5	42401.330	1.5
463.4601	25.00	-1.54	37789.930	2.5	59360.720	2.5
463.4616	24.00	-1.58	25106.340	3.0	46677.060	2.0
463.4640	40.00	-2.04	5484.711	0.0	27061.360	0.0
463.4734	24.01	-4.47	30219.040	4.5	51789.210	3.5
463.4747	25.00	-2.82	45060.810	3.5	66630.920	4.5
463.4762	24.00	-4.08	31393.400	5.0	52963.440	4.0
463.4763	22.00	-.15	18145.400	2.0	39715.437	3.0
463.4766	28.01	-4.47	115956.710	2.5	137526.730	2.5
463.4766	10.01	-.42	281332.550	.5	302902.570	1.5
463.4770	76.00	-.42	23148.708	0.0	44724.752	0.0
463.4810	74.00	-1.13	16292.819	0.0	37868.676	0.0
463.4902	23.01	-3.16	32299.240	1.0	53868.630	2.0
463.5063	29.01	-4.93	116080.460	3.0	137649.100	2.0
463.5102	28.01	-2.31	108763.320	.5	130331.780	1.5
463.5117	28.01	-4.52	112686.300	2.5	134254.690	1.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
463.5168	23.00	-2.02	553.020	4.5	22121.170	4.5
463.5205	26.02	-3.14	201166.350	3.0	222734.330	4.0
463.5233	9.02	-4.14	444623.120	3.5	466190.970	3.5
463.5310	29.01	-2.69	116371.410	4.0	137938.900	4.0
463.5327	26.01	-1.64	48039.230	2.5	69606.640	3.5
463.5381	10.01	-1.49	292451.780	1.5	314018.940	.5
463.5415	10.03	-4.26	511411.000	2.5	532978.000	1.5
463.5512	28.01	-4.31	112686.300	2.5	134252.850	3.5
463.5542	28.01	-2.44	100609.010	2.5	122175.420	2.5
463.5555	22.00	-1.59	18818.230	0.0	40384.580	1.0
463.5557	26.00	-2.89	29798.960	4.0	51365.300	3.0
463.5583	24.01	-4.17	67070.480	1.5	88636.700	1.5
463.5596	9.01	-.35	266516.430	0.0	288082.590	1.0
463.5609	27.01	-4.91	24886.500	2.0	46452.600	2.0
463.5622	26.00	-3.73	23110.925	3.0	44676.963	4.0
463.5690	44.00	-1.05	9517.587	0.0	31089.349	0.0
463.5729	7.00	-1.93	94793.460	1.5	116359.000	2.5
463.5824	17.02	-2.68	194959.500	2.5	216524.600	2.5
463.5849	26.00	-2.51	22946.810	1.0	44511.795	2.0
463.5947	22.00	-1.26	26494.322	2.0	48058.850	1.0
463.5968	10.00	-3.66	150917.431	0.0	172481.860	1.0
463.6086	23.00	-3.57	19023.470	4.5	40587.350	3.5
463.6104	13.01	-3.59	125719.000	2.0	147282.800	1.0
463.6104	13.01	-2.42	125719.000	2.0	147282.800	2.0
463.6104	13.01	-1.67	125719.000	2.0	147282.800	3.0
463.6147	17.01	-3.87	153257.000	2.0	174820.600	2.0
463.6166	23.01	-5.82	25191.080	2.0	46754.590	1.0
463.6215	26.02	-2.71	204943.260	2.0	226506.540	1.0
463.6229	22.00	-3.47	15975.590	3.0	37538.804	2.0
463.6241	23.00	-5.35	9636.960	1.5	31200.120	1.5
463.6288	22.01	-2.98	9395.760	1.5	30958.700	2.5
463.6351	28.01	-3.52	99340.550	3.5	120903.200	3.5
463.6430	57.01	-.69	18793.202	0.0	40361.521	0.0
463.6547	22.00	-1.95	12118.394	4.0	33680.130	3.0
463.6640	64.00	.09	6452.602	0.0	28019.944	0.0
463.6648	26.00	-3.14	24574.655	4.0	46135.920	5.0
463.6690	28.01	-4.61	114970.190	.5	136531.260	1.5
463.6703	23.00	-2.27	19026.340	2.5	40587.350	3.5
463.6740	25.02	-2.83	194971.150	2.5	216531.990	1.5
463.6740	58.01	-1.55	5726.684	0.0	27293.561	0.0
463.6746	23.00	-3.26	15724.220	3.5	37285.030	4.5
463.6847	24.00	-1.40	41086.260	3.0	62646.600	2.0
463.6914	22.00	-4.70	27355.042	1.0	48915.070	2.0
463.6995	22.00	-4.51	21588.496	4.0	43148.150	3.0
463.6996	24.00	-3.75	35572.940	2.0	57132.590	1.0
463.7090	7.00	-2.53	94881.790	3.5	116441.000	2.5
463.7110	26.02	-4.85	117950.320	4.0	139509.440	5.0
463.7159	24.00	-1.13	20520.920	3.0	42079.810	4.0
463.7185	24.00	-2.44	24056.110	5.0	45614.880	4.0
463.7193	22.00	-5.10	11531.760	2.0	33090.492	1.0
463.7200	60.00	-1.13	0.000	0.0	21564.737	0.0
463.7202	22.00	-3.63	18825.890	1.0	40384.580	1.0
463.7204	26.02	-4.09	201207.290	4.0	222765.970	4.0
463.7228	18.01	-.82	148842.370	2.5	170400.940	2.5
463.7400	25.02	-3.29	195112.810	3.5	216670.580	4.5
463.7411	25.01	-4.25	81147.650	2.0	102705.370	3.0
463.7449	7.00	-3.42	94793.460	1.5	116351.000	.5
463.7449	7.00	-2.32	94793.460	1.5	116351.000	1.5
463.7465	28.01	-3.17	113407.310	2.5	134964.780	1.5
463.7501	26.00	-1.58	26479.366	1.0	48036.667	2.0
463.7515	22.00	-3.27	16267.510	5.0	37824.748	4.0
463.7533	18.01	-4.08	181594.050	2.5	203151.200	2.5
463.7630	6.01	-1.34	162517.890	.5	184074.590	1.5
463.7692	22.00	-2.31	27480.047	3.0	49036.460	4.0
463.7716	28.01	-2.87	98276.700	4.5	119833.000	5.5
463.7734	28.01	-4.80	114836.630	3.5	136392.850	3.5
463.7755	24.00	-.83	20523.690	4.0	42079.810	4.0
463.7759	26.02	-4.75	93392.450	3.0	114948.550	3.0
463.7766	28.01	-3.25	113408.710	1.5	134964.780	1.5
463.7766	23.00	-2.88	17054.870	2.5	38610.940	3.5
463.7800	3.01	-1.34	561276.000	0.0	582837.947	0.0
463.7809	24.00	-1.77	20523.940	5.0	42079.810	4.0
463.7814	22.00	-.82	26772.965	5.0	48328.810	4.0
463.7871	22.00	-.46	18911.399	2.0	40466.979	2.0
463.7876	28.00	-2.48	33112.368	3.0	54667.928	4.0
463.7998	26.00	-4.91	29056.312	3.0	50611.303	3.0
463.8048	25.02	-2.51	194849.100	1.5	216403.860	2.5
463.8100	41.00	-.91	11130.738	0.0	32691.291	0.0
463.8166	7.00	-3.92	94881.790	3.5	116436.000	2.5
463.8194	24.01	-4.50	66872.120	.5	88426.200	.5
463.8244	22.00	-3.24	16106.080	4.0	37659.927	3.0
463.8380	14.00	-4.01	40991.884	1.0	62545.100	1.0
463.8424	25.00	-2.26	37737.220	3.5	59290.230	3.5
463.8507	28.00	-4.81	22102.349	4.0	43654.974	3.0
463.8676	28.01	-4.46	112719.750	3.5	134271.590	4.5
463.8758	22.00	-.95	26657.409	4.0	48208.870	3.0
463.8770	22.00	-.70	26910.705	6.0	48462.110	5.0
463.8775	27.01	-4.91	63616.000	2.0	85167.380	3.0
463.8810	23.00	-5.31	14910.040	3.5	36461.260	2.5
463.8810	23.00	-2.65	14910.040	3.5	36461.260	3.5
463.8857	17.02	-2.52	179781.000	.5	201332.000	1.5
463.8860	22.00	-.58	25643.695	3.0	47194.680	4.0
463.8861	8.01	-.29	185235.360	.5	206786.340	1.5
463.8881	28.01	-4.84	100010.170	.5	121561.060	.5
463.8889	24.00	-2.30	33423.790	1.0	54974.640	2.0
463.8917	24.01	-4.39	42898.120	2.5	64448.840	2.5
463.8919	6.01	-1.09	162524.570	1.5	184075.280	2.5
463.8928	26.01	-4.36	78137.530	3.5	99688.200	3.5
463.8939	10.01	-4.38	302890.570	2.5	324441.190	2.5
463.8965	10.01	-3.08	302890.570	2.5	324441.070	3.5
463.8971	27.00	-3.26	24326.110	3.5	45876.580	2.5
463.9000	64.01	-1.05	8469.040	0.0	30025.410	0.0
463.9068	6.01	-2.04	162524.570	1.5	184074.590	1.5
463.9094	27.00	-4.53	33439.720	4.5	54989.620	3.5
463.9094	25.01	-.79	86897.700	3.0	108447.600	2.0
463.9140	60.00	-.84	1048.548	0.0	22604.267	0.0
463.9145	27.00	-3.43	32733.070	3.5	54282.730	2.5
463.9154	25.00	-4.24	37789.930	2.5	59339.550	3.5
463.9214	28.01	-2.81	76727.360	5.5	98276.700	4.5
463.9277	23.00	-1.71	20812.990	1.5	42362.040	.5
463.9309	23.01	-4.48	25191.080	2.0	46739.980	2.0
463.9324	9.02	-3.76	443865.310	1.5	465414.140	2.5
463.9331	13.01	-.77	123415.900	2.0	144964.700	3.0
463.9358	22.00	-.01	14028.470	2.0	35577.140	2.0
463.9501	24.00	-.92	25089.200	2.0	46637.210	3.0
463.9561	28.01	-2.86	70778.120	3.5	92325.850	3.5
463.9636	22.00	-3.87	25102.880	2.0	46650.260	3.0
463.9640	26.00	-3.47	37162.729	3.0	58710.090	3.0
463.9653	29.01	-3.11	115665.400	1.0	137212.700	1.0
463.9660	22.00	-.11	14105.680	3.0	35652.950	3.0
463.9697	24.00	-.80	28637.000	3.0	50184.100	2.0
463.9710	90.01	-1.27	12340.601	0.0	33893.672	0.0
463.9716	28.01	-4.92	114970.190	.5	136517.200	.5
463.9783	29.01	-4.13	118163.500	2.0	139710.200	2.0
463.9783	13.01	-1.83	123418.000	3.0	144964.700	3.0
463.9783	13.01	-.86	123418.000	3.0	144964.700	4.0
463.9783	13.01	-1.09	123418.000	3.0	144964.700	4.0
463.9813	28.01	-4.59	94729.250	2.5	116275.810	3.5
463.9931	22.00	-.12	13981.750	1.0	35527.760	1.0
463.9974	26.02	-3.02	179661.480	3.0	201207.290	4.0
463.9981	26.02	-5.00	183456.690	3.0	205002.470	3.0
464.0050	9.02	-1.71	443868.680	2.5	465414.140	2.5
464.0069	23.00	-1.64	8476.200	1.5	30021.570	.5
464.0080	26.02	-4.47	183457.150	4.0	205002.470	3.0
464.0088	21.00	-3.52	17025.360	1.5	38570.640	.5
464.0125	23.00	-3.24	15770.720	4.5	37315.830	5.5
464.0130	40.00	-.43	14679.669	0.0	36230.789	0.0
464.0192	9.00	-3.81	115917.909	2.5	137462.710	1.5
464.0270	22.00	-1.33	25493.722	2.0	47038.160	3.0
464.0282	22.00	-1.90	27480.047	3.0	49024.430	3.0
464.0282	23.00	-.85	15270.420	1.5	36814.800	1.5
464.0304	20.02	-2.04	341349.190	1.0	362893.470	2.0
464.0386	13.01	-3.63	123420.800	4.0	144964.700	3.0
464.0386	13.01	-2.07	123420.800	4.0	144964.700	4.0
464.0386	13.01	-2.21	123420.800	4.0	144964.700	4.0
464.0386	13.01	-.54	123420.800	4.0	144964.700	5.0
464.0392	22.00	-.94	18825.890	1.0	40369.760	0.0
464.0414	21.00	-2.30	11610.240	3.5	33154.010	2.5
464.0451	19.02	-2.05	225082.000	1.5	246625.600	1.5
464.0519	24.01	-3.41	67379.920	1.5	88923.200	2.5
464.0536	25.02	-3.79	174048.890	2.5	195592.090	1.5
464.0543	25.00	-4.75	33825.490	2.5	55368.660	1.5
464.0547	24.00	-3.74	25177.390	4.0	46720.540	4.0
464.0572	22.00	-1.11	26564.385	3.0	48107.420	2.0
464.0592	26.02	-3.65	201207.290	4.0	222750.230	3.0
464.0613	22.00	-2.80	25107.417	2.0	46650.260	3.0
464.0644	7.02	.19	245701.700	1.5	267244.400	2.5
464.0664	24.00	-1.89	31049.330	6.0	52591.940	5.0
464.0726	28.01	-4.25	112719.750	3.5	134262.070	3.5
464.0739	23.00	-1.74	8578.520	2.5	30120.780	2.5
464.0823	27.00	-4.56	4690.180	2.5	26232.050	3.5
464.0825	24.00	-2.03	37233.500	5.0	58775.360	6.0
464.0883	26.00	-3.69	24772.019	1.0	46313.610	2.0
464.0888	25.02	-3.76	173920.690	1.5	195462.260	.5
464.0976	21.00	-4.44	11610.240	3.5	33151.400	4.5
464.0978	7.00	-3.74	94770.850	.5	116312.000	.5
464.0978	7.00	-4.05	94770.850	.5	116312.000	1.5
464.1064	26.02	-3.83	204907.130	1.0	226447.880	2.0
464.1075	22.00	-2.24	18145.400	2.0	39686.100	2.0
464.1290	26.00	-1.94	26623.726	2.0	48163.427	2.0
464.1301	25.00	-3.06	23719.520	1.5	45259.170	1.5
464.1316	23.01	-3.07	30613.970	4.0	52153.550	5.0
464.1534	9.02	-1.77	445006.130	2.5	466544.700	1.5
464.1560	28.00	-2.70	27414.893	2.0	48953.344	1.0
464.1633	9.00	-3.67	115917.909	2.5	137456.020	3.5
464.1660	92.01	-1.40	8307.725	0.0	29851.742	0.0
464.1713	23.00	-3.26	15000.840	5.5	36538.580	4.5
464.1765	26.02	-3.11	201207.290	4.0	222744.790	5.0
464.1773	24.00	-1.21	33671.550	3.0	55209.010	4.0
464.1800	74.00	-2.79	4758.794	0.0	26302.161	0.0
464.1825	8.01	.10	185340.680	1.5	206877.900	2.5
464.1830	76.00	-2.21	8630.355	0.0	30173.583	0.0
464.1915	7.02	-.77	245701.700	1.5	267238.500	1.5
464.1961	24.00	-.59	31055.350	5.0	52591.940	5.0
464.1968	22.00	-3.86	25493.722	2.0	47030.280	3.0
464.2023	28.01	-4.46	112719.750	3.5	134256.050	2.5
464.2058	7.00	-3.85	94830.860	2.5	116367.000	1.5
464.2058	7.00	-2.85	94830.860	2.5	116367.000	2.5
464.2058	7.00	-1.59	94830.860	2.5	116367.000	3.5
464.2071	24.00	-4.15	35618.510	1.0	57154.590	0.0
464.2092	28.01	-4.02	100609.010	2.5	122144.990	2.5
464.2109	24.01	-4.38	67387.300	2.5	88923.200	2.5
464.2163	25.00	-2.60	35769.970	3.5	57305.620	3.5
464.2178	26.02	-2.03	179630.770	4.0	201166.350	3.0
464.2232	6.00	-2.97	64089.850	1.0	85625.180	0.0
464.2240	62.01	-1.12	2984.328	0.0	24525.653	0.0
464.2273	23.00	-3.96	20828.480	2.5	42363.620	3.5
464.2413	24.00	-2.67	24833.860	3.0	46368.350	3.0
464.2463	26.02	-4.16	179759.490	2.0	201293.750	2.0
464.2482	28.01	-4.57	79823.030	3.5	101357.200	4.5
464.2487	7.00	-3.52	94770.850	.5	116305.000	.5
464.2487	7.00	-5.00	94770.850	.5	116305.000	1.5
464.2560	74.00	-1.24	13711.778	0.0	35251.618	0.0
464.2574	26.00	-3.76	27394.676	3.0	48926.423	2.0
464.2580	29.00	-.81	43716.376	0.0	65256.123	0.0
464.2642	9.00	-1.66	115917.909	2.5	137451.340	2.5
464.2648	25.01	-2.58	72648.800	4.0	94182.200	3.0
464.2683	24.00	-2.39	33671.550	3.0	55204.790	3.0
464.2700	42.00	-.31	25487.776	0.0	47026.967	0.0
464.2728	26.02	-3.71	179760.720	3.0	201293.750	2.0
464.2789	27.00	-1.64	29735.180	3.5	51267.930	4.5
464.2795	25.00	-1.47	38120.180	4.5	59652.900	5.5
464.2877	24.00	-2.65	35501.260	3.0	57033.600	4.0
464.2939	9.00	-1.96	115917.909	2.5	137449.960	1.5
464.2985	23.00	-1.71	20830.200	.5	42362.040	.5
464.3086	7.01	-.28	149076.520	2.0	170607.890	1.0
464.3120	69.00	-1.03	8711.012	0.0	30248.254	0.0
464.3150	74.00	-.81	20890.298	0.0	42427.401	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
464.3180	45.00	-1.14	16857.422	0.0	38394.386	0.0
464.3195	26.00	-4.55	11976.239	4.0	33507.102	3.0
464.3259	25.00	-2.59	37586.030	1.5	59116.600	2.5
464.3259	18.01	-4.62	185093.230	4.5	206623.800	3.5
464.3310	41.00	-2.43	2097.096	0.0	23633.457	0.0
464.3451	26.00	-4.84	29469.010	2.0	50998.686	2.0
464.3511	24.01	-3.88	67393.800	3.5	88923.200	2.5
464.3535	23.00	-1.94	20789.130	2.5	42318.420	1.5
464.3662	17.01	-2.28	153257.000	2.0	174785.700	1.0
464.3680	41.00	-.94	10969.423	0.0	32504.068	0.0
464.3700	39.00	-.91	0.000	0.0	21534.552	0.0
464.3705	13.01	-2.61	125700.500	0.0	147229.000	1.0
464.3712	25.02	-3.47	194894.780	1.5	216423.250	.5
464.3735	27.00	-1.80	27497.060	2.5	49025.420	1.5
464.3783	7.00	-2.07	94830.860	2.5	116359.000	2.5
464.3783	7.00	-3.96	94830.860	2.5	116359.000	3.5
464.3787	24.00	-1.83	27649.710	4.0	49177.830	3.0
464.3862	14.00	-2.80	40991.884	1.0	62519.660	2.0
464.3873	24.00	-4.19	35572.940	2.0	57100.660	2.0
464.3901	24.00	-2.42	25177.390	4.0	46704.980	5.0
464.3964	23.03	.28	266600.300	5.0	288127.600	4.0
464.4020	26.02	-2.92	201207.290	4.0	222734.330	4.0
464.4089	26.01	-6.19	21711.890	3.5	43238.610	2.5
464.4145	22.01	-3.67	43780.990	4.5	65307.450	4.5
464.4200	58.01	-1.02	8227.067	0.0	29759.301	0.0
464.4288	29.01	-3.60	116388.000	2.0	137913.800	1.0
464.4314	27.00	-.79	32733.070	3.5	54258.750	2.5
464.4362	22.00	-4.17	27498.975	3.0	49024.430	3.0
464.4365	27.00	-3.13	32841.990	4.5	54367.430	5.5
464.4411	25.00	-4.75	44978.980	1.5	66504.210	1.5
464.4431	9.00	-1.94	115917.909	2.5	137443.040	2.5
464.4436	28.01	-1.22	94067.140	1.5	115592.250	1.5
464.4480	24.00	-4.66	24897.550	4.0	46422.460	4.0
464.4711	25.01	-4.24	84643.860	6.0	106167.700	7.0
464.4781	28.00	-3.46	29013.228	2.0	50536.742	1.0
464.4830	40.00	.04	14599.011	0.0	36128.324	0.0
464.4935	13.01	-2.13	125706.200	1.0	147229.000	1.0
464.4946	27.00	-3.88	33466.870	3.5	54989.620	3.5
464.5019	24.00	-3.60	37205.880	3.0	58728.290	4.0
464.5090	44.00	.31	19922.407	0.0	41450.515	0.0
464.5108	28.01	-3.36	112686.300	2.5	134208.300	2.5
464.5129	28.01	-.84	91800.050	4.5	113321.950	4.5
464.5142	27.00	-2.31	30742.650	.5	52264.490	1.5
464.5149	27.00	-5.09	5075.830	1.5	26597.640	1.5
464.5164	24.00	-1.87	35813.730	3.0	57335.470	4.0
464.5183	22.00	-.47	13981.750	1.0	35503.400	0.0
464.5207	24.00	-3.10	31393.400	5.0	52914.940	6.0
464.5280	57.01	-2.43	967.890	0.0	22495.118	0.0
464.5302	23.00	-3.20	21032.520	3.5	42553.620	4.5
464.5306	24.00	-1.71	37233.500	5.0	58754.580	5.0
464.5400	62.00	-.55	241.973	0.0	21768.645	0.0
464.5418	9.00	-1.43	115917.909	2.5	137438.470	3.5
464.5492	25.00	-2.92	37737.220	3.5	59257.440	4.5
464.5509	7.00	-4.35	94830.860	2.5	116351.000	1.5
464.5583	25.02	-3.81	115762.600	1.5	137282.400	2.5
464.5749	28.01	-1.37	115000.250	3.5	136519.280	4.5
464.5854	7.00	-3.74	94793.460	1.5	116312.000	.5
464.5854	7.00	-3.24	94793.460	1.5	116312.000	1.5
464.5854	7.00	-4.45	94793.460	1.5	116312.000	2.5
464.5885	8.01	-3.94	254590.700	4.5	276109.100	5.5
464.5965	23.00	-3.53	323.420	3.5	21841.450	2.5
464.6000	64.00	.34	11775.998	0.0	33299.890	0.0
464.6060	59.01	-1.79	1693.808	0.0	23217.422	0.0
464.6124	20.02	-2.26	341601.460	2.0	363118.750	3.0
464.6148	24.00	-.66	8307.570	4.0	29824.750	3.0
464.6150	74.00	-1.02	19115.832	0.0	40639.029	0.0
464.6239	24.00	-1.58	33934.880	3.0	55451.640	3.0
464.6241	22.00	-2.80	18145.400	2.0	39662.150	1.0
464.6340	57.00	-.40	9840.217	0.0	31362.533	0.0
464.6403	23.00	-1.28	8578.520	2.5	30094.520	1.5
464.6405	24.00	-1.70	33935.650	2.0	55451.640	3.0
464.6451	28.01	-4.07	97799.660	1.5	119315.440	2.5
464.6481	24.00	-2.21	24833.860	3.0	46349.500	2.0
464.6600	92.01	-1.76	887.233	0.0	22408.345	0.0
464.6651	27.00	-3.60	21780.470	5.5	43295.320	4.5
464.6680	62.01	-1.70	2177.753	0.0	23698.495	0.0
464.6736	27.00	-3.29	32841.990	4.5	54356.450	4.5
464.6768	23.00	-3.66	15770.720	4.5	37285.030	4.5
464.6787	25.01	-3.58	59537.400	4.0	81051.620	3.0
464.6792	24.00	-.82	25010.640	1.0	46524.640	2.0
464.6813	10.01	-3.70	283894.410	.5	305408.510	.5
464.6848	26.01	-3.31	63948.840	4.5	85462.780	3.5
464.6910	28.00	-3.58	29320.782	3.0	50834.435	2.0
464.6950	41.00	-.14	18728.600	0.0	39748.091	0.0
464.6977	22.00	-3.20	19573.968	4.0	41087.310	3.0
464.7000	6.03	.92	449887.000	0.0	471406.260	0.0
464.7092	24.01	-4.91	30156.940	3.5	51669.750	2.5
464.7124	29.01	-4.03	117883.140	4.0	139395.600	4.0
464.7276	23.00	-3.75	14949.300	4.5	36461.260	3.5
464.7299	25.02	-4.41	174436.590	2.5	195948.440	3.5
464.7367	7.00	-3.52	94793.460	1.5	116305.000	.5
464.7367	7.00	-4.20	94793.460	1.5	116305.000	1.5
464.7380	58.01	-1.57	5646.026	0.0	27163.526	0.0
464.7397	22.03	-.52	278501.100	4.5	300012.500	4.5
464.7397	22.03	1.21	278501.100	4.5	300012.500	5.5
464.7397	22.03	1.13	278501.100	3.5	300012.500	4.5
464.7400	6.02	.10	238212.000	0.0	259729.408	0.0
464.7428	28.00	-1.98	29320.782	3.0	50832.039	3.0
464.7437	26.00	-1.17	23783.617	5.0	45294.830	5.0
464.7510	57.01	-.85	15566.901	0.0	37083.799	0.0
464.7515	24.00	-2.13	25177.390	4.0	46688.240	3.0
464.7526	25.01	-.94	86936.800	2.0	108447.600	2.0
464.7530	62.01	-1.84	5242.739	0.0	26759.545	0.0
464.7587	8.01	-.64	234402.480	1.5	255913.000	1.5
464.7610	44.00	-.61	7985.094	0.0	29501.529	0.0
464.7611	24.00	-2.57	37244.170	4.0	58754.580	5.0
464.7619	9.01	-1.03	243458.900	1.0	264969.270	2.0
464.7632	27.00	-3.57	32841.990	4.5	54352.300	3.5
464.7640	64.01	-1.69	1693.808	0.0	23210.104	0.0
464.7699	13.01	-1.91	125719.000	2.0	147229.000	1.0
464.7796	27.00	-3.71	33173.360	3.5	54682.910	4.5
464.7810	42.00	-.81	18389.915	0.0	39905.424	0.0
464.7872	23.00	-1.27	19078.150	3.5	40587.350	3.5
464.7876	26.00	-4.26	25091.620	0.0	46600.800	1.0
464.7883	25.02	-4.17	174243.330	3.5	195752.480	2.5
464.7898	25.02	-3.06	194894.780	1.5	216403.860	2.5
464.7952	18.01	-1.88	182222.030	1.5	203730.860	1.5
464.8045	25.02	-4.00	115774.000	3.5	137282.400	2.5
464.8088	24.00	-1.09	20517.400	2.0	42025.600	3.0
464.8123	23.01	-3.81	30673.140	2.0	52181.180	1.0
464.8133	25.01	-2.50	49882.150	4.0	71390.140	3.0
464.8140	27.00	-3.53	33439.720	4.5	54947.680	5.5
464.8160	16.01	-2.68	119242.130	1.5	140750.000	1.5
464.8160	62.01	-2.07	0.000	0.0	21513.889	0.0
464.8231	26.01	-4.78	22939.350	2.5	44446.890	3.5
464.8254	24.00	-3.44	31377.960	4.0	52885.390	5.0
464.8319	24.00	-1.55	24200.230	6.0	45707.360	6.0
464.8363	25.02	-4.60	89204.690	4.5	110711.620	3.5
464.8457	9.01	-.81	243462.780	2.0	264969.270	2.0
464.8559	26.01	-3.75	79243.730	1.5	100749.750	2.5
464.8631	26.00	-3.87	29798.960	4.0	51304.650	4.0
464.8646	28.00	-.04	27580.411	5.0	49086.030	4.0
464.8650	57.00	-1.05	2581.041	0.0	24092.663	0.0
464.8671	13.01	-2.14	124792.000	2.0	146297.500	1.0
464.8687	23.00	-3.20	20812.990	1.5	42318.420	1.5
464.8777	22.00	-3.93	25438.898	2.0	46943.910	2.0
464.8808	26.02	-2.06	179661.480	3.0	201166.350	3.0
464.8849	24.00	-1.15	20520.920	3.0	42025.600	3.0
464.8851	24.00	-.65	28679.430	1.0	50184.100	2.0
464.8862	26.02	-2.68	204943.260	2.0	226447.880	2.0
464.8895	22.00	-2.22	27355.042	1.0	48859.510	1.0
464.8922	26.01	-4.46	20830.520	2.5	42334.860	2.5
464.8950	10.01	-3.87	283894.410	.5	305398.620	1.5
464.8950	41.00	-1.32	1129.205	0.0	22639.438	0.0
464.8981	27.00	-3.99	33945.900	2.5	55449.970	2.5
464.9052	18.01	-2.81	158428.030	.5	179931.770	1.5
464.9110	24.00	-3.80	23163.270	0.0	44666.740	1.0
464.9120	42.00	-.29	25729.749	0.0	47239.196	0.0
464.9143	8.01	.35	185499.200	2.5	207002.520	3.5
464.9251	29.01	-4.10	114511.440	1.0	136014.260	2.0
464.9270	26.02	-1.96	179661.480	3.0	201164.210	2.0
464.9383	23.00	-2.41	15078.250	.5	36580.460	1.5
464.9446	24.00	-.37	28682.180	2.0	50184.100	2.0
464.9448	24.00	-2.05	20523.690	4.0	42025.600	3.0
464.9490	62.00	-.38	806.575	0.0	22314.310	0.0
464.9578	28.01	-4.06	95573.390	3.5	117074.700	3.5
464.9619	26.02	-1.99	179676.890	2.0	201178.010	1.0
464.9640	27.00	-4.01	32781.710	2.5	54284.730	2.5
464.9690	27.00	-4.41	33449.180	.5	54949.970	1.5
464.9696	25.00	-1.88	45130.160	4.5	66630.920	4.5
464.9796	25.00	-3.25	37789.930	2.5	59290.230	3.5
464.9800	25.01	-4.10	49889.860	3.0	71390.140	3.0
464.9821	26.00	-3.15	26105.908	6.0	47606.092	5.0
464.9861	9.01	-.66	243469.270	3.0	264969.270	2.0
464.9905	10.00	-2.87	149824.221	2.0	171324.017	1.0
465.0001	23.01	-5.96	25191.080	2.0	46690.430	1.0
465.0014	22.00	-.59	14028.470	2.0	35527.760	1.0
465.0032	26.01	-4.70	38164.240	2.5	59663.450	1.5
465.0037	26.00	-4.64	26623.726	2.0	48122.913	3.0
465.0112	28.01	-2.48	94067.140	1.5	115565.980	2.5
465.0160	6.02	-.12	238212.000	0.0	259716.636	0.0
465.0174	21.00	-4.17	11557.640	2.5	33056.190	3.5
465.0185	17.02	-4.57	183042.700	2.5	204541.200	2.5
465.0330	57.00	-1.38	2984.328	0.0	24488.178	0.0
465.0498	22.00	-2.32	27418.015	2.0	48915.070	2.0
465.0596	13.01	-1.06	123468.100	3.0	144964.700	4.0
465.0596	13.01	-.84	123468.100	3.0	144964.700	4.0
465.0596	13.01	-4.47	123468.100	3.0	144964.700	3.0
465.0622	23.00	-5.32	2112.320	.5	23608.800	1.5
465.0690	22.00	-3.50	25643.695	3.0	47139.860	4.0
465.0707	7.01	.11	149076.520	2.0	170572.610	2.0
465.0847	8.01	-.32	185235.360	.5	206730.800	.5
465.0877	26.00	-3.87	26627.612	4.0	48122.913	3.0
465.0900	6.02	-.47	308248.000	0.0	329749.215	0.0
465.0927	26.02	-2.01	179682.940	1.0	201178.010	1.0
465.0988	24.00	-2.77	37233.500	5.0	58728.290	4.0
465.0994	23.00	-3.43	18805.050	.5	40299.810	.5
465.1050	42.00	.34	29601.310	0.0	51101.831	0.0
465.1056	26.00	-3.72	24338.766	3.0	45833.240	4.0
465.1124	29.00	-.01	40893.363	0.0	62393.542	0.0
465.1155	23.00	-4.24	17116.920	3.5	38610.940	3.5
465.1282	24.00	-1.38	7927.470	2.0	29420.900	1.0
465.1341	28.01	-4.10	115785.060	1.5	137276.220	1.5
465.1350	6.02	-.60	238212.000	0.0	259711.135	0.0
465.1377	23.00	-2.68	15270.420	1.5	36763.410	2.5
465.1421	23.01	-6.83	17910.980	4.0	39403.770	4.0
465.1520	59.01	-1.63	1613.150	0.0	23111.499	0.0
465.1527	25.00	-4.62	35725.850	2.5	57216.150	3.5
465.1560	90.01	-1.56	7259.177	0.0	28757.341	0.0
465.1594	24.00	-4.18	31393.400	5.0	52885.390	5.0
465.1613	24.00	-3.99	35640.690	0.0	57132.590	1.0
465.1635	26.02	-3.69	201207.290	4.0	222699.090	5.0
465.1730	25.00	-3.72	41932.640	3.5	63424.000	3.5
465.1737	28.01	-2.95	99559.330	2.5	121050.660	2.5
465.1754	27.00	-2.97	33674.380	2.5	55165.630	2.5
465.1800	6.02	-.56	308215.000	0.0	329712.055	0.0
465.1817	7.00	-2.33	86137.320	.5	107628.283	1.5
465.1882	25.00	-3.86	45013.550	2.5	66504.210	1.5
465.1990	90.01	-2.91	1451.835	0.0	22948.012	0.0
465.2035	26.01	-3.26	65109.710	3.5	86599.660	2.5
465.2080	57.00	-1.19	3468.273	0.0	24964.034	0.0
465.2105	10.00	-3.26	150772.112	1.0	172261.740	1.0
465.2142	26.02	-2.81	179676.890	2.0	201166.350	3.0
465.2152	24.00	-.95	8095.210	3.0	29584.620	2.0
465.2241	26.01	-2.89	63559.560	.5	85048.560	1.5
465.2267	24.01	-2.66	47354.630	2.5	68843.510	3.5
465.2330	75.00	-1.45	14357.039	0.0	35851.645	0.0
465.2339	28.01	-3.76	112719.750	3.5	134208.300	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
465.2410	23.00	-2.70	20830.200	.5	42318.420	1.5
465.2425	7.00	-4.35	94770.850	.5	116259.000	.5
465.2468	27.00	-3.92	8460.810	2.5	29948.760	2.5
465.2605	26.02	-1.92	179676.890	2.0	201164.210	2.0
465.2637	17.00	-4.88	72827.038	.5	94314.206	1.5
465.2639	26.02	-2.15	179682.940	1.0	201170.100	0.0
465.2732	9.02	-2.53	443927.410	3.5	465414.140	2.5
465.2761	25.01	-1.16	86961.000	1.0	108447.600	2.0
465.2917	23.00	-2.90	15688.800	2.5	37174.680	3.5
465.3062	7.00	-3.89	94881.790	3.5	116367.000	2.5
465.3062	7.00	-2.01	94881.790	3.5	116367.000	3.5
465.3153	25.01	-2.44	81220.580	3.0	102705.370	3.0
465.3166	18.01	-1.84	190592.170	1.5	212076.900	2.5
465.3198	9.02	-1.56	444056.420	.5	465541.000	.5
465.3198	9.02	-2.12	444056.420	.5	465541.000	1.5
465.3215	13.01	-1.64	124792.000	2.0	146276.500	3.0
465.3235	24.00	-4.36	35501.260	3.0	56985.670	3.0
465.3244	25.02	-4.54	174464.070	4.5	195948.440	3.5
465.3298	24.00	-1.94	37244.170	4.0	58728.290	4.0
465.3419	9.02	-1.77	444057.440	1.5	465541.000	.5
465.3419	9.02	-1.53	444057.440	1.5	465541.000	1.5
465.3436	26.00	-4.44	26351.049	5.0	47834.529	5.0
465.3488	28.01	-4.40	99559.330	2.5	121042.570	1.5
465.3491	26.00	-5.37	7985.783	2.0	29469.010	2.0
465.3499	28.01	-2.38	99559.330	2.5	121042.520	1.5
465.3510	26.02	-4.46	201293.750	2.0	222776.890	1.0
465.3540	64.00	.06	6291.287	0.0	27780.304	0.0
465.3592	25.01	-3.45	81220.580	3.0	102703.340	4.0
465.3696	28.01	-3.86	100078.780	1.5	121561.060	.5
465.3710	10.00	-3.00	150772.112	1.0	172256.330	0.0
465.3725	24.00	-4.01	35618.510	1.0	57100.660	2.0
465.3768	27.00	-2.96	20500.710	1.5	41982.660	1.5
465.3915	26.02	-2.72	179682.940	1.0	201164.210	2.0
465.3917	28.01	-1.80	115108.090	2.5	136589.350	3.5
465.3943	7.00	-2.94	94830.860	2.5	116312.000	1.5
465.3943	7.00	-3.49	94830.860	2.5	116312.000	2.5
465.4041	17.00	-3.85	74225.846	1.5	95706.534	1.5
465.4089	26.02	-3.86	201293.750	2.0	222774.220	2.0
465.4164	10.01	-1.31	302961.070	1.5	324441.190	2.5
465.4184	27.00	-3.96	33466.870	3.5	54946.900	2.5
465.4290	58.01	-1.27	4113.534	0.0	25599.088	0.0
465.4312	14.03	-.52	293837.920	4.5	315317.360	4.5
465.4312	14.03	1.22	293837.920	4.5	315317.360	5.5
465.4312	14.03	1.13	293837.920	3.5	315317.360	4.5
465.4320	44.00	-.89	8952.985	0.0	30438.401	0.0
465.4344	28.01	-3.28	93390.060	2.5	114869.350	1.5
465.4380	40.00	-.98	12663.231	0.0	34148.370	0.0
465.4502	26.00	-2.56	12560.933	3.0	34039.495	4.0
465.4509	27.00	-3.09	21920.090	4.5	43398.620	3.5
465.4531	7.01	-1.51	149187.800	1.0	170666.230	0.0
465.4597	26.00	-1.01	29056.312	3.0	50534.435	3.0
465.4600	24.00	-4.34	35618.510	1.0	57096.620	1.0
465.4615	23.00	-1.70	20767.570	3.5	42245.610	3.5
465.4624	13.01	-3.35	121480.900	2.0	142958.900	1.0
465.4638	26.00	-1.79	25899.974	4.0	47377.909	4.0
465.4669	24.01	-3.31	67859.910	.5	89337.700	1.5
465.4689	13.01	-3.83	121481.200	1.0	142958.900	1.0
465.4717	28.01	-4.74	100609.010	2.5	122086.580	3.5
465.4756	24.00	-.81	24971.210	0.0	46448.600	1.0
465.4795	7.00	-3.54	94881.790	3.5	116359.000	2.5
465.4795	7.00	-2.58	94881.790	3.5	116359.000	3.5
465.4832	27.00	-.69	32781.710	2.5	54258.750	2.5
465.4895	27.00	-4.59	25269.250	3.5	46746.000	2.5
465.4906	27.00	-4.75	22475.360	4.5	43952.060	5.5
465.4923	23.02	-.66	162760.280	4.5	184236.900	4.5
465.4949	13.01	-1.65	125866.700	1.0	147343.200	2.0
465.4990	64.01	-1.15	8469.040	0.0	29951.363	0.0
465.5062	7.00	-2.51	93581.520	.5	115057.500	1.5
465.5105	28.01	-4.47	100609.010	2.5	122084.790	1.5
465.5122	21.00	-3.81	15672.550	1.5	37148.250	1.5
465.5130	62.01	-1.79	3871.561	0.0	25353.238	0.0
465.5190	72.00	-1.53	6533.259	0.0	28014.659	0.0
465.5250	25.01	-3.24	49465.130	3.0	70940.240	2.0
465.5359	22.00	-4.91	11639.804	3.0	33114.412	2.0
465.5450	26.00	-4.57	31686.342	2.0	53160.530	3.0
465.5461	7.00	-3.90	94830.860	2.5	116305.000	1.5
465.5471	21.00	-2.27	11677.310	4.5	33151.400	4.5
465.5500	57.01	.05	15566.901	0.0	37046.871	0.0
465.5532	25.00	-2.71	41031.480	4.5	62505.290	3.5
465.5534	27.00	-3.49	23184.230	2.5	44658.030	1.5
465.5534	23.00	-3.58	21032.520	3.5	42506.320	4.5
465.5543	28.01	-3.33	99844.130	3.5	121317.890	3.5
465.5560	27.00	-1.79	32841.990	4.5	54315.670	5.5
465.5648	28.00	-1.79	29832.810	3.0	51306.085	3.0
465.5668	22.00	-.61	18911.399	2.0	40384.580	1.0
465.5734	22.01	-4.08	40798.370	3.5	62271.250	2.5
465.5749	22.01	-3.21	9363.710	.5	30836.520	1.5
465.5784	24.00	-.59	35862.820	4.0	57335.470	4.0
465.5862	26.02	-3.90	201293.750	2.0	222766.040	3.0
465.5872	10.01	-2.30	292546.700	.5	314018.940	.5
465.5966	28.01	-3.47	93528.440	3.5	115000.250	3.5
465.6042	22.00	-.95	14105.680	3.0	35577.140	2.0
465.6089	28.01	-3.67	100609.010	2.5	122080.250	2.5
465.6094	28.00	-2.53	40361.254	3.0	61832.470	4.0
465.6141	17.01	-.79	110297.000	3.0	131768.000	2.0
465.6180	77.00	-1.62	13873.093	0.0	35349.926	0.0
465.6185	24.00	-1.78	24897.550	4.0	46368.350	3.0
465.6363	28.01	-4.14	112686.300	2.5	134156.280	1.5
465.6391	29.01	-2.64	117747.450	3.0	139217.300	2.0
465.6393	10.00	-2.63	148257.790	1.0	169727.630	1.0
465.6434	24.01	-4.41	67868.050	2.5	89337.700	1.5
465.6468	22.00	-1.31	0.000	2.0	21469.494	3.0
465.6499	28.01	-3.08	115120.000	2.5	136589.350	3.5
465.6534	27.00	-4.88	20500.710	1.5	41969.900	.5
465.6534	24.00	-3.83	35618.510	1.0	57087.700	2.0
465.6542	7.00	-3.98	94770.850	.5	116240.000	1.5
465.6595	23.01	-4.51	30613.970	4.0	52082.880	4.0
465.6666	27.01	-5.87	25317.720	1.0	46786.300	1.0
465.6679	24.00	-2.43	35807.900	2.0	57276.420	3.0
465.6683	17.01	-1.78	110299.500	2.0	131768.000	2.0
465.6721	26.00	-4.39	26224.961	3.0	47693.289	3.0
465.6735	16.01	-.55	109560.500	.5	131028.760	1.5
465.6753	27.00	-3.90	20500.710	1.5	41968.890	2.5
465.6809	24.00	-.57	38537.680	5.0	60005.600	5.0
465.6966	24.01	-2.90	67870.500	1.5	89337.700	1.5
465.6970	26.01	-6.09	23317.600	2.5	44784.780	2.5
465.7120	24.00	-2.15	33338.200	0.0	54804.690	1.0
465.7143	16.01	-3.64	119242.130	1.5	140708.510	2.5
465.7187	24.00	-.77	41224.780	4.0	62690.960	5.0
465.7209	22.01	-2.23	10024.740	2.5	31490.820	3.5
465.7226	17.01	-4.01	110302.000	1.0	131768.000	2.0
465.7322	26.00	-4.16	19552.474	1.0	41018.029	2.0
465.7326	7.00	-3.61	94793.460	1.5	116259.000	.5
465.7326	7.00	-3.95	94793.460	1.5	116259.000	1.5
465.7326	7.00	-2.98	94793.460	1.5	116259.000	2.5
465.7356	17.01	-2.07	110302.000	1.0	131767.400	0.0
465.7371	27.00	-1.41	26063.110	1.5	47528.440	.5
465.7398	28.00	-.79	34408.574	1.0	55873.780	2.0
465.7434	24.00	-1.15	28637.000	3.0	50102.040	3.0
465.7440	74.00	.54	27746.187	0.0	49217.210	0.0
465.7456	24.00	-2.53	35870.530	4.0	57335.470	4.0
465.7487	28.00	-2.80	35639.148	3.0	57103.946	3.0
465.7573	27.00	-1.63	29735.180	3.5	51199.580	3.5
465.7589	26.00	-3.13	22946.810	1.0	44411.137	1.0
465.7640	40.00	-.66	11856.655	0.0	33326.756	0.0
465.7797	24.00	-3.15	35897.870	2.0	57361.240	3.0
465.7866	24.00	-3.51	24200.230	6.0	45663.280	5.0
465.7896	18.01	-.26	138243.550	1.5	159706.460	.5
465.7933	29.01	-3.40	117130.360	2.0	138593.100	1.0
465.7944	24.00	-.90	35813.730	3.0	57276.420	3.0
465.8020	71.00	-1.82	0.000	0.0	21468.349	0.0
465.8029	26.01	-4.61	44915.070	3.5	66377.370	3.5
465.8135	25.00	-1.25	45060.810	3.5	66522.620	4.5
465.8180	41.00	-1.87	5887.999	0.0	27355.611	0.0
465.8268	27.00	-4.30	33945.900	2.5	55407.100	1.5
465.8304	26.00	-2.67	34636.820	2.0	56097.850	3.0
465.8320	15.01	-.40	103668.740	3.0	125129.700	3.0
465.8320	39.00	.07	16050.847	0.0	37517.814	0.0
465.8376	25.00	-2.68	38934.940	2.5	60395.640	1.5
465.8396	22.01	-4.51	43780.990	4.5	65241.600	5.5
465.8454	28.01	-3.58	99442.860	4.5	120903.200	3.5
465.8630	26.00	-3.92	33095.922	4.0	54555.450	4.0
465.8719	26.02	-2.49	179748.170	5.0	201207.290	4.0
465.8843	8.01	-1.65	234454.450	2.5	255913.000	1.5
465.8851	14.00	-4.45	40991.884	1.0	62450.400	1.0
465.8886	23.02	.29	160576.620	3.5	182034.970	4.5
465.8919	28.01	-4.78	114869.350	1.5	136327.550	1.5
465.9000	6.02	-.69	308248.000	0.0	329711.833	0.0
465.9006	27.00	-2.12	30102.960	2.5	51560.760	2.5
465.9076	22.00	-3.20	13981.750	1.0	35439.228	1.0
465.9134	24.00	-1.43	39158.630	4.0	60615.840	3.0
465.9160	9.02	-.89	468682.910	3.5	490140.000	2.5
465.9212	27.00	-4.21	33439.720	4.5	54896.570	3.5
465.9249	23.00	-2.70	15724.220	3.5	37180.900	4.5
465.9273	9.02	-1.04	468683.430	2.5	490140.000	1.5
465.9273	9.02	-2.20	468683.430	2.5	490140.000	2.5
465.9292	26.02	-4.11	201293.750	2.0	222750.230	3.0
465.9292	23.00	-2.96	20789.130	2.5	42245.610	3.5
465.9412	24.00	-4.32	35640.690	0.0	57096.620	1.0
465.9483	23.00	-4.74	2153.200	1.5	23608.800	1.5
465.9490	40.00	-1.92	5000.766	0.0	26462.342	0.0
465.9548	16.01	-2.43	119294.700	2.5	140750.000	1.5
465.9548	17.01	-1.22	110299.500	2.0	131754.800	1.0
465.9568	28.01	-4.56	94283.940	4.5	115739.150	4.5
465.9740	25.00	-3.84	33825.490	2.5	55279.910	1.5
465.9870	74.00	-2.12	0.000	0.0	21459.826	0.0
465.9881	25.01	-4.70	49291.310	3.0	70745.080	3.0
465.9940	58.01	-1.40	7662.464	0.0	29121.968	0.0
465.9974	16.01	-2.41	130641.000	1.5	152094.340	2.5
466.0091	17.01	-2.39	110302.000	1.0	131754.800	1.0
466.0218	23.01	-4.04	32299.240	1.0	53751.460	1.0
466.0272	23.02	-4.45	140933.140	3.5	162385.110	3.5
466.0289	29.01	-.31	116576.810	0.0	138028.700	1.0
466.0417	17.01	-3.84	110303.500	0.0	131754.800	1.0
466.0450	7.00	-2.08	86137.320	.5	107588.469	.5
466.0467	24.00	-2.64	35884.400	5.0	57335.470	4.0
466.0583	28.01	-3.13	99844.130	3.5	121294.670	4.5
466.0641	27.00	-4.31	23207.760	1.5	44658.030	1.5
466.0659	22.00	-4.43	25493.722	2.0	46943.910	2.0
466.0700	57.00	-.76	7985.094	0.0	29441.098	0.0
466.0717	24.01	-2.84	67875.680	3.5	89325.600	4.5
466.0722	27.01	-2.36	27106.000	6.0	48555.900	5.0
466.0850	26.02	-3.04	179757.980	4.0	201207.290	4.0
466.0926	24.00	-2.07	27728.870	2.0	49177.830	3.0
466.0995	25.01	-4.97	82387.530	3.0	103836.170	2.0
466.1100	29.01	-2.63	117883.140	4.0	139331.300	3.0
466.1105	10.00	-2.90	148257.790	1.0	169705.925	0.0
466.1120	73.00	-1.23	13227.833	0.0	34681.904	0.0
466.1158	28.01	-4.82	98822.550	6.5	120270.440	5.5
466.1182	26.01	-4.72	44929.590	2.5	66377.370	3.5
466.1182	24.00	-2.75	24286.540	1.0	45734.320	2.0
466.1208	17.00	-2.67	74865.667	.5	96313.330	1.5
466.1230	74.00	-.78	22342.133	0.0	43795.698	0.0
466.1265	22.00	-5.57	7255.369	2.0	28702.768	3.0
466.1327	26.00	-3.19	22838.320	2.0	44285.436	2.0
466.1347	29.01	-1.89	114511.440	1.0	135958.460	1.0
466.1356	24.01	-4.88	53271.070	2.5	74718.050	1.5
466.1445	26.02	-4.09	179760.720	3.0	201207.290	4.0
466.1452	7.00	-3.26	94793.460	1.5	116240.000	1.5
466.1452	7.00	-4.78	94793.460	1.5	116240.000	2.5
466.1521	24.00	-1.94	41224.780	4.0	62671.000	4.0
466.1537	28.01	-3.83	100010.170	.5	121456.320	1.5
466.1580	21.00	-2.75	11610.240	3.5	33056.190	3.5
466.1634	27.01	-3.88	27902.500	4.0	49348.200	4.0
466.1643	8.01	-.25	185340.680	1.5	206786.340	1.5
466.1697	26.02	-2.04	205002.470	3.0	226447.880	2.0
466.1706	28.01	-4.10	118563.390	3.5	140008.760	3.5
466.1847	25.00	-.86	23549.200	2.5	44993.920	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
466.1850	24.00	-1.08	33542.110	2.0	54986.820	3.0
466.1880	63.00	.17	0.000	0.0	21450.574	0.0
466.1930	42.00	-1.68	11372.710	0.0	32823.054	0.0
466.1970	74.00	-1.49	15324.929	0.0	36775.088	0.0
466.1973	26.00	-2.41	24118.815	4.0	45562.959	3.0
466.2015	22.01	-4.36	43740.770	3.5	65184.720	3.5
466.2041	27.00	-4.94	33945.900	2.5	55389.730	1.5
466.2097	23.00	-4.98	9824.580	2.5	31268.150	3.5
466.2126	25.00	-1.15	45130.160	4.5	66573.600	5.5
466.2133	10.00	-4.23	151038.452	1.0	172481.860	1.0
466.2269	28.01	-2.38	118563.390	3.5	140006.170	4.5
466.2404	27.00	-3.13	33462.830	2.5	54904.990	2.5
466.2408	24.00	-2.61	24277.060	0.0	45719.200	1.0
466.2450	25.00	-2.29	41789.480	4.5	63231.430	4.5
466.2490	75.00	-1.88	13711.778	0.0	35159.545	0.0
466.2510	57.01	-2.05	0.000	0.0	21447.675	0.0
466.2549	22.00	-2.70	27418.015	2.0	48859.510	1.0
466.2619	23.01	-3.23	30641.710	3.0	52082.880	4.0
466.2632	29.01	-3.66	114511.440	1.0	135952.550	2.0
466.2650	26.02	-4.64	201164.210	2.0	222605.240	3.0
466.2678	30.02	-3.40	216895.300	1.0	238336.200	2.0
466.2708	22.01	-3.57	9395.760	1.5	30836.520	1.5
466.2717	25.00	-1.37	45013.550	2.5	66454.270	3.5
466.2732	22.01	-3.95	9518.050	2.5	30958.700	2.5
466.2760	42.00	-1.18	11775.998	0.0	33222.523	0.0
466.2763	25.00	-4.47	41230.300	3.5	62670.810	4.5
466.2808	25.00	-2.79	23818.870	.5	45259.170	1.5
466.2845	23.00	-2.94	15770.720	4.5	37210.850	5.5
466.2989	26.02	-4.39	201166.350	3.0	222605.820	4.0
466.2996	28.01	-2.09	108548.610	1.5	129988.050	2.5
466.3167	26.02	-4.07	204943.260	2.0	226381.910	3.0
466.3170	26.00	-2.95	28604.610	2.0	50043.250	1.0
466.3183	29.01	-4.39	115639.020	2.0	137077.600	3.0
466.3200	90.00	-2.03	2823.013	0.0	24267.515	0.0
466.3248	28.01	-3.49	100609.010	2.5	122047.290	3.5
466.3283	27.00	-4.99	33466.870	3.5	54904.990	2.5
466.3317	24.00	-.51	25010.640	1.0	46448.600	1.0
466.3389	26.01	-4.93	63273.030	2.5	84710.660	3.5
466.3400	27.00	-.21	25269.250	3.5	46706.830	3.5
466.3487	24.00	-1.71	41224.780	4.0	62661.960	3.0
466.3530	6.02	-.56	308248.000	0.0	329690.984	0.0
466.3554	10.00	-3.55	151038.452	1.0	172475.323	2.0
466.3560	62.00	-.31	2258.411	0.0	23701.257	0.0
466.3615	25.00	-1.50	23719.520	1.5	45156.110	2.5
466.3644	22.00	-2.89	27025.652	4.0	48462.110	5.0
466.3656	12.03	-4.90	582571.000	2.5	604007.400	2.5
466.3696	26.01	-6.56	23317.600	2.5	44753.820	3.5
466.3733	24.00	-2.86	24286.540	1.0	45722.590	0.0
466.3750	92.00	-1.56	564.603	0.0	22006.576	0.0
466.3760	57.01	-.33	15647.559	0.0	37089.486	0.0
466.3769	22.00	-3.74	26892.926	3.0	48328.810	4.0
466.3820	76.00	-.80	15324.929	0.0	36766.580	0.0
466.3822	24.00	-.34	25089.200	2.0	46524.840	2.0
466.3830	41.00	-1.27	1532.493	0.0	22974.098	0.0
466.3835	26.01	-4.26	78137.530	3.5	99573.110	4.5
466.3857	7.00	-2.71	93581.520	.5	115017.000	.5
466.3857	7.00	-2.33	93581.520	.5	115017.000	1.5
466.3956	22.00	-3.00	27480.047	3.0	48915.070	2.0
466.3970	27.00	-2.09	29735.180	3.5	51170.140	4.5
466.4003	23.00	-2.94	15103.770	4.5	36538.580	4.5
466.4085	24.00	-3.42	24299.890	2.0	45734.320	2.0
466.4120	72.01	-1.36	12824.546	0.0	34264.818	0.0
466.4270	64.01	-.32	17663.997	0.0	39103.579	0.0
466.4319	28.00	-2.85	29320.782	3.0	50754.137	2.0
466.4327	28.01	-4.55	79923.880	4.5	101357.200	4.5
466.4334	25.01	-3.30	49889.860	3.0	71323.150	2.0
466.4460	25.02	-4.11	194971.150	2.5	216403.860	2.5
466.4471	24.00	-3.08	24286.540	1.0	45719.200	1.0
466.4499	24.00	-2.18	33542.110	2.0	54974.640	2.0
466.4566	20.01	-3.75	68056.910	2.5	89489.130	2.5
466.4566	20.01	-2.45	68056.910	3.5	89489.130	2.5
466.4603	25.00	-3.14	38669.600	3.5	60101.650	2.5
466.4610	27.01	-2.87	64914.710	2.0	86346.730	3.0
466.4650	59.01	-1.60	3387.616	0.0	24825.452	0.0
466.4680	66.01	-1.75	4274.849	0.0	25712.547	0.0
466.4699	26.00	-3.71	22946.810	1.0	44378.420	1.0
466.4778	25.00	-3.25	37420.240	5.5	58851.490	5.5
466.4784	26.01	-7.50	20805.830	4.5	42237.050	3.5
466.4791	24.00	-.27	25206.020	3.0	46637.210	3.0
466.4811	11.00	-1.55	16956.172	.5	38387.270	1.5
466.4821	26.01	-4.86	78487.250	1.5	99918.300	1.5
466.4827	20.01	-2.60	68056.910	2.5	89487.930	1.5
466.4967	24.00	-3.79	24303.940	3.0	45734.320	2.0
466.4971	24.00	-2.83	27597.220	3.0	49027.580	2.0
466.4971	23.00	-1.78	15270.420	1.5	36700.780	2.5
466.5000	6.03	-.47	449938.000	0.0	471374.227	0.0
466.5004	7.00	-2.84	94881.790	3.5	116312.000	2.5
466.5115	27.00	-3.80	33466.870	3.5	54896.570	3.5
466.5130	62.01	-2.15	3468.273	0.0	24903.903	0.0
466.5276	23.00	-4.28	17181.980	4.5	38610.940	3.5
466.5287	23.00	-2.15	19023.470	4.5	40452.380	5.5
466.5322	18.01	-2.75	183675.570	3.5	205104.320	4.5
466.5330	41.00	-1.19	12179.286	0.0	33613.997	0.0
466.5357	20.02	-1.88	325467.670	2.0	346896.260	2.0
466.5455	7.00	-3.15	94830.860	2.5	116259.000	1.5
466.5455	7.00	-2.70	94830.860	2.5	116259.000	2.5
466.5512	22.00	-2.20	18287.560	4.0	39715.437	3.0
466.5526	24.01	-4.67	65709.530	5.5	87137.340	6.5
466.5542	26.00	-3.62	32873.623	4.0	54301.360	4.0
466.5542	24.00	-3.23	24940.610	2.0	46368.350	3.0
466.5542	26.00	-2.47	32873.623	4.0	54301.360	4.0
466.5548	28.01	-2.51	55299.650	4.5	76727.360	5.5
466.5614	23.00	-4.47	20606.430	.5	42033.840	1.5
466.5661	28.01	-2.23	92325.850	3.5	113753.040	4.5
466.5796	26.01	-4.45	21812.040	1.5	43238.610	2.5
466.5897	24.00	-.45	28679.430	1.0	50105.540	1.0
466.5900	6.02	.01	308317.000	0.0	329749.092	0.0
466.5995	25.01	-3.79	81279.710	4.0	102705.370	3.0
466.6117	27.00	-2.17	32733.070	3.5	54158.170	4.5
466.6123	23.00	-1.44	15270.420	1.5	36695.490	.5
466.6197	24.00	-1.24	23933.900	4.0	45358.630	4.0
466.6216	26.00	-3.70	26406.490	1.0	47831.132	2.0
466.6240	41.00	-.21	11130.738	0.0	32561.269	0.0
466.6265	18.01	-2.93	158167.710	1.5	179592.130	2.5
466.6319	29.01	-3.52	108335.430	2.0	129759.600	1.0
466.6437	25.01	-2.52	81279.710	4.0	102703.340	4.0
466.6450	64.01	-1.05	10969.423	0.0	32398.989	0.0
466.6463	23.00	-3.82	13801.530	1.5	35225.040	2.5
466.6478	24.00	-.30	25359.620	4.0	46783.060	4.0
466.6496	24.00	-.86	28682.180	2.0	50105.540	1.0
466.6517	24.00	-4.32	33113.270	4.0	54536.530	5.0
466.6541	25.00	-1.90	37420.240	5.5	58843.390	6.5
466.6565	22.00	-1.50	25227.217	3.0	46650.260	3.0
466.6710	58.01	-1.79	4436.164	0.0	25864.536	0.0
466.6753	26.01	-3.43	22810.330	3.5	44232.510	4.5
466.6770	13.01	-2.11	125866.700	1.0	147288.800	0.0
466.6790	90.00	-1.25	6291.287	0.0	27719.292	0.0
466.6830	9.00	-3.13	116040.883	1.5	137462.710	1.5
466.6831	26.01	-4.19	64040.960	3.5	85462.780	3.5
466.6837	22.00	-3.62	27614.667	4.0	49036.460	4.0
466.6852	22.00	-2.50	27418.015	2.0	48839.740	3.0
466.6860	92.01	-2.06	241.973	0.0	21669.657	0.0
466.6905	28.01	-4.93	114869.350	1.5	136290.830	.5
466.6964	27.00	-2.97	33439.720	4.5	54860.930	4.5
466.6979	28.01	-2.19	117074.700	3.5	138495.840	4.5
466.6982	28.00	-1.62	30619.440	2.0	52040.568	2.0
466.7095	24.00	-2.89	28637.000	3.0	50057.610	2.0
466.7136	14.03	-1.26	315230.270	3.5	336650.690	3.5
466.7136	14.03	.28	315230.270	3.5	336650.690	4.5
466.7136	14.03	.17	315230.270	2.5	336650.690	3.5
466.7140	40.00	-1.63	5000.766	0.0	26427.164	0.0
466.7156	23.00	-3.41	18805.050	.5	40225.380	1.5
466.7167	24.00	-1.67	23933.900	4.0	45354.180	5.0
466.7188	10.01	-3.13	302750.810	3.5	324170.990	2.5
466.7207	7.01	-1.58	149187.800	1.0	170607.890	1.0
466.7220	41.00	-1.48	2097.096	0.0	23523.127	0.0
466.7227	10.01	-1.76	302750.810	3.5	324170.810	3.5
466.7258	24.00	-4.95	28682.180	2.0	50102.040	3.0
466.7268	20.02	-.74	341601.460	2.0	363021.270	2.0
466.7321	25.02	-3.79	174332.910	1.5	195752.480	2.5
466.7378	24.00	-3.90	24299.890	2.0	45719.200	1.0
466.7381	22.00	-2.42	17540.205	3.0	38959.499	4.0
466.7391	28.01	-4.74	114869.350	1.5	136288.600	2.5
466.7444	26.00	-4.12	29056.312	3.0	50475.320	4.0
466.7470	39.00	-.34	15889.531	0.0	37314.414	0.0
466.7491	10.01	-3.35	306899.330	2.5	328318.120	3.5
466.7526	22.00	-1.66	8436.618	0.0	29855.248	1.0
466.7528	10.01	-4.56	306899.330	2.5	328317.950	2.5
466.7550	26.02	-3.42	179759.490	2.0	201178.010	1.0
466.7584	22.00	-1.16	170.132	3.0	21588.496	4.0
466.7755	28.00	-1.16	29888.505	2.0	51306.085	3.0
466.7949	25.01	-4.99	82419.480	3.0	103836.170	2.0
466.8054	25.00	-1.58	44978.980	1.5	66395.190	2.5
466.8062	26.00	-.83	29732.721	1.0	51148.892	2.0
466.8077	13.01	-4.48	125866.700	1.0	147282.800	2.0
466.8077	13.01	-4.95	125866.700	1.0	147282.800	1.0
466.8079	22.00	-3.44	27498.975	3.0	48915.070	2.0
466.8119	25.01	-4.83	82387.530	3.0	103803.440	3.0
466.8121	27.00	-3.61	23152.570	3.5	44568.470	2.5
466.8142	26.00	-1.35	26339.682	2.0	47755.485	3.0
466.8170	90.00	-.87	7420.492	0.0	28842.163	0.0
466.8350	22.00	-1.21	8492.421	1.0	29907.273	2.0
466.8460	74.00	-1.44	15324.929	0.0	36745.269	0.0
466.8480	47.00	-.34	30327.228	0.0	51747.476	0.0
466.8509	26.02	-4.70	114325.350	5.0	135739.470	6.0
466.8531	28.01	-2.00	108368.050	2.5	129782.070	3.5
466.8557	11.00	-2.25	16973.368	1.5	38387.270	1.5
466.8559	11.00	-1.30	16973.368	1.5	38387.257	2.5
466.8577	16.01	-3.58	119294.700	2.5	140708.510	2.5
466.8614	18.01	-3.25	181594.050	2.5	203007.690	1.5
466.8620	28.00	-1.49	34163.294	2.0	55576.905	3.0
466.8622	24.00	-1.87	35862.820	4.0	57276.420	3.0
466.8716	21.00	-3.07	15672.550	1.5	37085.720	.5
466.8734	24.00	-3.53	27223.050	2.0	48636.140	3.0
466.8784	23.00	-3.14	17116.920	3.5	38529.780	4.5
466.8803	24.00	-1.04	35807.900	2.0	57220.670	2.0
466.8812	24.00	-3.40	35572.940	2.0	56985.670	3.0
466.8910	57.01	-.54	14276.381	0.0	35694.656	0.0
466.8943	26.01	-2.90	63273.030	2.5	84685.160	3.5
466.8956	25.01	-3.98	52373.180	3.0	73785.250	2.0
466.8990	77.00	-1.56	15970.189	0.0	37386.097	0.0
466.9140	44.00	-1.27	14760.326	0.0	36177.546	0.0
466.9140	73.00	-1.56	9194.957	0.0	30612.177	0.0
466.9158	26.00	-1.51	29469.010	2.0	50880.152	1.0
466.9172	23.00	-1.55	19026.340	2.5	40437.420	1.5
466.9211	17.01	-3.12	149798.300	2.0	171209.200	2.0
466.9229	28.01	-2.98	100389.520	2.5	121800.340	1.5
466.9240	72.00	-1.95	10485.478	0.0	31902.240	0.0
466.9242	22.00	-2.73	14028.470	2.0	35439.228	1.0
466.9272	8.01	-1.03	234402.480	1.5	255813.100	2.5
466.9299	10.01	-1.95	302750.810	3.5	324161.310	3.5
466.9303	23.00	-3.67	553.020	4.5	21963.500	3.5
466.9308	9.00	-3.29	116040.883	1.5	137451.340	2.5
466.9320	17.02	-4.76	179663.000	1.5	201073.400	.5
466.9333	24.00	-.48	25548.640	5.0	46956.980	5.0
466.9371	10.01	-.60	302750.810	3.5	324160.980	4.5
466.9400	62.01	-1.48	806.575	0.0	22222.603	0.0
466.9414	24.01	-3.13	67859.910	.5	89269.880	.5
466.9459	22.00	-3.49	27614.667	4.0	49024.430	3.0
466.9469	8.01	-.61	234402.480	1.5	255812.200	1.5
466.9595	7.00	-3.79	94830.860	2.5	116240.000	1.5
466.9595	7.00	-3.20	94830.860	2.5	116240.000	2.5
466.9609	9.00	-2.02	116040.883	1.5	137449.960	1.5
466.9650	24.00	-2.63	24940.610	2.0	46349.500	2.0
466.9650	62.01	-1.38	2177.753	0.0	23592.634	0.0
466.9748	10.01	-1.62	291495.040	2.5	312903.480	2.5
466.9763	26.02	-2.96	179757.980	4.0	201166.350	3.0
466.9870	41.00	-1.25	10969.423	0.0	32383.295	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
466.9887	7.00	-1.65	86220.480	1.5	107628.283	1.5
466.9924	25.01	-4.32	52373.180	3.0	73780.810	3.0
466.9980	44.00	-1.69	7420.492	0.0	28833.860	0.0
467.0064	23.02	.26	160879.980	4.5	182286.970	5.5
467.0075	24.00	-1.87	35813.730	3.0	57220.670	2.0
467.0091	10.01	-4.32	302750.810	3.5	324157.680	2.5
467.0092	26.02	-4.44	179759.490	2.0	201166.350	3.0
467.0142	22.00	-4.51	25537.276	1.0	46943.910	2.0
467.0164	26.01	-4.06	20830.520	2.5	42237.050	3.5
467.0176	7.00	-3.01	93581.520	.5	114988.000	.5
467.0176	7.00	-3.64	93581.520	.5	114988.000	1.5
467.0304	24.00	-4.31	35870.530	4.0	57276.420	3.0
467.0356	26.01	-2.56	63465.190	1.5	84870.840	2.5
467.0361	26.02	-3.28	179760.720	3.0	201166.350	3.0
467.0396	21.01	-.51	10944.510	2.0	32349.980	3.0
467.0485	23.00	-1.10	8715.720	3.5	30120.780	2.5
467.0559	26.02	-3.46	179759.490	2.0	201164.210	2.0
467.0629	23.00	-6.31	9824.580	2.5	31228.980	2.5
467.0740	58.01	-1.30	5404.054	0.0	26813.938	0.0
467.0745	23.01	-4.24	13542.680	3.0	34946.550	4.0
467.0750	62.00	-.21	1451.835	0.0	22861.673	0.0
467.0773	26.01	-4.06	62322.500	3.5	83726.240	3.5
467.0826	18.01	-2.16	183675.570	3.5	205079.070	2.5
467.0828	26.02	-3.00	179760.720	3.0	201164.210	2.0
467.0884	10.00	-2.49	150858.508	2.0	172261.740	1.0
467.0991	23.02	-2.67	140933.140	3.5	162335.880	3.5
467.1100	60.00	-.94	1048.548	0.0	22456.782	0.0
467.1118	9.00	-2.14	116040.883	1.5	137443.040	2.5
467.1253	26.02	-4.78	97041.380	3.0	118442.920	3.0
467.1277	25.01	-4.67	52379.380	2.0	73780.810	3.0
467.1384	24.01	-2.46	45669.540	1.5	67070.480	1.5
467.1410	92.01	-1.67	4516.821	0.0	25923.634	0.0
467.1507	25.01	-2.49	81279.710	4.0	102680.090	5.0
467.1672	25.00	-1.59	23296.670	3.5	44696.290	2.5
467.1688	29.01	.08	114511.440	1.0	135910.990	2.0
467.1699	23.00	-1.70	15078.250	.5	36477.750	.5
467.1725	24.01	-3.70	67870.500	1.5	89269.880	.5
467.1800	3.01	1.18	561245.000	0.0	582650.026	0.0
467.1830	57.01	-.48	15647.559	0.0	37052.447	0.0
467.1900	42.00	-.25	21212.928	0.0	42617.496	0.0
467.1910	26.02	-4.62	201207.290	4.0	222605.820	4.0
467.1932	21.01	-2.93	39001.590	0.0	60400.020	1.0
467.1933	8.00	-4.77	102928.355	4.0	124326.779	3.0
467.2001	26.00	-4.53	33412.706	3.0	54810.820	4.0
467.2001	20.00	-1.07	23652.304	1.0	45050.419	2.0
467.2004	8.01	-4.63	254481.500	3.5	275879.600	3.5
467.2080	59.01	-1.50	1693.808	0.0	23097.551	0.0
467.2090	41.00	-1.01	2742.356	0.0	24146.053	0.0
467.2225	25.01	-3.56	52383.720	4.0	73780.810	3.0
467.2227	22.00	-1.83	25797.600	3.0	47194.680	4.0
467.2255	25.02	-2.93	195315.780	2.5	216712.730	2.5
467.2295	28.01	-4.20	99844.130	3.5	121240.900	3.5
467.2314	18.01	-2.23	183797.360	2.5	205194.040	1.5
467.2506	17.01	-1.71	140259.000	2.0	161654.800	1.0
467.2535	28.01	-2.96	98822.550	6.5	120218.220	6.5
467.2543	8.00	-2.59	86625.769	1.0	108021.400	2.0
467.2662	25.02	-3.75	173920.690	1.5	195315.780	2.5
467.2734	24.00	-1.13	33423.790	1.0	54818.550	2.0
467.2798	22.00	-1.83	25643.695	3.0	47038.160	3.0
467.2832	26.00	-4.83	12968.552	2.0	34362.860	1.0
467.2887	27.00	-2.67	33466.870	3.5	54860.930	4.5
467.2926	28.01	-3.77	115565.980	2.5	136959.860	2.5
467.2978	24.00	-4.93	35934.020	6.0	57327.660	5.0
467.2985	8.00	-2.36	86627.790	2.0	108021.400	2.0
467.3018	25.00	-3.83	45060.810	3.5	66454.270	3.5
467.3074	26.01	-4.48	64286.440	3.5	85679.640	2.5
467.3085	7.00	-3.29	94770.850	.5	116164.000	.5
467.3085	7.00	-3.46	94770.850	.5	116164.000	1.5
467.3129	24.00	-.56	33816.060	4.0	55209.010	4.0
467.3153	26.00	-4.49	29469.010	2.0	50861.850	3.0
467.3184	21.00	-4.96	18000.250	2.5	39392.950	3.5
467.3236	25.00	-3.99	45130.160	4.5	66522.620	4.5
467.3256	14.01	-2.14	103556.290	3.5	124948.660	3.5
467.3256	14.01	-.60	103556.290	3.5	124948.660	4.5
467.3260	14.03	-2.65	293837.920	3.5	315230.270	3.5
467.3260	14.03	-1.10	293837.920	4.5	315230.270	3.5
467.3260	14.03	-1.22	293837.920	3.5	315230.270	2.5
467.3284	14.01	-.71	103556.420	2.5	124948.660	3.5
467.3315	12.02	-.35	548720.700	1.0	570112.800	0.0
467.3393	21.00	-3.05	15756.510	2.5	37148.250	1.5
467.3435	22.00	-1.61	18911.399	2.0	40302.950	3.0
467.3460	4.01	1.01	98053.000	0.0	119450.423	0.0
467.3557	29.01	-.21	114511.440	1.0	135902.430	0.0
467.3590	41.00	-.39	17905.969	0.0	39302.797	0.0
467.3620	56.00	-.97	9596.000	0.0	30992.690	0.0
467.3666	23.00	-1.51	19145.130	5.5	40535.620	6.5
467.3715	28.01	-4.92	116145.690	3.5	137535.960	3.5
467.3748	8.01	-1.09	185340.680	1.5	206730.800	.5
467.3788	8.00	-2.22	86631.466	3.0	108021.400	2.0
467.3900	6.02	-.47	308317.000	0.0	329712.409	0.0
467.3903	22.00	-4.43	21469.494	3.0	42858.900	3.0
467.3970	60.00	-1.09	2339.068	0.0	23734.156	0.0
467.3984	22.00	-3.41	20126.055	3.0	41515.090	4.0
467.4036	22.01	-4.24	45548.900	1.5	66937.700	2.5
467.4047	28.01	-4.90	98822.550	6.5	120211.300	5.5
467.4051	24.00	-4.24	33816.060	4.0	55204.790	3.0
467.4064	23.00	-5.32	2220.130	2.5	23608.800	1.5
467.4197	28.01	-4.46	112906.930	1.5	134294.990	2.5
467.4418	27.00	-4.80	34133.590	3.5	55520.640	3.5
467.4495	17.01	-4.45	126219.000	3.0	147605.700	3.0
467.4520	22.00	-3.86	25643.695	3.0	47030.280	3.0
467.4537	17.00	-1.69	74225.846	1.5	95612.357	1.5
467.4600	62.01	-1.05	1451.835	0.0	22844.040	0.0
467.4650	44.00	-1.04	11695.340	0.0	33087.316	0.0
467.4651	26.00	-4.81	12560.933	3.0	33946.920	2.0
467.4720	29.00	-.64	41538.623	0.0	62930.279	0.0
467.4751	28.00	-1.46	29320.782	3.0	50706.310	4.0
467.4840	39.00	-.85	483.945	0.0	21875.051	0.0
467.4907	7.01	-1.59	149187.800	1.0	170572.610	2.0
467.4975	19.02	-.28	241443.500	2.5	262828.000	1.5
467.5019	28.00	-3.60	27943.543	1.0	49327.845	2.0
467.5019	23.03	-1.43	264902.200	3.0	286286.500	4.0
467.5030	45.00	-1.72	5646.026	0.0	27036.263	0.0
467.5032	27.00	-2.74	23184.230	2.5	44568.470	2.5
467.5052	7.00	-4.27	94770.850	.5	116155.000	.5
467.5052	7.00	-2.38	94770.850	.5	116155.000	1.5
467.5094	25.01	-4.89	82419.480	3.0	103803.440	3.0
467.5118	24.00	-2.66	25038.610	5.0	46422.460	4.0
467.5119	22.00	-1.33	8602.340	2.0	29986.185	3.0
467.5157	28.01	-3.72	99844.130	3.5	121227.800	2.5
467.5202	22.00	-4.93	7255.369	2.0	28638.832	2.0
467.5247	28.01	-4.15	100309.290	5.5	121692.550	4.5
467.5295	25.02	-1.33	195308.790	4.5	216691.830	5.5
467.5370	41.00	-1.14	2097.096	0.0	23485.778	0.0
467.5457	23.00	-4.11	20687.750	1.5	42070.050	2.5
467.5520	60.00	-.53	3629.588	0.0	25017.583	0.0
467.5589	28.00	-2.20	29084.478	4.0	50466.172	4.0
467.5601	25.00	-3.84	45013.550	2.5	66395.190	2.5
467.5726	27.00	-4.68	34196.210	1.5	55577.280	1.5
467.5754	24.00	-3.34	24282.340	4.0	45663.280	5.0
467.5763	24.00	-2.10	33423.790	1.0	54804.690	1.0
467.6058	28.01	-4.57	98276.700	4.5	119656.250	3.5
467.6069	28.01	-4.05	115209.850	3.5	136589.350	3.5
467.6082	26.02	-2.70	205002.470	3.0	226381.910	3.0
467.6205	21.00	-4.27	11677.310	4.5	33056.190	3.5
467.6244	8.01	-.38	185499.200	2.5	206877.900	2.5
467.6320	10.01	-1.41	291801.880	1.5	313180.230	1.5
467.6358	24.00	-1.79	28679.430	1.0	50057.610	2.0
467.6498	28.01	-3.95	100078.780	1.5	121456.320	1.5
467.6570	7.00	-3.47	94881.790	3.5	116259.000	2.5
467.6630	74.00	-.84	19438.462	0.0	40821.381	0.0
467.6692	6.00	-4.14	60393.140	2.0	81769.790	2.0
467.6703	26.02	-2.30	184951.620	3.0	206328.220	3.0
467.6710	27.00	-1.82	28470.510	1.5	49847.080	2.5
467.6772	22.00	-4.64	26494.322	2.0	47870.610	2.0
467.6857	17.01	-3.43	140259.000	2.0	161634.900	2.0
467.6879	22.00	-1.25	20209.444	2.0	41585.240	3.0
467.6910	62.01	-1.39	322.630	0.0	21704.269	0.0
467.6916	28.01	-2.83	100010.170	.5	121385.800	1.5
467.6935	23.00	-6.86	9824.580	2.5	31200.120	1.5
467.6959	24.00	-3.41	28682.180	2.0	50057.610	2.0
467.6992	26.01	-3.56	64087.500	2.5	85462.780	3.5
467.7003	27.00	-4.34	21920.090	4.5	43295.320	4.5
467.7034	25.02	-4.56	115762.600	1.5	137137.690	1.5
467.7065	8.01	-.81	234454.450	2.5	255829.400	3.5
467.7231	27.00	-4.85	5075.830	1.5	26450.020	2.5
467.7432	26.02	-3.63	184951.620	3.0	206324.890	2.0
467.7459	22.00	.07	24694.895	4.0	46068.040	4.0
467.7506	27.00	-4.88	4690.180	2.5	26063.110	1.5
467.7575	26.00	-2.40	33507.102	3.0	54879.720	2.0
467.7585	25.02	-4.10	174575.870	3.5	195948.440	3.5
467.7590	24.00	-4.33	23933.900	4.0	45306.450	5.0
467.7621	22.00	-4.54	26564.385	3.0	47936.790	3.0
467.7658	16.02	-1.76	148397.800	1.0	169770.040	1.0
467.7690	74.00	-.73	19680.435	0.0	41058.508	0.0
467.7766	17.00	-3.85	74225.846	1.5	95597.593	.5
467.7824	27.00	-3.64	23184.230	2.5	44555.710	1.5
467.7860	69.01	-3.28	161.315	0.0	21538.611	0.0
467.7922	28.01	-3.00	106620.530	3.5	127991.560	3.5
467.7964	28.01	-3.55	115565.980	2.5	136936.820	3.5
467.8030	7.00	-3.53	94793.460	1.5	116164.000	.5
467.8030	7.00	-3.39	94793.460	1.5	116164.000	1.5
467.8030	7.00	-2.49	94793.460	1.5	116164.000	2.5
467.8054	23.00	-.69	20767.570	3.5	42138.000	2.5
467.8089	25.00	-1.74	42053.730	2.5	63424.000	3.5
467.8135	7.01	.08	190120.240	1.0	211490.300	2.0
467.8160	48.00	.42	29923.940	0.0	51299.866	0.0
467.8170	59.01	-1.90	4032.876	0.0	25408.756	0.0
467.8194	22.00	-2.91	27355.042	1.0	48724.830	1.0
467.8291	10.01	-2.02	303071.840	2.5	324441.190	2.5
467.8301	22.00	-2.94	27355.042	1.0	48724.340	2.0
467.8317	10.01	-.72	303071.840	2.5	324441.070	3.5
467.8350	39.00	-.11	19035.175	0.0	40410.232	0.0
467.8398	26.00	-3.74	27559.568	2.0	48928.423	2.0
467.8400	3.01	.71	561276.000	0.0	582650.829	0.0
467.8421	8.01	-2.46	240328.750	.5	261697.500	1.5
467.8476	28.01	-4.67	115592.250	1.5	136960.750	2.5
467.8476	12.02	-1.54	585466.200	1.0	606834.700	2.0
467.8480	7.00	-3.24	93581.520	.5	114950.000	.5
467.8480	7.00	-3.07	93581.520	.5	114950.000	1.5
467.8480	41.00	-1.07	8307.725	0.0	29682.189	0.0
467.8498	23.03	-1.99	236322.400	2.0	257690.800	3.0
467.8588	7.00	-2.40	86220.480	1.5	107588.469	.5
467.8600	7.03	-1.53	484150.000	0.0	505523.915	0.0
467.8609	10.00	-2.89	150121.592	1.0	171489.485	1.0
467.8668	10.01	-1.72	292651.320	1.5	314018.940	.5
467.8744	28.00	-3.93	36600.805	2.0	57968.080	3.0
467.8832	26.00	-.31	29056.312	3.0	50423.185	4.0
467.8901	24.01	-3.80	33418.110	2.5	54784.670	3.5
467.8949	7.01	-3.21	190120.240	1.0	211486.580	1.0
467.8995	29.01	-3.73	115359.800	4.0	136725.930	5.0
467.9021	15.01	-.98	106001.990	1.0	127368.000	2.0
467.9035	25.02	-1.36	194545.780	.5	215911.730	1.5
467.9040	74.00	-1.22	18147.942	0.0	39519.847	0.0
467.9043	24.01	-4.65	54444.190	3.5	75810.100	4.5
467.9107	26.02	-3.75	114339.950	4.0	135705.570	3.0
467.9110	59.01	-1.93	5000.766	0.0	26372.352	0.0
467.9124	7.00	-2.52	94793.460	1.5	116159.000	2.5
467.9159	28.01	-2.48	56371.410	3.5	77736.790	4.5
467.9180	64.00	.41	12421.258	0.0	33792.524	0.0
467.9219	26.00	-3.36	26224.961	3.0	47590.070	4.0
467.9222	26.00	-3.20	27166.804	4.0	48531.896	3.0
467.9497	26.00	-4.10	32873.623	4.0	54237.460	4.0
467.9639	24.00	-4.12	23512.000	1.0	44875.190	2.0
467.9719	22.00	-1.77	8492.421	1.0	29855.248	1.0
467.9834	13.01	-4.66	125866.700	1.0	147229.000	1.0
467.9867	24.01	-4.91	30307.600	1.5	51669.750	2.5
467.9946	25.02	-1.89	195308.790	4.5	216670.580	4.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
467.9953	26.00	-3.03	34017.084	1.0	55378.842	2.0
467.9994	25.01	-4.51	62572.200	2.0	83933.770	3.0
468.0000	7.00	-4.27	94793.460	1.5	116155.000	.5
468.0000	7.00	-3.36	94793.460	1.5	116155.000	1.5
468.0040	64.00	-.03	7420.492	0.0	28787.831	0.0
468.0044	25.00	-3.31	41031.480	4.5	62392.820	4.5
468.0130	58.01	-.59	8469.040	0.0	29835.968	0.0
468.0140	30.00	.28	32101.693	0.0	53468.575	0.0
468.0182	27.00	-3.54	23207.760	1.5	44568.470	2.5
468.0189	25.00	-4.43	33825.490	2.5	55186.170	2.5
468.0191	22.00	-4.40	26657.409	4.0	48018.080	4.0
468.0233	25.00	-4.88	35725.850	2.5	57086.330	2.5
468.0298	26.00	-3.50	12968.552	2.0	34328.733	3.0
468.0382	8.01	-5.00	254481.500	3.5	275841.300	3.5
468.0382	8.01	-4.15	254481.500	3.5	275841.300	4.5
468.0405	22.00	-2.58	27480.047	3.0	48839.740	3.0
468.0437	18.01	-1.42	188766.150	2.5	210125.700	2.5
468.0441	24.00	-.98	39158.630	4.0	60518.160	3.0
468.0441	24.00	-1.55	39158.630	4.0	60518.160	3.0
468.0469	24.00	-.73	25089.200	2.0	46448.600	1.0
468.0471	26.00	-2.93	23051.744	0.0	44411.137	1.0
468.0520	74.00	-1.53	4758.794	0.0	26123.941	0.0
468.0550	26.00	-3.07	34017.084	1.0	55376.117	1.0
468.0584	28.00	-1.91	30912.838	1.0	52271.716	2.0
468.0634	8.01	-1.16	234454.450	2.5	255813.100	2.5
468.0730	7.00	-3.14	94881.790	3.5	116240.000	2.5
468.0735	27.00	-2.81	32430.590	5.5	53788.780	4.5
468.0740	60.01	-1.89	483.945	0.0	21848.088	0.0
468.0831	8.01	-1.64	234454.450	2.5	255812.200	1.5
468.0840	24.00	-2.31	24940.610	2.0	46298.320	1.0
468.0864	24.00	-3.78	27820.230	3.0	49177.830	3.0
468.0888	23.00	-1.69	15103.770	4.5	36461.260	3.5
468.0895	25.02	-3.85	115780.230	2.5	137137.690	1.5
468.0897	26.00	-2.80	37162.729	3.0	58520.180	4.0
468.0990	58.01	-1.00	10969.423	0.0	32332.425	0.0
468.1035	28.00	-3.15	29320.782	3.0	50677.599	3.0
468.1061	9.02	-2.26	444057.440	1.5	465414.140	2.5
468.1276	24.01	-3.48	67070.480	1.5	88426.200	.5
468.1307	16.01	-3.46	109831.280	1.5	131186.860	2.5
468.1331	26.00	-4.04	31805.059	3.0	53160.530	3.0
468.1383	23.00	-4.66	19023.470	4.5	40378.700	4.5
468.1394	23.02	-2.40	141405.100	5.5	162760.280	4.5
468.1500	18.01	-1.93	160239.350	1.5	181594.050	2.5
468.1550	62.00	-.37	1451.835	0.0	22812.282	0.0
468.1651	10.01	-.98	302816.980	1.5	324170.990	2.5
468.1657	23.00	-3.05	15571.900	2.5	36925.880	3.5
468.1758	22.01	-4.82	43740.770	3.5	65094.290	4.5
468.1765	23.02	.56	160681.480	3.5	182034.970	4.5
468.1790	44.00	-.88	9114.300	0.0	30473.652	0.0
468.1840	7.00	-3.62	94770.850	.5	116124.000	.5
468.1840	7.00	-3.92	94770.850	.5	116124.000	1.5
468.1846	8.01	-2.61	240516.280	1.5	261869.400	2.5
468.1880	73.00	-1.91	1935.780	0.0	23294.721	0.0
468.1908	22.00	-1.03	386.874	4.0	21739.713	5.0
468.1931	24.01	-3.18	69498.270	4.5	90851.000	4.5
468.1984	29.01	.16	114511.440	1.0	135863.930	1.0
468.2017	14.00	-3.39	58311.659	0.0	79664.000	1.0
468.2064	22.00	-3.58	26910.705	6.0	48262.830	7.0
468.2153	10.00	-3.59	150121.592	1.0	171473.313	2.0
468.2280	18.01	-1.55	149179.170	3.5	170530.310	3.5
468.2307	28.00	-3.37	29481.020	4.0	50832.039	3.0
468.2310	76.00	-1.81	12663.231	0.0	34020.211	0.0
468.2320	39.01	-1.97	3226.301	0.0	24583.235	0.0
468.2320	75.00	-1.10	19357.805	0.0	40714.739	0.0
468.2372	27.00	-.32	25739.930	2.5	47090.650	2.5
468.2487	22.00	-4.85	6556.828	1.0	27907.026	2.0
468.2515	26.00	-4.37	31805.059	3.0	53155.130	4.0
468.2539	25.00	-3.75	38120.180	4.5	59470.140	3.5
468.2564	26.00	-3.33	23711.443	4.0	45061.287	3.0
468.2660	41.00	-.66	16534.792	0.0	37890.175	0.0
468.2690	62.01	-1.95	3468.273	0.0	24823.520	0.0
468.2700	22.00	-3.93	26564.385	3.0	47913.610	4.0
468.2778	23.00	-2.34	20789.130	2.5	42138.000	2.5
468.2887	22.00	-7.58	14105.680	3.0	35454.051	4.0
468.2980	27.00	-3.24	23207.760	1.5	44555.710	1.5
468.3013	23.00	-4.05	17181.980	4.5	38529.780	4.5
468.3021	28.01	-4.14	112906.930	1.5	134254.690	1.5
468.3070	64.00	-.68	7017.204	0.0	28370.718	0.0
468.3098	28.01	-4.34	113753.040	4.5	135100.450	3.5
468.3278	24.00	-4.19	38537.680	5.0	59884.270	6.0
468.3297	22.00	-4.24	26772.965	5.0	48119.470	5.0
468.3330	64.00	.25	7904.437	0.0	29256.765	0.0
468.3342	22.00	-4.06	26494.322	2.0	47840.620	3.0
468.3362	28.01	-3.28	99844.130	3.5	121190.340	4.5
468.3388	23.00	-4.79	20687.750	1.5	42033.840	1.5
468.3394	25.02	-4.84	89052.440	3.5	110398.500	2.5
468.3420	40.00	-.18	12259.943	0.0	33611.861	0.0
468.3450	60.00	-.27	0.000	0.0	21351.781	0.0
468.3540	74.00	-.91	19680.435	0.0	41031.806	0.0
468.3544	23.01	-4.61	52153.550	5.0	73498.930	6.0
468.3559	24.00	-.75	39158.630	4.0	60503.940	4.0
468.3564	26.00	-2.50	22838.320	2.0	44183.607	2.0
468.3660	9.02	-.47	444957.110	1.5	466301.960	2.5
468.3746	25.02	-3.64	174247.630	.5	195592.090	1.5
468.3779	10.00	-3.23	150917.431	0.0	172261.740	1.0
468.3830	42.00	-.34	25407.119	0.0	46757.168	0.0
468.3830	70.01	-.75	32182.351	0.0	53532.400	0.0
468.3875	28.01	-2.92	99559.330	2.5	120903.200	3.5
468.4020	44.00	-1.20	7985.094	0.0	29334.277	0.0
468.4040	60.00	-.59	1048.548	0.0	22397.640	0.0
468.4100	26.00	-4.06	26623.726	2.0	47966.571	3.0
468.4123	24.01	-3.79	45669.540	1.5	67012.280	2.5
468.4138	25.01	-3.59	85543.230	5.0	106885.900	4.0
468.4228	22.00	-4.62	25797.600	3.0	47139.860	4.0
468.4242	23.03	-1.52	265879.200	1.0	287221.400	2.0
468.4242	23.03	-1.40	265879.200	2.0	287221.400	2.0
468.4250	40.00	-1.63	5000.766	0.0	26348.901	0.0
468.4261	24.00	-3.45	31377.960	4.0	52720.070	4.0
468.4345	25.01	-3.59	43131.400	2.0	64473.130	3.0
468.4356	28.01	-3.56	113623.100	.5	134964.780	1.5
468.4419	23.00	-1.91	15270.420	1.5	36611.810	2.5
468.4437	27.00	-2.90	33173.360	3.5	54514.670	3.5
468.4510	22.00	-.80	17423.853	2.0	38764.832	3.0
468.4522	22.00	-6.93	7255.369	2.0	28596.293	1.0
468.4557	22.00	-4.19	27498.975	3.0	48839.740	3.0
468.4571	10.01	-2.15	302816.980	1.5	324157.680	2.5
468.4606	24.00	-2.30	24833.860	3.0	46174.400	3.0
468.4610	58.01	-.48	7259.177	0.0	28605.671	0.0
468.4626	10.01	-1.85	302816.980	1.5	324157.430	1.5
468.4782	24.01	-3.25	45730.740	2.5	67070.480	1.5
468.4863	24.00	-2.42	28679.430	1.0	50018.800	1.0
468.4870	73.00	-2.49	5565.369	0.0	26910.678	0.0
468.5008	23.01	-1.50	44657.990	2.0	65996.700	3.0
468.5026	26.00	-2.37	22946.810	1.0	44285.436	2.0
468.5041	24.00	-3.41	36034.220	3.0	57372.780	4.0
468.5111	23.00	-2.09	15078.250	.5	36416.490	1.5
468.5117	22.00	-1.45	25699.950	2.0	47038.160	3.0
468.5140	41.00	-.27	10969.423	0.0	32313.502	0.0
468.5155	9.02	-1.04	444957.110	1.5	466295.150	1.5
468.5190	40.01	-.45	19357.805	0.0	40701.657	0.0
468.5230	58.01	-1.19	6936.547	0.0	28280.216	0.0
468.5262	23.01	-3.77	13609.000	4.0	34946.550	4.0
468.5268	20.00	-1.26	23652.304	1.0	44989.830	2.0
468.5270	73.00	-2.10	9194.957	0.0	30538.444	0.0
468.5357	27.00	-4.20	33945.900	2.5	55283.020	2.5
468.5385	29.01	-3.09	116576.810	0.0	137913.800	1.0
468.5400	7.03	-1.05	484150.000	0.0	505492.895	0.0
468.5403	22.00	-3.80	26657.409	4.0	47994.320	5.0
468.5414	25.00	-4.94	37148.660	5.5	58485.520	4.5
468.5429	26.01	-4.30	78487.250	1.5	99824.040	2.5
468.5454	22.00	-5.67	8492.421	1.0	29829.097	0.0
468.5460	28.01	-3.33	113321.950	4.5	134658.600	4.5
468.5467	24.00	-3.03	28682.180	2.0	50018.800	1.0
468.5546	23.00	-3.74	20828.480	2.5	42164.740	3.5
468.5570	7.00	-3.40	94770.850	.5	116107.000	.5
468.5570	7.00	-4.90	94770.850	.5	116107.000	1.5
468.5590	27.01	-4.31	65604.400	3.0	86940.460	2.0
468.5638	26.02	-4.91	179178.620	3.0	200514.460	4.0
468.5696	2.01	1.18	390142.340	0.0	411483.887	0.0
468.5810	42.00	-.12	27584.872	0.0	48925.899	0.0
468.5840	32.00	-1.30	16292.819	0.0	37633.710	0.0
468.5853	27.00	-3.77	7442.410	3.5	28777.270	3.5
468.5950	26.01	-6.77	26055.400	2.5	47389.820	1.5
468.5959	25.00	-3.38	45060.810	3.5	66395.190	2.5
468.6002	18.01	-2.64	187589.230	2.5	208923.410	2.5
468.6040	27.00	-2.89	25041.160	1.5	46375.170	1.5
468.6072	22.00	-3.68	26772.965	5.0	48106.830	6.0
468.6097	23.01	-4.08	52082.880	4.0	73416.630	5.0
468.6098	28.00	-.61	29500.690	1.0	50834.435	2.0
468.6100	42.00	-.17	28149.475	0.0	49489.182	0.0
468.6108	24.00	-1.39	33338.200	0.0	54671.900	1.0
468.6183	28.01	-4.19	115565.980	2.5	136899.340	2.5
468.6189	14.03	-3.69	315317.360	4.5	336650.690	4.5
468.6189	14.03	-1.96	315317.360	5.5	336650.690	4.5
468.6189	14.03	-2.05	315317.360	4.5	336650.690	3.5
468.6190	90.00	-2.21	2823.013	0.0	24162.310	0.0
468.6207	28.00	-.64	29013.228	2.0	50346.477	2.0
468.6230	7.00	-4.07	94830.860	2.5	116164.000	1.5
468.6230	7.00	-2.62	94830.860	2.5	116164.000	2.5
468.6230	7.00	-2.76	94830.860	2.5	116164.000	3.5
468.6347	10.01	-2.22	302192.920	4.5	323525.530	4.5
468.6354	10.01	-.49	302192.920	4.5	323525.500	5.5
468.6363	24.00	-4.49	24282.340	4.0	45614.880	4.0
468.6488	18.01	-2.81	187589.230	2.5	208921.200	1.5
468.6523	27.00	-2.86	27497.060	2.5	48828.870	2.5
468.6545	10.01	-2.89	302839.280	2.5	324170.990	2.5
468.6570	40.00	-1.30	11534.025	0.0	32871.592	0.0
468.6584	10.01	-.76	302839.280	2.5	324170.810	3.5
468.6609	23.01	-3.58	32420.040	0.0	53751.460	1.0
468.6679	23.00	-3.57	21032.520	3.5	42363.620	3.5
468.6802	7.00	-3.62	94793.460	1.5	116124.000	.5
468.6802	7.00	-3.12	94793.460	1.5	116124.000	1.5
468.6802	7.00	-4.34	94793.460	1.5	116124.000	2.5
468.6848	22.00	-3.93	25699.950	2.0	47030.280	3.0
468.6882	22.00	-1.14	17369.590	1.0	38699.767	2.0
468.6925	23.00	-2.27	15078.250	.5	36408.230	1.5
468.6943	27.01	-4.82	65016.830	2.0	86346.730	3.0
468.6943	26.02	-4.88	179194.220	4.0	200524.120	5.0
468.6980	28.01	-3.01	98467.250	3.5	119796.980	2.5
468.7057	28.01	-3.61	115565.980	2.5	136895.360	3.5
468.7180	62.01	-1.66	322.630	0.0	21657.420	0.0
468.7191	18.02	-3.72	187823.050	2.0	209151.820	2.0
468.7304	26.00	-5.19	7728.058	3.0	29056.312	3.0
468.7329	7.00	-4.05	94830.860	2.5	116159.000	2.5
468.7329	7.00	-2.43	94830.860	2.5	116159.000	3.5
468.7378	26.00	-2.02	22838.320	2.0	44166.240	3.0
468.7457	23.02	.83	160321.890	2.5	181649.450	3.5
468.7576	24.00	-4.35	36034.220	3.0	57361.240	3.0
468.7620	14.00	-3.24	40991.884	1.0	62318.700	0.0
468.7651	26.00	-3.65	23051.744	0.0	44378.420	1.0
468.7653	24.00	-4.23	31393.400	5.0	52720.070	4.0
468.7701	29.01	-4.33	123556.640	2.0	144883.090	2.0
468.7719	26.02	-3.45	179178.620	3.0	200504.990	3.0
468.7800	40.00	-.01	5807.341	0.0	27139.309	0.0
468.7808	22.00	-2.19	11531.760	2.0	32857.721	3.0
468.7860	75.00	-.48	27100.927	0.0	48432.622	0.0
468.7881	10.01	-1.38	302831.800	.5	324157.430	1.5
468.8018	23.00	-2.15	20812.990	1.5	42138.000	2.5
468.8020	11.02	-4.45	440552.400	3.5	461877.400	4.5
468.8035	25.01	-4.17	43131.400	2.0	64456.330	2.0
468.8048	26.02	-3.17	185003.350	2.0	206328.220	3.0
468.8088	24.00	-4.02	35807.900	2.0	57132.590	1.0
468.8114	8.00	-4.61	102928.355	4.0	124252.926	3.0
468.8120	64.00	-1.15	483.945	0.0	21814.457	0.0
468.8154	27.00	-4.99	32464.730	4.5	53789.120	3.5
468.8211	24.00	-3.86	27500.370	3.0	48824.500	4.0
468.8215	25.00	-3.59	45130.160	4.5	66454.270	3.5
468.8220	42.00	.52	28068.817	0.0	49398.874	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
468.8229	27.00	-2.54	32464.730	4.5	53788.780	4.5
468.8352	22.00	-1.08	24921.110	1.0	46244.600	2.0
468.8367	26.00	-2.53	33801.555	2.0	55124.974	3.0
468.8444	23.01	-4.79	17910.980	4.0	39234.050	3.0
468.8450	40.00	-1.24	1209.863	0.0	22538.874	0.0
468.8473	29.01	-3.73	116326.160	3.0	137649.100	2.0
468.8492	27.00	-3.60	33945.900	2.5	55268.750	3.5
468.8511	22.00	-4.10	26910.705	6.0	48233.470	6.0
468.8625	10.01	-2.42	302192.920	4.5	323515.170	3.5
468.8673	10.01	-2.02	302839.280	2.5	324161.310	3.5
468.8730	62.00	-.04	2258.411	0.0	23586.148	0.0
468.8767	28.01	-4.41	79823.030	3.5	101144.630	3.5
468.8780	26.02	-3.88	185003.350	2.0	206324.890	2.0
468.8820	26.01	-4.59	62945.120	3.5	84266.480	2.5
468.8840	73.00	-1.41	17099.394	0.0	38426.631	0.0
468.8917	25.00	-2.68	45013.550	2.5	66334.470	3.5
468.8992	10.01	-3.59	302192.920	4.5	323513.500	3.5
468.9005	18.01	-1.17	183675.570	3.5	204996.090	3.5
468.9032	8.02	-2.35	370900.600	2.0	392221.000	2.0
468.9066	26.02	-3.81	179194.220	4.0	200514.460	4.0
468.9070	92.01	-1.99	0.000	0.0	21326.190	0.0
468.9095	10.01	-1.35	302192.920	4.5	323513.030	4.5
468.9200	90.01	-1.79	6613.917	0.0	27939.516	0.0
468.9311	9.00	-2.40	116143.579	.5	137462.710	1.5
468.9379	24.00	-.33	25206.020	3.0	46524.640	2.0
468.9395	26.00	-3.36	25091.620	0.0	46410.366	1.0
468.9456	22.01	-5.08	9518.050	2.5	30836.520	1.5
468.9469	16.01	-3.28	130641.000	1.5	151959.410	1.5
468.9472	10.01	-3.49	302839.280	2.5	324157.680	2.5
468.9500	58.01	-1.45	8872.327	0.0	30196.562	0.0
468.9527	10.01	-3.09	302839.280	2.5	324157.430	1.5
468.9570	62.01	-2.64	322.630	0.0	21646.547	0.0
468.9603	27.00	-3.09	29735.180	3.5	51052.980	3.5
468.9612	25.01	-2.84	49427.320	4.0	70745.080	3.0
468.9742	23.01	-4.49	19112.930	4.0	40430.100	4.0
468.9770	39.00	-.33	16050.847	0.0	37373.854	0.0
468.9788	22.01	-3.48	20891.880	3.5	42208.840	2.5
468.9878	26.02	-4.00	179207.570	5.0	200524.120	5.0
468.9920	25.00	-4.52	35769.970	3.5	57086.330	2.5
468.9960	27.00	-2.76	32841.990	4.5	54158.170	4.5
468.9973	24.00	-3.14	25106.340	3.0	46422.460	4.0
468.9977	23.03	-3.26	264482.800	2.0	285798.900	2.0
469.0011	22.00	-2.54	26892.926	3.0	48208.870	3.0
469.0110	44.00	-.96	8469.040	0.0	29790.502	0.0
469.0160	24.00	-.91	33671.550	3.0	54986.820	3.0
469.0166	27.00	-3.89	33674.380	2.5	54989.620	3.5
469.0170	58.01	-1.59	6936.547	0.0	28257.736	0.0
469.0350	60.00	-.73	0.000	0.0	21320.371	0.0
469.0351	12.02	-.95	562136.100	2.0	583450.500	1.0
469.0351	12.02	-.95	562136.100	2.0	583450.500	1.0
469.0372	26.00	-4.87	26105.908	6.0	47420.215	5.0
469.0374	26.00	-6.15	8154.713	1.0	29469.010	2.0
469.0430	24.00	-1.67	21810.840	1.0	43124.880	2.0
469.0483	25.02	-.96	194849.100	1.5	216162.900	1.5
469.0500	58.01	-1.34	8227.067	0.0	29546.756	0.0
469.0540	7.00	-3.40	94793.460	1.5	116107.000	.5
469.0540	7.00	-4.09	94793.460	1.5	116107.000	1.5
469.0633	29.01	-3.36	117928.480	1.0	139241.600	1.0
469.0683	6.00	-2.09	64086.920	3.0	85399.810	2.0
469.0785	25.02	-3.94	194971.150	2.5	216283.580	3.5
469.0796	22.00	-5.03	8602.340	2.0	29914.720	3.0
469.0857	13.01	-2.55	123468.100	3.0	144780.200	2.0
469.0860	42.00	-.26	25407.119	0.0	46725.172	0.0
469.0875	24.00	-4.30	33113.270	4.0	54425.290	4.0
469.0952	28.01	-2.47	98969.440	5.5	120281.110	4.5
469.1040	14.03	-2.98	315305.280	3.5	336616.550	3.5
469.1040	14.03	-1.44	315305.280	4.5	336616.550	3.5
469.1040	14.03	-1.55	315305.280	3.5	336616.550	2.5
469.1113	24.00	-3.79	24303.940	3.0	45614.880	4.0
469.1150	26.02	-3.90	179194.220	4.0	200504.990	3.0
469.1160	64.00	-.62	6452.602	0.0	27769.291	0.0
469.1180	57.01	-2.49	1371.178	0.0	22687.776	0.0
469.1276	30.02	-2.22	216895.300	1.0	238205.500	1.0
469.1311	23.00	-1.61	15270.420	1.5	36580.460	1.5
469.1328	6.00	-3.68	64089.850	1.0	85399.810	2.0
469.1335	25.01	-4.78	52373.180	3.0	73683.110	4.0
469.1337	22.00	-.60	8602.340	2.0	29912.262	3.0
469.1383	26.02	-4.21	184951.620	3.0	206261.330	4.0
469.1414	26.00	-1.37	24118.815	4.0	45428.385	4.0
469.1445	28.01	-2.75	115209.850	3.5	136519.280	4.5
469.1454	28.01	-3.61	100490.950	1.5	121800.340	1.5
469.1491	24.00	-1.04	39158.630	4.0	60467.850	5.0
469.1523	17.00	-1.93	74225.846	1.5	95534.923	.5
469.1571	6.00	-2.62	64090.950	2.0	85399.810	2.0
469.1583	10.00	-3.00	150772.112	1.0	172080.916	1.0
469.1620	56.00	.21	13514.000	0.0	34828.599	0.0
469.1640	90.00	-1.78	6291.287	0.0	27605.795	0.0
469.1641	9.02	-3.59	443630.960	3.5	464939.500	2.5
469.1654	7.00	-3.55	93581.520	.5	114890.000	1.5
469.1692	26.01	-2.98	63876.380	5.5	85184.690	4.5
469.1699	22.00	-8.50	6598.749	2.0	27907.026	2.0
469.1723	22.00	-4.37	25635.740	1.0	46943.910	2.0
469.1730	40.00	-2.09	5162.081	0.0	26476.180	0.0
469.1837	26.02	-3.83	179216.470	6.0	200524.120	5.0
469.1900	73.00	-1.51	9678.902	0.0	30992.229	0.0
469.1925	23.00	-3.62	19145.130	5.5	40452.380	5.5
469.1929	26.00	-4.82	21715.735	5.0	43022.969	4.0
469.1960	28.01	-2.66	115592.250	1.5	136899.340	2.5
469.1963	27.00	-2.16	29735.180	3.5	51042.260	2.5
469.1963	28.01	-4.50	115592.250	1.5	136899.330	1.5
469.1976	28.01	-4.27	100078.780	1.5	121385.800	1.5
469.2021	22.00	-3.54	27418.015	2.0	48724.830	1.0
469.2060	58.01	-1.42	5887.999	0.0	27200.599	0.0
469.2060	76.00	-1.60	11292.053	0.0	32604.653	0.0
469.2088	26.01	-3.99	65109.710	3.5	86416.220	3.5
469.2117	9.00	-2.55	116143.579	.5	137449.960	1.5
469.2129	22.00	-2.52	27418.015	2.0	48724.340	2.0
469.2189	24.01	-3.11	67868.050	2.5	89174.100	3.5
469.2432	8.01	-3.46	234454.450	2.5	255759.400	3.5
469.2435	22.00	-1.70	8602.340	2.0	29907.273	2.0
469.2500	57.01	-.53	14034.408	0.0	35345.010	0.0
469.2640	22.00	-2.70	26803.417	2.0	48107.420	2.0
469.2643	18.02	-4.60	187823.050	2.0	209127.040	1.0
469.2705	27.00	-3.09	33173.360	3.5	54477.070	3.5
469.2714	26.00	-4.01	37521.144	2.0	58824.810	2.0
469.2810	22.00	-3.39	25227.217	3.0	46530.450	4.0
469.2826	22.00	-2.71	27025.652	4.0	48328.810	4.0
469.2841	28.01	-3.18	98969.440	5.5	120272.530	4.5
469.2841	24.00	-3.11	33671.550	3.0	54974.640	2.0
469.2967	24.00	-3.25	24056.110	5.0	45358.630	4.0
469.3000	26.00	-4.63	26627.612	4.0	47929.981	4.0
469.3077	18.01	-2.47	183675.570	3.5	204977.590	2.5
469.3144	14.01	-2.25	97972.350	.5	119274.070	1.5
469.3165	27.00	-.50	26063.110	1.5	47364.730	1.5
469.3220	28.01	-4.40	112906.930	1.5	134208.300	2.5
469.3225	8.01	-.91	234454.450	2.5	255755.800	2.5
469.3302	28.01	-1.50	98969.440	5.5	120270.440	5.5
469.3350	73.00	-.10	22584.106	0.0	43890.849	0.0
469.3392	28.01	-3.98	109269.830	1.5	130570.420	.5
469.3401	23.00	-2.12	19078.150	3.5	40378.700	4.5
469.3434	28.01	-4.34	97799.660	1.5	119100.060	1.5
469.3630	62.01	-1.99	1451.835	0.0	22757.306	0.0
469.3648	23.00	-1.13	19026.340	2.5	40325.770	2.5
469.3657	25.01	-3.21	52383.720	4.0	73683.110	4.0
469.3663	22.00	-2.73	170.132	3.0	21469.494	3.0
469.3680	10.00	-3.70	150772.112	1.0	172071.396	2.0
469.3730	74.00	.31	26536.324	0.0	47841.342	0.0
469.3789	25.00	-1.42	41932.640	3.5	63231.430	4.5
469.3855	27.00	-2.86	30742.650	.5	52041.140	.5
469.3870	24.01	-3.84	67875.680	3.5	89174.100	3.5
469.3948	24.00	-1.19	24056.110	5.0	45354.180	5.0
469.4075	24.00	-1.84	41393.470	5.0	62690.960	5.0
469.4090	90.01	-2.47	0.000	0.0	21303.384	0.0
469.4112	16.00	-1.40	52622.690	2.0	73920.011	3.0
469.4141	27.00	-3.77	24627.790	4.5	45924.980	3.5
469.4256	9.02	-.57	445006.130	2.5	466302.800	3.5
469.4273	7.01	-.92	223643.300	0.0	244939.890	1.0
469.4330	64.00	.52	8388.382	0.0	29690.676	0.0
469.4424	27.00	-2.86	23184.230	2.5	44480.140	2.5
469.4441	9.02	-1.88	445006.130	2.5	466301.960	2.5
469.4494	25.00	-2.13	45060.810	3.5	66356.400	4.5
469.4510	41.00	-.23	16857.422	0.0	38158.900	0.0
469.4640	27.00	-4.05	33150.680	1.5	54445.610	2.5
469.4642	7.01	.10	190120.240	1.0	211415.160	2.0
469.4710	27.00	-4.98	32430.590	5.5	53725.200	4.5
469.4726	22.01	-4.02	45472.890	.5	66767.430	.5
469.4880	58.01	-1.18	6452.602	0.0	27752.401	0.0
469.4900	90.01	-2.40	4113.534	0.0	25413.242	0.0
469.4990	75.00	-1.86	15647.559	0.0	36946.859	0.0
469.5034	7.00	-2.82	94830.860	2.5	116124.000	1.5
469.5034	7.00	-3.39	94830.860	2.5	116124.000	2.5
469.5040	40.00	-.63	17018.737	0.0	38317.810	0.0
469.5078	28.01	-3.45	112422.190	5.5	133715.130	4.5
469.5149	24.00	-1.43	24056.110	5.0	45348.730	6.0
469.5153	28.01	-3.23	113321.950	4.5	134614.550	5.5
469.5184	26.02	-3.26	185003.350	2.0	206295.810	1.0
469.5193	27.00	-3.51	26232.050	3.5	47524.470	4.5
469.5197	17.02	-2.55	179781.000	.5	201073.400	.5
469.5224	24.01	-4.36	67344.420	2.5	88636.700	1.5
469.5255	26.01	-3.83	64832.000	4.5	86124.140	4.5
469.5279	24.00	-4.60	27223.050	2.0	48515.080	3.0
469.5283	20.02	-2.91	341601.460	2.0	362893.470	2.0
469.5427	23.00	-2.34	19023.470	4.5	40314.830	3.5
469.5443	16.00	-1.56	52622.690	2.0	73913.978	2.0
469.5470	41.00	-.97	10808.108	0.0	32105.231	0.0
469.5495	25.02	-3.13	195112.810	3.5	216403.860	2.5
469.5544	23.00	-3.89	13801.530	1.5	35092.360	1.5
469.5555	9.02	-5.00	443630.960	3.5	464921.740	3.5
469.5579	8.00	-4.21	102928.355	4.0	124219.025	3.0
469.5592	27.00	-2.63	30742.650	.5	52033.260	1.5
469.5744	24.01	-2.11	59130.510	1.5	80420.430	2.5
469.5864	26.02	-1.42	205092.530	4.0	226381.910	3.0
469.5899	7.01	-.68	223658.550	1.0	244947.770	2.0
469.5943	9.02	-2.02	445006.130	2.5	466295.150	1.5
469.5949	22.00	-4.28	6598.749	2.0	27887.740	3.0
469.6007	28.01	-.85	116833.150	4.5	138121.880	4.5
469.6060	23.00	-1.87	19026.340	2.5	40314.830	3.5
469.6082	25.00	-2.07	45130.160	4.5	66418.550	5.5
469.6091	28.01	-2.81	115000.250	3.5	136288.600	2.5
469.6177	25.01	-4.56	62587.500	3.0	83875.460	4.0
469.6228	23.00	-4.07	17242.050	5.5	38529.780	4.5
469.6252	16.00	-1.78	52622.690	2.0	73910.309	1.0
469.6358	8.01	-1.39	185499.200	2.5	206786.340	1.5
469.6362	8.01	-.98	234402.480	1.5	255689.600	2.5
469.6382	28.01	-2.84	112686.300	2.5	133973.330	2.5
469.6440	60.00	-.04	3629.588	0.0	24922.312	0.0
469.6510	42.00	-.91	20809.640	0.0	42102.046	0.0
469.6535	22.00	-2.44	27750.124	5.0	49036.460	4.0
469.6614	28.01	-2.59	114836.630	3.5	136122.610	2.5
469.6678	23.00	-4.08	20828.480	2.5	42114.170	3.5
469.6702	21.01	-3.91	39114.440	1.0	60400.020	1.0
469.6737	28.01	-2.58	113321.950	4.5	134607.370	4.5
469.6810	39.00	-.02	15889.531	0.0	37180.577	0.0
469.6909	22.00	-1.77	17369.590	1.0	38654.230	1.0
469.6983	9.01	-.10	267399.940	1.0	288684.250	2.0
469.6998	22.00	-3.22	27740.190	2.0	49024.430	3.0
469.7280	27.01	-4.37	65657.500	1.0	86940.460	2.0
469.7393	24.00	-1.17	27176.220	1.0	48456.670	2.0
469.7420	64.00	.05	6291.287	0.0	27579.569	0.0
469.7445	7.00	-2.28	94881.790	3.5	116164.000	3.5
469.7452	27.00	-1.48	32654.500	2.5	53936.680	2.5
469.7470	41.00	-1.10	8630.355	0.0	29918.410	0.0
469.7485	25.00	-4.29	33825.490	2.5	55107.520	3.5
469.7490	29.00	-.86	42264.541	0.0	63552.505	0.0
469.7556	18.01	-1.31	183797.360	2.5	205079.070	2.5
469.7560	26.02	-.95	184951.620	3.0	206233.310	2.0
469.7593	24.01	-2.06	45730.740	2.5	67012.280	2.5
469.7611	23.00	-3.73	13810.900	.5	35092.360	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
469.7637	7.01	-1.52	223658.550	1.0	244939.690	1.0
469.7768	29.01	-3.84	117747.450	3.0	139028.200	2.0
469.7834	24.00	-.80	41393.470	5.0	62673.920	6.0
469.7840	10.01	-1.62	302890.570	2.5	324170.990	2.5
469.7880	10.01	-2.29	302890.570	2.5	324170.810	3.5
469.7944	25.01	-4.83	49465.130	3.0	70745.080	3.0
469.7978	24.00	-3.14	35807.900	2.0	57087.700	2.0
469.7984	18.01	-1.76	182222.030	1.5	203501.800	2.5
469.8064	24.00	-3.19	27382.180	2.0	48661.590	3.0
469.8185	15.01	-2.06	103668.740	3.0	124947.600	2.0
469.8234	25.00	-2.98	37148.660	5.5	58427.300	5.5
469.8249	21.01	-2.84	4802.750	2.0	26081.320	2.0
469.8386	27.00	-.77	26250.490	.5	47528.440	.5
469.8389	28.00	-.87	32973.414	4.0	54251.353	3.0
469.8430	10.01	-.58	302247.780	3.5	323525.530	4.5
469.8466	24.00	-.07	25359.620	4.0	46637.210	3.0
469.8479	24.00	-1.94	41393.470	5.0	62671.000	4.0
469.8549	7.00	-3.21	94881.790	3.5	116159.000	3.5
469.8554	7.01	-.92	223658.550	1.0	244935.740	0.0
469.8596	24.00	-1.31	21847.880	2.0	43124.680	2.0
469.8629	24.00	-1.16	24897.550	4.0	46174.400	3.0
469.8630	74.00	-1.04	19680.435	0.0	40963.234	0.0
469.8662	22.01	-4.62	9930.740	1.5	31207.440	2.5
469.8702	25.01	-3.87	85673.720	4.0	106950.240	3.0
469.8720	24.00	-1.39	33542.110	2.0	54818.550	2.0
469.8765	22.00	-4.89	26564.385	3.0	47840.620	3.0
469.8765	22.00	-.99	8492.421	1.0	29768.655	2.0
469.8786	7.00	-3.80	94830.860	2.5	116107.000	1.5
469.8826	27.00	-1.45	33150.680	1.5	54426.640	1.5
469.8829	26.00	-4.57	21715.735	5.0	42991.680	5.0
469.8836	22.00	-1.33	17423.853	2.0	38699.767	2.0
469.8923	18.01	-1.74	183675.570	3.5	204951.090	3.5
469.8932	28.01	-2.49	113321.950	4.5	134597.430	5.5
469.8949	24.00	-1.76	24833.860	3.0	46109.260	2.0
469.8978	28.01	-3.87	99040.750	1.5	120316.020	.5
469.9010	72.00	-.39	17905.969	0.0	39187.047	0.0
469.9040	25.00	-3.98	41230.300	3.5	62505.290	3.5
469.9159	22.00	-2.17	20062.980	1.0	41337.430	2.0
469.9177	27.00	-3.62	8460.810	2.5	29735.180	3.5
469.9265	24.00	-4.32	35813.730	3.0	57087.700	2.0
469.9314	23.00	-1.53	15264.830	5.5	36538.580	4.5
469.9334	25.00	-2.34	45060.810	3.5	66334.470	3.5
469.9340	62.01	-1.88	2661.698	0.0	23941.282	0.0
469.9451	14.01	-2.46	97972.350	.5	119245.480	.5
469.9585	24.00	-.63	33934.880	3.0	55207.400	4.0
469.9616	27.00	-3.64	23207.760	1.5	44480.140	2.5
469.9630	57.01	-2.27	3226.301	0.0	24504.572	0.0
469.9681	28.00	-2.64	33500.854	3.0	54772.940	3.0
469.9709	23.02	-3.83	141488.320	4.5	162760.280	4.5
469.9720	72.01	-.78	20003.065	0.0	41280.928	0.0
469.9979	10.01	-.73	302890.570	2.5	324161.310	3.5
470.0032	7.01	-.62	223688.450	2.0	244958.950	3.0
470.0053	22.00	-3.70	21588.496	4.0	42858.900	3.0
470.0140	90.01	-1.16	14195.724	0.0	35471.686	0.0
470.0184	23.02	-1.06	160379.640	2.5	181649.450	3.5
470.0184	26.00	-3.12	29798.960	4.0	51068.770	5.0
470.0215	16.01	-.95	130641.000	1.5	151910.670	1.5
470.0244	10.01	-1.36	281720.280	1.5	302989.820	1.5
470.0363	24.00	-.77	39158.630	4.0	60427.630	5.0
470.0410	74.00	-2.48	6129.972	0.0	27404.712	0.0
470.0422	26.00	-4.29	17726.985	2.0	38995.717	1.0
470.0430	56.00	-.63	12636.000	0.0	33910.649	0.0
470.0440	75.00	-.92	21616.215	0.0	42890.819	0.0
470.0454	24.00	-1.38	38537.680	5.0	59806.270	5.0
470.0454	10.01	-3.47	281720.280	1.5	302988.870	.5
470.0490	42.00	.17	28714.077	0.0	49988.455	0.0
470.0558	25.02	-1.62	194894.780	1.5	216162.900	1.5
470.0597	24.00	-1.04	21856.940	3.0	43124.880	2.0
470.0615	22.00	-1.73	25926.820	4.0	47194.680	4.0
470.0675	22.01	-3.89	45548.900	1.5	66816.490	1.5
470.0719	10.01	-1.83	302247.780	3.5	323515.170	3.5
470.0737	24.01	-4.27	53051.550	1.5	74318.860	2.5
470.0781	10.01	-3.05	302890.570	2.5	324157.680	2.5
470.0830	25.02	-3.96	174048.890	2.5	195315.780	2.5
470.0837	10.01	-2.91	302890.570	2.5	324157.430	1.5
470.0865	15.01	-1.36	103166.370	1.0	124433.100	1.0
470.1088	10.01	-1.71	302247.780	3.5	323513.500	3.5
470.1130	25.00	-1.61	23549.200	2.5	44814.730	1.5
470.1143	13.02	-.99	167612.750	2.5	188878.220	1.5
470.1192	10.01	-2.88	302247.780	3.5	323513.030	4.5
470.1287	13.02	-2.14	167612.750	2.5	188877.570	2.5
470.1320	73.00	-1.66	10888.765	0.0	32159.387	0.0
470.1346	28.00	-2.55	28068.091	4.0	49332.643	4.0
470.1353	20.02	-1.47	325467.670	2.0	346732.190	1.0
470.1424	13.02	-.83	167613.370	3.5	188877.570	2.5
470.1530	28.00	-.38	32973.414	4.0	54237.136	4.0
470.1548	9.01	-.11	267399.940	1.0	288663.580	2.0
470.1592	24.01	-2.83	33521.230	3.5	54784.670	3.5
470.1679	25.00	-3.86	37164.250	6.5	58427.300	5.5
470.1782	24.00	-2.74	33542.110	2.0	54804.690	1.0
470.1822	30.02	-3.27	217073.800	2.0	238336.200	2.0
470.1860	18.01	-.52	183675.570	3.5	204937.800	4.5
470.1891	26.00	-3.49	27666.334	1.0	48928.423	2.0
470.1908	24.00	-2.58	25106.340	3.0	46368.350	3.0
470.1927	22.00	-.56	25388.334	4.0	46650.260	3.0
470.2050	92.01	-1.96	4678.136	0.0	25945.456	0.0
470.2110	29.01	-3.39	116388.000	2.0	137649.100	2.0
470.2244	28.00	-1.70	33500.854	3.0	54761.346	4.0
470.2311	28.01	-2.94	115592.250	1.5	136852.440	1.5
470.2312	18.00	-4.25	95399.870	1.0	116660.054	1.0
470.2320	90.01	-2.24	9598.245	0.0	30864.343	0.0
470.2406	28.01	-4.16	95573.390	3.5	116833.150	4.5
470.2430	23.02	.76	161027.320	4.5	182286.970	5.5
470.2470	74.00	-1.14	18873.860	0.0	40139.280	0.0
470.2503	7.01	-.83	223688.450	2.0	244947.770	2.0
470.2503	9.01	-4.55	256262.460	1.0	277521.780	2.0
470.2520	92.01	-1.96	2258.411	0.0	23523.605	0.0
470.2534	25.02	-4.57	174332.910	1.5	195592.090	1.5
470.2583	26.01	-3.98	54870.620	2.5	76129.580	1.5
470.2605	18.01	-2.00	183797.360	2.5	205056.220	1.5
470.2640	57.00	-1.25	4032.876	0.0	25297.527	0.0
470.2685	24.00	-4.41	20523.690	4.0	41782.190	4.0
470.2711	24.00	-3.33	27300.190	1.0	48558.570	2.0
470.2731	29.01	-2.93	123556.640	2.0	144814.930	3.0
470.2740	24.00	-4.69	20523.940	5.0	41782.190	4.0
470.2791	25.01	-2.61	49820.160	2.0	71078.180	1.0
470.2910	26.00	-2.84	26105.908	6.0	47363.390	6.0
470.2991	12.00	-1.72	35051.264	1.0	56308.381	2.0
470.2995	29.01	-3.02	118484.000	3.0	139741.100	3.0
470.3001	22.01	-4.93	20951.770	2.5	42208.840	2.5
470.3003	25.00	-4.85	41230.300	3.5	62487.360	2.5
470.3061	17.01	-2.63	149952.400	1.0	171209.200	2.0
470.3065	24.01	-3.72	67379.920	1.5	88636.700	1.5
470.3076	26.02	-3.06	114325.350	5.0	135582.080	6.0
470.3092	27.00	-2.63	27497.060	2.5	48753.720	1.5
470.3149	17.02	-1.56	195268.000	1.5	216524.600	2.5
470.3193	22.00	-4.69	26657.409	4.0	47913.610	4.0
470.3280	57.01	-.57	15566.901	0.0	36828.659	0.0
470.3358	18.01	-1.76	174820.930	.5	196076.390	1.5
470.3363	22.00	-2.33	26803.417	2.0	48058.850	1.0
470.3450	26.00	-3.53	26351.049	5.0	47606.092	5.0
470.3486	23.01	-4.22	13490.840	2.0	34745.720	3.0
470.3570	60.01	-1.69	2984.328	0.0	24244.775	0.0
470.3571	26.00	-4.02	34121.623	0.0	55376.117	1.0
470.3601	20.02	-1.81	323003.560	1.0	344257.920	1.0
470.3641	26.01	-3.90	64425.460	2.5	85679.640	2.5
470.3690	10.01	-3.56	307894.840	2.5	329146.800	1.5
470.3718	10.01	-4.87	307894.840	2.5	329148.670	2.5
470.3734	27.00	-4.24	34196.210	1.5	55449.970	2.5
470.3803	28.00	-.90	29500.690	1.0	50754.137	2.0
470.3822	23.00	-2.40	20767.570	3.5	42020.930	3.5
470.3858	12.02	-.99	585466.200	1.0	606719.400	2.0
470.3858	17.01	-3.93	149798.300	2.0	171051.500	1.0
470.3917	24.00	-3.29	41409.030	2.0	62661.960	3.0
470.3922	22.00	-2.92	8602.340	2.0	29855.248	1.0
470.3990	90.00	-2.04	0.000	0.0	21258.549	0.0
470.3995	23.02	-2.24	141507.700	3.5	162760.280	4.5
470.4159	27.00	-.51	29948.760	2.5	51200.600	1.5
470.4247	7.01	-.68	223688.450	2.0	244939.890	1.0
470.4308	18.00	-3.01	104102.144	1.0	125353.310	1.0
470.4353	23.00	-3.25	15571.900	2.5	36822.860	3.5
470.4384	27.00	-.91	29948.760	2.5	51199.580	3.5
470.4400	62.01	-1.55	0.000	0.0	21256.696	0.0
470.4433	8.01	-4.76	254590.700	4.5	275841.300	4.5
470.4491	24.00	-4.63	24056.110	5.0	45306.450	5.0
470.4573	27.00	-4.41	23855.620	4.5	45105.590	3.5
470.4594	29.00	-.83	41135.335	0.0	62391.154	0.0
470.4677	22.00	-3.52	27665.570	1.0	48915.070	2.0
470.4699	24.01	-3.77	67387.300	2.5	88636.700	1.5
470.4710	28.01	-4.01	112906.930	1.5	134156.280	1.5
470.4739	23.02	.88	160576.620	3.5	181825.840	4.5
470.4836	28.01	-.74	98969.440	5.5	120218.220	6.5
470.4845	25.00	-3.92	38008.700	5.5	59257.440	4.5
470.4878	25.02	-2.57	195308.790	4.5	216557.380	3.5
470.4943	26.00	-1.33	29732.721	1.0	50981.020	0.0
470.4970	22.00	-3.70	20209.444	2.0	41457.620	3.0
470.4978	23.00	-1.05	19189.280	1.5	40437.420	1.5
470.4984	24.00	-2.19	33423.790	1.0	54671.900	1.0
470.5040	75.00	-.70	22019.503	0.0	43273.307	0.0
470.5069	28.01	-1.75	114874.880	2.5	136122.610	2.5
470.5093	23.00	-2.36	19078.150	3.5	40325.770	2.5
470.5252	12.02	-2.03	585466.200	1.0	606713.100	1.0
470.5286	27.00	-3.15	23207.760	1.5	44454.510	.5
470.5319	28.01	-4.86	106620.530	3.5	127867.130	4.5
470.5383	28.01	-2.81	100078.780	1.5	121325.090	2.5
470.5401	23.01	-4.91	52252.700	6.0	73498.930	6.0
470.5447	22.00	-4.70	6661.003	3.0	27907.026	2.0
470.5452	26.00	-3.11	28604.610	2.0	49850.610	3.0
470.5456	24.00	-1.44	33906.650	1.0	55152.630	2.0
470.5658	24.00	-3.55	25177.390	4.0	46422.460	4.0
470.5830	22.00	-3.19	27480.047	3.0	48724.340	2.0
470.5904	22.00	-4.73	25699.950	2.0	46943.910	2.0
470.5916	28.00	-2.94	29500.690	1.0	50744.593	1.0
470.6050	19.02	-.69	242526.700	.5	263770.000	.5
470.6060	42.00	-.21	23390.681	0.0	44639.879	0.0
470.6074	27.00	-3.83	33439.720	4.5	54682.910	4.5
470.6081	24.00	-2.35	25106.340	3.0	46349.500	2.0
470.6090	73.00	-1.63	11130.738	0.0	32379.800	0.0
470.6112	27.01	-4.27	63344.100	3.0	84587.120	4.0
470.6138	23.00	-1.49	15571.900	2.5	36814.800	1.5
470.6159	22.00	-1.29	20126.055	3.0	41368.860	4.0
470.6170	74.00	-1.63	16292.819	0.0	37541.520	0.0
470.6211	24.00	-3.62	27935.260	4.0	49177.830	3.0
470.6250	90.01	-2.18	6936.547	0.0	28184.887	0.0
470.6258	23.00	-.48	20767.570	3.5	42009.930	2.5
470.6291	7.00	-2.74	94881.790	3.5	116124.000	2.5
470.6302	26.00	-2.87	29371.860	3.0	50614.020	4.0
470.6329	9.01	-1.75	267399.940	1.0	288641.980	0.0
470.6360	27.00	-3.05	23152.570	3.5	44394.470	3.5
470.6369	28.01	-3.27	98969.440	5.5	120211.300	5.5
470.6380	28.01	-4.94	116512.060	3.5	137753.870	4.5
470.6400	7.01	-.74	223731.590	3.0	244973.310	4.0
470.6426	25.02	-2.14	195315.780	2.5	216557.380	3.5
470.6540	60.01	-1.50	0.000	0.0	21247.031	0.0
470.6573	23.02	-2.55	141144.170	4.5	162385.110	3.5
470.6579	23.00	-.04	17242.050	5.5	38482.960	6.5
470.6579	9.01	-.43	267399.940	1.0	288640.850	1.0
470.6632	28.00	-1.17	31031.042	3.0	52271.716	2.0
470.6643	26.00	-6.31	12560.933	3.0	33801.555	2.0
470.6657	22.00	-2.05	25797.600	3.0	47036.160	3.0
470.6757	14.00	-2.33	40991.884	1.0	62231.990	2.0
470.6803	11.02	-2.72	444748.100	1.5	465988.000	.5
470.6960	60.00	-.48	1048.548	0.0	22293.683	0.0
470.6967	21.00	-.31	18515.770	1.5	39754.930	2.5
470.6998	26.00	-3.05	26351.049	5.0	47590.070	4.0
470.7065	23.02	-1.09	162760.280	4.5	183999.000	3.5
470.7260	42.00	.30	20003.065	0.0	41246.846	0.0
470.7281	26.00	-1.16	26140.164	3.0	47377.909	4.0

C4

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
470.7319	24.00	-4.19	41409.030	2.0	62646.600	2.0
470.7357	27.00	-2.86	32464.730	4.5	53702.130	3.5
470.7428	23.00	-.75	15688.800	2.5	36925.880	3.5
470.7457	8.01	-1.49	234454.450	2.5	255691.400	3.5
470.7490	22.01	-3.74	43740.770	3.5	64977.570	3.5
470.7491	26.00	-2.37	22946.810	1.0	44183.607	2.0
470.7517	23.00	-2.42	19078.150	3.5	40314.830	3.5
470.7540	59.01	-2.20	1613.150	0.0	22855.667	0.0
470.7563	27.01	-4.62	64359.560	3.0	85596.030	2.0
470.7659	25.00	-3.45	37630.620	4.5	58866.660	4.5
470.7685	22.01	-4.60	42208.840	2.5	63444.760	3.5
470.7701	26.01	-3.73	63948.840	4.5	85184.690	4.5
470.7721	28.01	-3.99	98561.220	2.5	119796.980	2.5
470.7752	24.00	-.91	27223.050	2.0	48458.670	2.0
470.7790	40.00	-.62	11856.655	0.0	33098.044	0.0
470.7856	8.01	-.62	234454.450	2.5	255689.600	2.5
470.7940	58.01	-1.28	7017.204	0.0	28257.916	0.0
470.7940	59.01	-2.27	403.288	0.0	21644.000	0.0
470.7999	14.00	-3.84	40991.884	1.0	62226.390	1.0
470.8009	26.02	-4.66	185061.350	1.0	206295.810	1.0
470.8018	24.00	.13	25548.640	5.0	46783.060	4.0
470.8082	9.01	-.93	267399.940	1.0	288634.070	2.0
470.8094	18.02	-1.86	231341.800	2.0	252575.880	1.0
470.8100	90.01	-2.00	11614.683	0.0	32854.674	0.0
470.8129	9.02	-1.63	444957.110	1.5	466191.030	2.5
470.8157	24.00	-2.91	24940.610	2.0	46174.400	3.0
470.8190	57.00	-.64	9114.300	0.0	30353.885	0.0
470.8198	20.02	-1.23	343110.240	0.0	364343.850	1.0
470.8206	23.00	-2.66	19145.130	5.5	40378.700	4.5
470.8220	42.00	-.56	18147.942	0.0	39387.391	0.0
470.8290	41.00	-.37	10808.108	0.0	32047.242	0.0
470.8420	18.00	-3.30	104102.144	1.0	125334.750	0.0
470.8599	23.00	-3.36	20789.130	2.5	42020.930	3.5
470.8650	28.00	-2.63	33500.854	3.0	54732.425	2.0
470.8661	22.01	-2.37	9975.920	1.5	31207.440	2.5
470.8727	28.01	-2.37	99040.750	1.5	120271.970	2.5
470.8747	9.01	-.95	267399.940	1.0	288631.070	1.0
470.8836	20.02	-.08	326186.320	3.0	347417.050	3.0
470.8840	72.00	-.20	22745.421	0.0	43982.074	0.0
470.8850	39.00	-.82	15082.956	0.0	36319.564	0.0
470.8863	27.00	-2.78	33674.380	2.5	54904.990	2.5
470.8880	77.00	-1.11	18954.517	0.0	40190.989	0.0
470.8914	22.00	-2.45	17423.853	2.0	38654.230	1.0
470.8920	56.01	-.89	49390.050	0.0	70626.342	0.0
470.8981	26.00	-1.82	29356.780	2.0	50586.857	3.0
470.9005	24.00	-4.78	24056.110	5.0	45286.080	4.0
470.9007	26.02	-2.09	185003.350	2.0	206233.310	2.0
470.9033	27.00	-1.47	32464.730	4.5	53694.570	3.5
470.9074	26.00	-.87	29469.010	2.0	50698.666	2.0
470.9207	26.02	-3.92	114325.350	5.0	135554.410	4.0
470.9262	24.01	-3.81	47354.630	2.5	68583.440	2.5
470.9266	26.02	-2.21	184951.620	3.0	206180.410	3.0
470.9286	23.03	-1.27	263111.400	4.0	284340.100	4.0
470.9299	9.01	-.83	267399.940	1.0	288628.580	2.0
470.9342	21.00	.01	18571.400	2.5	39799.850	3.5
470.9435	7.01	-2.17	168892.210	1.0	190120.240	1.0
470.9480	44.00	-.20	9033.642	0.0	30267.409	0.0
470.9499	26.00	-4.91	26224.961	3.0	47452.702	4.0
470.9521	28.00	-2.91	27943.543	1.0	49171.187	1.0
470.9557	7.00	-3.67	93581.520	.5	114809.000	.5
470.9583	7.01	-.38	223731.590	3.0	244958.950	3.0
470.9612	24.01	-4.01	69498.270	4.5	90725.500	3.5
470.9628	26.01	-3.14	54902.420	1.5	76129.580	1.5
470.9710	60.01	-1.72	1451.835	0.0	22684.565	0.0
470.9712	25.00	-.48	23796.670	3.5	44523.450	3.5
470.9722	22.00	-3.82	6661.003	3.0	27887.740	3.0
470.9780	64.00	-.93	967.890	0.0	22200.304	0.0
470.9794	25.01	-3.69	49291.310	3.0	70517.720	3.0
470.9832	25.00	-3.44	45130.160	4.5	66356.400	4.5
470.9926	26.00	-2.87	33765.291	2.0	54991.110	1.0
471.0012	24.00	-2.97	35862.820	4.0	57088.250	5.0
471.0026	22.00	-4.51	27498.975	3.0	48724.340	2.0
471.0043	28.00	-3.04	29481.020	4.0	50706.310	4.0
471.0080	40.00	-.16	5484.711	0.0	26715.773	0.0
471.0091	22.00	-3.16	27614.667	4.0	48839.740	3.0
471.0190	22.00	-.63	17540.205	3.0	38764.632	3.0
471.0193	22.00	-1.30	8436.618	0.0	29661.232	1.0
471.0254	24.00	-2.18	24833.860	3.0	46058.200	4.0
471.0286	26.00	-1.47	24338.766	3.0	45562.959	3.0
471.0487	10.00	-2.75	151038.452	1.0	172261.740	1.0
471.0551	13.01	-3.29	123415.900	2.0	144638.900	2.0
471.0551	13.01	-2.56	123415.900	2.0	144638.900	1.0
471.0551	13.01	-4.84	123415.900	2.0	144638.900	3.0
471.0556	23.00	-.16	17181.980	4.5	38404.960	5.5
471.0573	28.01	-2.58	110573.360	2.5	131796.260	2.5
471.0640	62.01	-1.86	5242.739	0.0	26471.277	0.0
471.0682	24.00	-1.49	33423.790	1.0	54646.200	0.0
471.0683	10.00	-4.35	150858.508	2.0	172080.916	1.0
471.0731	27.00	-4.63	33674.380	2.5	54896.570	3.5
471.0789	24.01	-3.62	53051.550	1.5	74273.480	1.5
471.0824	18.01	-4.63	149179.170	3.5	170400.940	2.5
471.0916	22.00	-4.66	26772.965	5.0	47994.320	5.0
471.1017	13.01	-2.39	123418.000	3.0	144638.900	2.0
471.1017	13.01	-3.29	123418.000	3.0	144638.900	3.0
471.1024	25.00	-2.31	37630.620	4.5	58851.490	5.5
471.1040	23.00	-.99	20789.130	2.5	42009.930	2.5
471.1190	74.00	-1.19	19115.832	0.0	40341.892	0.0
471.1246	24.00	-1.89	35813.730	3.0	57033.600	4.0
471.1277	27.00	-3.61	33945.900	2.5	55165.630	2.5
471.1337	28.01	-2.94	115108.090	2.5	136327.550	1.5
471.1357	25.00	-4.16	38120.180	4.5	59339.550	3.5
471.1364	24.01	-3.75	69506.160	3.5	90725.500	3.5
471.1406	7.00	-4.74	94770.850	.5	115990.000	.5
471.1487	28.00	-4.03	35639.148	3.0	56857.933	4.0
471.1544	22.01	-4.00	45548.900	1.5	66767.430	.5
471.1639	13.01	-2.23	123420.800	4.0	144638.900	3.0
471.1680	22.00	-2.20	11639.804	3.0	32857.721	3.0
471.1717	24.00	-1.53	33934.880	3.0	55152.630	2.0
471.1723	24.00	-3.88	35870.530	4.0	57088.250	5.0
471.1729	28.00	-2.91	30979.789	4.0	52197.482	3.0
471.1737	21.00	-.69	18504.050	.5	39721.710	1.5
471.1888	24.00	-1.41	33935.650	2.0	55152.630	2.0
471.1920	40.00	-.38	12259.943	0.0	33482.714	0.0
471.1980	64.01	-1.33	8791.670	0.0	30014.171	0.0
471.1992	25.00	-3.32	38351.780	.5	59568.290	.5
471.2017	29.01	-3.96	117666.600	4.0	138883.000	4.0
471.2053	28.00	-1.08	29500.690	1.0	50716.927	1.0
471.2059	25.02	-4.47	195315.780	2.5	216531.990	1.5
471.2066	7.01	-.62	223731.590	3.0	244947.770	2.0
471.2097	27.00	-3.60	33466.870	3.5	54682.910	4.5
471.2109	26.00	-3.24	24335.764	2.0	45551.748	1.0
471.2133	10.00	-3.07	151038.452	1.0	172254.330	0.0
471.2181	10.01	-1.69	302307.750	2.5	323523.410	2.5
471.2213	28.00	-3.15	27943.543	1.0	49159.060	2.0
471.2328	26.00	-3.79	29371.860	3.0	50586.857	3.0
471.2410	25.02	-3.76	174247.630	.5	195462.260	.5
471.2440	22.00	-2.35	26892.926	3.0	48107.420	2.0
471.2440	90.01	-1.68	9194.957	0.0	30415.386	0.0
471.2447	26.02	-4.28	114339.950	4.0	135554.410	4.0
471.2490	74.00	-1.51	14840.984	0.0	36061.188	0.0
471.2534	20.02	-1.25	344149.810	2.0	365363.880	1.0
471.2554	24.00	-4.57	31377.960	4.0	52591.940	5.0
471.2732	24.01	-4.56	53271.070	2.5	74484.250	2.5
471.2763	22.00	-4.56	25926.820	4.0	47139.860	4.0
471.2765	25.02	-2.92	194849.100	1.5	216062.130	2.5
471.2796	10.00	-2.81	150858.508	2.0	172071.396	2.0
471.2930	57.01	-2.40	3226.301	0.0	24444.524	0.0
471.2954	25.01	-4.87	85673.720	4.0	106885.900	4.0
471.2974	24.00	-4.94	33040.100	2.0	54252.190	2.0
471.2974	10.01	-2.37	291968.140	.5	313180.230	1.5
471.2976	28.01	-2.39	106007.890	2.5	127219.970	3.5
471.3050	41.00	-1.58	8307.725	0.0	29525.408	0.0
471.3060	62.01	-1.30	4355.506	0.0	25573.144	0.0
471.3132	23.00	-4.26	13801.530	1.5	35012.910	.5
471.3136	22.00	-1.64	25438.898	2.0	46650.260	3.0
471.3181	26.01	-5.09	22409.820	.5	43620.980	1.5
471.3200	2.00	-.97	169087.000	0.0	190304.008	0.0
471.3241	27.00	-4.88	34196.210	1.5	55407.100	1.5
471.3285	24.01	-2.57	47372.750	1.5	68583.440	2.5
471.3320	26.00	-4.14	26623.726	2.0	47834.260	3.0
471.3385	27.00	-4.53	23184.230	2.5	44394.470	3.5
471.3430	40.00	-.45	14679.669	0.0	35895.641	0.0
471.3445	23.00	-.97	20789.130	2.5	41999.100	1.5
471.3456	10.01	-3.79	302961.070	1.5	324170.990	2.5
471.3500	41.00	-1.63	2742.356	0.0	23958.013	0.0
471.3590	63.00	-.36	15566.901	0.0	36782.153	0.0
471.3630	25.02	-3.06	195752.480	2.5	216961.620	3.5
471.3638	27.02	-4.43	83799.600	2.5	105008.700	3.5
471.3672	29.01	-4.03	118532.150	2.0	139741.100	3.0
471.3778	23.00	-5.08	2311.370	3.5	23519.840	4.5
471.3792	28.00	-2.75	28569.210	2.0	49777.619	3.0
471.3861	18.01	-2.03	183985.940	1.5	205194.040	1.5
471.3914	28.01	-3.78	113172.960	4.5	134380.820	3.5
471.3961	24.01	-2.51	33418.110	2.5	54625.760	2.5
471.3983	28.01	-4.11	115120.000	2.5	136327.550	1.5
471.3994	17.01	-2.76	149798.300	2.0	171005.800	2.0
471.3996	24.00	.41	33762.740	6.0	54970.230	7.0
471.4000	58.01	-.41	8872.327	0.0	30085.734	0.0
471.4012	10.01	-2.23	302307.750	2.5	323515.170	3.5
471.4015	26.00	-4.03	26623.726	2.0	47831.132	2.0
471.4023	24.00	-2.89	27300.190	1.0	48507.560	1.0
471.4032	23.00	-1.92	15270.420	1.5	36477.750	.5
471.4059	26.00	-1.97	36766.950	3.0	57974.160	2.0
471.4116	23.00	-.24	17116.920	3.5	38323.870	4.5
471.4183	26.00	-4.43	26627.612	4.0	47834.260	3.0
471.4341	21.00	-.63	18515.770	1.5	39721.710	1.5
471.4383	10.01	-.75	302307.750	2.5	323513.500	3.5
471.4408	28.00	.23	27260.891	6.0	48466.530	5.0
471.4485	28.01	-2.84	113321.950	4.5	134527.240	3.5
471.4510	42.00	-.91	20809.640	0.0	42020.752	0.0
471.4519	26.02	-4.18	97041.380	3.0	118246.520	3.0
471.4563	23.01	-9.12	13741.610	3.0	34946.550	4.0
471.4620	62.01	-2.01	2984.328	0.0	24194.945	0.0
471.4703	25.00	-3.85	45130.160	4.5	66334.470	3.5
471.4714	22.00	-1.91	18061.540	1.0	39265.800	2.0
471.4806	24.00	-2.63	35884.400	5.0	57088.250	5.0
471.4810	58.01	-.76	8469.040	0.0	29678.802	0.0
471.4859	27.00	-3.61	32733.070	3.5	53936.680	2.5
471.4886	28.00	-3.20	28068.091	4.0	49271.578	3.0
471.4890	23.02	1.14	161240.020	5.5	182443.490	6.5
471.4932	10.01	-1.04	303237.910	1.5	324441.190	2.5
471.4948	28.01	-4.00	113177.610	3.5	134380.820	3.5
471.4986	23.01	-3.55	13542.680	3.0	34745.720	3.0
471.5070	23.00	-2.11	16728.750	4.5	37931.410	5.5
471.5088	24.01	-2.42	45669.540	1.5	66872.120	.5
471.5123	10.00	-2.95	150121.592	1.0	171324.017	1.0
471.5184	7.00	-3.88	94770.850	.5	115973.000	1.5
471.5215	23.00	-6.79	13810.900	.5	35012.910	.5
471.5257	14.00	-3.89	39760.285	1.0	60962.105	2.0
471.5260	62.01	-2.07	806.575	0.0	22014.313	0.0
471.5293	23.00	-1.42	15724.220	3.5	36925.880	3.5
471.5301	22.00	-2.70	386.874	4.0	21586.496	4.0
471.5315	18.01	-2.41	158730.210	2.5	179931.770	1.5
471.5393	28.01	-2.05	115000.250	3.5	136201.460	3.5
471.5430	90.01	-1.92	10485.478	0.0	31692.452	0.0
471.5575	10.01	-1.62	292451.780	1.5	313652.170	1.5
471.5590	60.01	-1.70	1613.150	0.0	22819.404	0.0
471.5680	92.00	-1.17	4355.506	0.0	25561.355	0.0
471.5757	28.00	-.40	28578.046	3.0	49777.619	3.0
471.5830	41.00	-.27	16534.792	0.0	37739.967	0.0
471.5875	23.00	-1.92	19026.340	2.5	40225.380	1.5
471.5885	28.00	-1.83	33500.854	3.0	54699.852	3.0
471.5945	18.01	-.97	183797.360	2.5	204996.090	3.5
471.5987	24.00	-3.86	31393.400	5.0	52591.940	5.0
471.6004	28.01	-2.48	106133.140	1.5	127331.600	2.5
471.6073	25.01	-3.66	82605.290	4.0	103803.440	3.0
471.6100	62.00	.35	3064.986	0.0	24268.947	0.0
471.6129	21.01	-5.01	4883.420	3.0	26081.320	2.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
471.6209	7.00	-2.98	94793.460	1.5	115991.000	2.5
471.6222	16.01	-.25	109831.280	1.5	131028.760	1.5
471.6274	21.00	-.71	18504.050	.5	39701.300	.5
471.6286	20.02	-.32	326186.320	3.0	347383.510	4.0
471.6343	23.00	-2.25	20812.990	1.5	42009.930	2.5
471.6356	23.02	.99	160879.980	4.5	182076.860	5.5
471.6416	10.01	-2.77	302961.070	1.5	324157.680	2.5
471.6423	22.01	-2.77	43780.990	4.5	64977.570	3.5
471.6431	7.00	-3.61	94793.460	1.5	115990.000	.5
471.6431	7.00	-3.67	94793.460	1.5	115990.000	2.5
471.6440	57.01	-1.63	6129.972	0.0	27332.404	0.0
471.6471	10.01	-1.94	302961.070	1.5	324157.430	1.5
471.6524	22.00	-4.82	26910.705	6.0	48106.830	6.0
471.6625	26.02	-4.26	147281.690	1.0	168477.360	1.0
471.6636	23.00	-2.98	9636.960	1.5	30832.580	2.5
471.6654	14.02	.75	204330.790	2.0	225526.330	3.0
471.6700	71.00	-3.36	0.000	0.0	21201.264	0.0
471.6730	28.01	-4.58	116512.060	3.5	137707.260	3.5
471.6743	20.01	-2.11	56839.250	1.5	78034.390	2.5
471.6766	26.00	-2.83	26224.961	3.0	47420.000	2.0
471.6852	28.01	-4.50	116512.060	3.5	137706.710	2.5
471.6860	74.00	-1.47	16857.422	0.0	38057.966	0.0
471.6890	25.02	-1.81	195112.810	3.5	216307.290	4.5
471.6903	26.01	-4.34	78137.530	3.5	99331.950	4.5
471.6903	18.01	-2.00	183985.940	1.5	205180.360	.5
471.7010	22.00	-4.51	27665.570	1.0	48859.510	1.0
471.7019	21.00	-1.75	11557.640	2.5	32751.540	3.5
471.7070	62.00	-.46	0.000	0.0	21199.601	0.0
471.7104	27.00	-4.57	34196.210	1.5	55389.730	1.5
471.7328	25.01	-2.15	52718.800	0.0	73911.310	1.0
471.7429	25.00	-4.69	30354.210	3.5	51546.270	4.5
471.7453	22.00	-3.25	18593.990	3.0	39785.940	4.0
471.7498	25.02	-2.38	194971.150	2.5	216162.900	1.5
471.7507	23.02	-2.81	141144.170	4.5	162335.880	3.5
471.7551	23.00	-1.94	15571.900	2.5	36763.410	2.5
471.7590	57.01	-1.06	16454.134	0.0	37651.398	0.0
471.7603	10.00	-2.62	150121.592	1.0	171312.870	0.0
471.7620	40.00	-1.44	4839.451	0.0	26036.580	0.0
471.7673	24.00	-2.24	25177.390	4.0	46368.350	3.0
471.7691	23.00	-.29	17054.870	2.5	38245.750	3.5
471.7700	23.00	-4.71	15270.420	1.5	36461.260	2.5
471.7720	62.01	-1.52	3468.273	0.0	24664.953	0.0
471.7760	9.02	-2.57	445006.130	2.5	466196.700	3.5
471.7861	23.01	-5.97	16340.970	3.0	37531.090	4.0
471.7880	58.01	-1.16	5565.369	0.0	26761.330	0.0
471.7885	25.00	-4.23	37148.660	5.5	58338.670	6.5
471.7887	10.03	-4.73	642934.000	3.5	664124.000	2.5
471.7920	42.00	-.18	20003.065	0.0	41198.846	0.0
471.8122	26.00	-3.31	37521.144	2.0	58710.090	3.0
471.8181	23.02	-.76	141196.430	2.5	162385.110	3.5
471.8246	22.00	-1.48	20006.032	2.0	41194.420	3.0
471.8321	24.01	-4.00	67868.050	2.5	89056.100	2.5
471.8324	24.00	-3.16	27300.190	1.0	48488.230	0.0
471.8330	62.01	-1.34	5242.739	0.0	26436.678	0.0
471.8377	7.01	-.05	223785.510	4.0	244973.310	4.0
471.8412	26.00	-4.69	33412.706	3.0	54600.350	3.0
471.8426	24.00	.30	25771.400	6.0	46958.980	5.0
471.8446	27.00	-1.59	32430.590	5.5	53618.080	6.5
471.8448	24.01	-4.34	52298.120	3.5	73485.600	3.5
471.8630	74.00	-.62	23793.968	0.0	44986.560	0.0
471.8640	62.00	-1.05	3064.986	0.0	24257.533	0.0
471.8745	26.02	-3.95	147291.210	2.0	168477.360	1.0
471.8753	23.00	-1.95	20812.990	1.5	41999.100	1.5
471.8776	28.01	-2.95	109846.000	3.5	131032.010	2.5
471.8867	24.01	-3.60	67870.500	1.5	89056.100	2.5
471.8869	24.00	-4.09	28637.000	3.0	49822.590	2.0
471.8880	42.00	.03	28472.105	0.0	49663.574	0.0
471.8883	23.00	-1.77	16572.540	3.5	37758.070	4.5
471.8883	21.00	-1.45	18515.770	1.5	39701.300	.5
471.9023	9.02	-.96	445006.130	2.5	466191.030	2.5
471.9100	72.01	-1.72	11856.655	0.0	33047.136	0.0
471.9114	26.00	-3.38	26627.612	4.0	47812.104	4.0
471.9120	40.00	.05	14921.641	0.0	36112.032	0.0
471.9194	18.00	-4.64	104102.144	1.0	125286.280	1.0
471.9226	24.00	-3.73	35618.510	1.0	56802.500	0.0
471.9328	21.00	-.66	18571.400	2.5	39754.930	2.5
471.9364	10.01	-1.24	281720.280	1.5	302903.650	2.5
471.9366	22.00	-4.71	6556.828	1.0	27740.190	2.0
471.9398	22.00	-2.65	27025.652	4.0	48208.670	3.0
471.9426	27.00	-4.62	33173.360	3.5	54356.450	4.5
471.9495	28.00	-4.58	33590.159	4.0	54772.940	3.0
471.9495	23.00	-3.91	20767.570	3.5	41950.350	2.5
471.9513	22.01	-3.23	10024.740	2.5	31207.440	2.5
471.9605	10.01	-1.46	281720.280	1.5	302902.570	1.5
471.9638	28.01	-2.51	99040.750	1.5	120222.890	1.5
471.9840	62.01	-1.80	322.630	0.0	21509.789	0.0
471.9843	8.01	-2.98	240516.280	1.5	261697.500	1.5
471.9852	28.01	-4.76	114869.350	1.5	136050.530	2.5
471.9940	57.01	-.56	15647.559	0.0	36834.269	0.0
471.9980	90.01	-1.29	14195.724	0.0	35382.254	0.0
472.0001	28.01	-2.47	115108.090	2.5	136288.600	2.5
472.0021	24.01	-4.97	67875.680	3.5	89056.100	2.5
472.0063	18.01	-1.37	183797.360	2.5	204977.590	2.5
472.0072	28.01	-.77	114942.420	1.5	136122.610	2.5
472.0120	62.01	-2.21	4355.506	0.0	25541.408	0.0
472.0144	26.01	-4.90	25787.600	1.5	46967.470	2.5
472.0195	23.01	-9.35	16340.970	3.0	37520.610	3.0
472.0217	7.00	-3.25	94793.460	1.5	115973.000	1.5
472.0255	27.00	-4.10	34133.590	3.5	55312.960	4.5
472.0366	15.01	-1.64	86744.700	1.0	107923.570	2.0
472.0400	74.00	-1.92	13227.833	0.0	34412.478	0.0
472.0516	30.02	-1.98	216464.500	4.0	237642.700	3.0
472.0523	25.02	-2.60	194971.150	2.5	216149.320	3.5
472.0549	29.01	-2.94	118532.150	2.0	139710.200	2.0
472.0612	24.00	-1.85	35807.900	2.0	56985.670	3.0
472.0701	28.01	-2.25	110573.360	2.5	131750.730	3.5
472.0770	26.02	-1.88	185003.350	2.0	206180.410	3.0
472.0853	21.00	-1.62	11520.150	1.5	32696.840	2.5
472.0870	25.02	-3.05	174575.870	3.5	195752.480	2.5
472.0917	12.02	-.49	564289.800	1.0	585466.200	1.0
472.0917	12.02	-.49	564289.800	1.0	585466.200	1.0
472.0919	24.00	-2.77	27382.180	2.0	48556.570	2.0
472.0920	44.00	-1.02	16050.847	0.0	37233.159	0.0
472.0931	26.01	-3.75	64286.440	3.5	85462.780	3.5
472.0942	26.00	-2.33	33507.102	3.0	54683.390	4.0
472.0982	25.00	-1.88	38351.780	.5	59527.890	1.5
472.1000	45.00	-2.21	9114.300	0.0	30296.253	0.0
472.1003	26.00	-2.63	24118.815	4.0	45294.830	5.0
472.1022	20.01	-1.95	56858.460	2.5	78034.390	3.5
472.1022	20.01	-3.26	56858.460	2.5	78034.390	2.5
472.1075	28.01	-3.81	115785.060	1.5	136960.750	2.5
472.1100	25.00	-3.64	38351.780	.5	59527.360	.5
472.1127	24.00	-1.35	28637.000	3.0	49812.460	3.0
472.1162	17.01	-2.02	149798.300	2.0	170973.600	3.0
472.1255	17.00	-2.12	74225.846	1.5	95400.731	2.5
472.1256	22.00	-4.36	27740.190	2.0	48915.070	2.0
472.1274	28.01	-4.25	115785.060	1.5	136959.860	2.5
472.1305	27.00	-5.88	5075.830	1.5	26250.490	.5
472.1359	25.00	-2.53	37164.250	6.5	58338.670	6.5
472.1390	62.01	-2.57	1935.780	0.0	23115.983	0.0
472.1399	28.01	-2.98	115592.250	1.5	136766.490	2.5
472.1528	23.00	-.40	15724.220	3.5	36897.880	4.5
472.1536	10.00	-2.61	150315.861	2.0	171489.485	1.0
472.1542	27.01	-7.13	25147.200	4.0	46320.800	4.0
472.1571	14.00	-2.02	39683.163	0.0	60856.630	1.0
472.1577	7.01	-.75	223785.510	4.0	244958.950	3.0
472.1588	18.01	-.78	161048.640	1.5	182222.030	1.5
472.1675	25.02	-3.64	115762.600	1.5	136935.600	.5
472.1796	23.02	-4.07	140750.820	2.5	161923.280	2.5
472.1907	26.02	-1.30	185061.350	1.0	206233.310	2.0
472.1912	24.00	-1.46	35813.730	3.0	56985.670	3.0
472.2080	28.00	-3.03	33590.159	4.0	54761.346	4.0
472.2158	26.00	-3.67	33095.922	4.0	54266.760	5.0
472.2160	30.00	.69	32343.666	0.0	53520.416	0.0
472.2170	24.00	-1.21	35862.820	4.0	57033.600	4.0
472.2173	25.02	-2.04	195112.810	3.5	216283.580	3.5
472.2175	24.00	-1.34	33816.060	4.0	54986.820	3.0
472.2190	83.00	-1.22	11292.053	0.0	32468.668	0.0
472.2266	27.00	-3.14	23611.780	5.5	44782.130	4.5
472.2280	38.00	-.13	14437.696	0.0	35613.907	0.0
472.2295	28.01	-4.19	115785.060	1.5	136955.280	.5
472.2300	58.01	-1.73	4436.164	0.0	25612.286	0.0
472.2333	25.00	-4.83	38120.180	4.5	59290.230	3.5
472.2427	25.02	-1.95	194545.780	.5	215715.410	1.5
472.2489	24.01	-3.63	68305.730	1.5	89475.080	2.5
472.2590	23.00	-2.22	20830.200	.5	41999.100	1.5
472.2610	22.00	-1.43	8492.421	1.0	29661.232	1.0
472.2639	9.02	-3.74	443753.060	2.5	464921.740	3.5
472.2646	24.00	-2.23	24940.610	2.0	46109.260	2.0
472.2657	28.01	-4.05	115120.000	2.5	136288.600	2.5
472.2657	9.02	-4.24	443770.900	3.5	464939.500	2.5
472.2730	92.01	-1.82	1693.808	0.0	22868.002	0.0
472.2768	24.00	-1.28	27163.200	0.0	48331.300	1.0
472.2835	29.01	-4.93	118163.500	2.0	139331.300	3.0
472.2858	23.00	-.26	15770.720	4.5	36938.420	5.5
472.2880	73.00	-3.19	0.000	0.0	21173.521	0.0
472.2936	25.02	-3.29	194894.780	1.5	216062.130	2.5
472.2997	28.00	-2.86	33500.854	3.0	54667.928	4.0
472.3000	7.03	-1.52	484394.000	0.0	505566.983	0.0
472.3016	24.00	-1.47	33934.880	3.0	55101.870	3.0
472.3027	21.00	-2.80	17012.980	2.5	38179.920	1.5
472.3060	42.00	.12	32504.981	0.0	53677.695	0.0
472.3077	28.00	-4.10	36600.805	2.0	57767.520	1.0
472.3078	25.00	-3.16	38934.940	2.5	60101.650	2.5
472.3125	24.00	-.84	24833.860	3.0	46000.360	3.0
472.3139	28.00	-1.76	31031.042	3.0	52197.482	3.0
472.3167	22.00	-1.46	8602.340	2.0	29768.655	2.0
472.3188	24.00	-1.68	33935.650	2.0	55101.870	3.0
472.3193	12.02	-.46	564300.000	0.0	585466.200	1.0
472.3193	12.02	-.46	564300.000	0.0	585466.200	1.0
472.3310	58.01	-1.59	5646.026	0.0	26817.620	0.0
472.3340	24.01	-2.25	33619.130	4.5	54764.670	3.5
472.3345	28.00	-2.56	29668.918	3.0	50834.435	2.0
472.3433	23.00	-1.66	16449.850	2.5	37614.970	3.5
472.3440	90.01	-1.15	12340.601	0.0	33511.612	0.0
472.3523	27.00	-3.41	31699.690	4.5	52864.410	4.5
472.3616	24.01	-3.08	52321.300	4.5	73485.600	3.5
472.3750	24.01	-5.00	42898.120	2.5	64061.820	1.5
472.3780	90.00	-.78	7420.492	0.0	28589.979	0.0
472.3798	10.00	-3.49	150917.431	0.0	172080.916	1.0
472.3800	41.00	-.21	17825.312	0.0	38994.710	0.0
472.3846	26.01	-4.73	44915.070	3.5	66078.340	2.5
472.3879	28.00	-3.33	29668.918	3.0	50832.039	3.0
472.3891	24.00	-2.99	35870.530	4.0	57033.600	4.0
472.3927	23.00	-2.53	17242.050	5.5	38404.960	5.5
472.3964	28.01	-1.03	99040.750	1.5	120203.490	2.5
472.4004	18.01	-4.22	182951.150	.5	204113.710	1.5
472.4052	24.00	-3.34	24093.160	2.0	45255.510	3.0
472.4067	26.01	-9.26	20805.830	4.5	41968.110	5.5
472.4124	28.00	-2.18	33610.916	2.0	54772.940	3.0
472.4259	25.00	-4.87	30354.210	3.5	51515.630	2.5
472.4260	69.00	-2.06	0.000	0.0	21167.336	0.0
472.4304	23.00	-3.15	20789.130	2.5	41950.350	2.5
472.4304	24.00	-4.95	27500.370	3.0	48661.590	3.0
472.4430	57.01	-2.34	6129.972	0.0	27296.547	0.0
472.4431	24.00	-.78	24897.550	4.0	46058.200	4.0
472.4436	24.00	-4.79	36212.150	4.0	57372.780	4.0
472.4474	22.00	-4.95	27025.652	4.0	48186.110	4.0
472.4514	29.01	-3.78	115639.020	2.0	136799.300	2.0
472.4545	7.00	-3.07	94830.860	2.5	115991.000	2.5
472.4674	22.00	-2.10	17540.205	3.0	38699.767	2.0
472.4768	7.00	-3.28	94830.860	2.5	115990.000	1.5
472.4768	7.00	-2.83	94830.860	2.5	115990.000	2.5
472.4773	28.01	-4.93	95573.390	3.5	116732.510	2.5
472.4813	23.00	-4.94	18438.070	4.5	39597.010	4.5
472.4927	28.01	-.83	99040.750	1.5	120199.180	1.5
472.5081	24.01	-4.90	59130.510	1.5	80288.250	1.5
472.5090	58.01	-1.25	4113.534	0.0	25277.152	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
472.5140	74.00	-.89	19115.832	0.0	40279.226	0.0
472.5145	10.00	-2.80	150315.861	2.0	171473.313	2.0
472.5248	27.00	-4.19	31699.690	4.5	52856.680	3.5
472.5340	42.00	-.32	27584.872	0.0	48747.370	0.0
472.5349	22.00	-1.64	25493.722	2.0	46650.260	3.0
472.5581	25.02	-3.19	174436.590	2.5	195592.090	1.5
472.5630	28.01	-4.74	52738.450	2.5	73893.730	1.5
472.5657	23.00	-3.61	15770.720	4.5	36925.880	3.5
472.5675	24.00	-1.35	27176.220	1.0	48331.300	1.0
472.5695	23.02	.31	160879.980	4.5	182034.970	4.5
472.5700	27.00	-4.09	32781.710	2.5	53936.680	2.5
472.5751	24.00	-3.19	23512.000	1.0	44666.740	1.0
472.5760	23.03	-1.43	264902.200	3.0	286056.900	3.0
472.5791	21.00	-3.88	17025.360	1.5	38179.920	1.5
472.5850	39.00	-.50	15889.531	0.0	37049.746	0.0
472.5865	24.00	-1.79	35934.020	6.0	57088.250	5.0
472.5927	24.00	-2.48	24200.230	6.0	45354.180	5.0
472.5930	75.00	-.96	22987.393	0.0	44147.249	0.0
472.5939	26.00	-3.40	34636.820	2.0	55790.720	3.0
472.5977	18.01	-1.13	183797.360	2.5	204951.090	3.5
472.6020	62.01	-1.85	2661.698	0.0	23821.151	0.0
472.6080	70.01	-.42	26616.982	0.0	47776.167	0.0
472.6143	26.00	-3.35	24180.848	3.0	45333.834	2.0
472.6191	24.01	-4.09	53271.070	2.5	74423.840	3.5
472.6287	18.01	-4.93	185093.230	4.5	206245.570	3.5
472.6320	90.01	-2.89	1774.465	0.0	22932.575	0.0
472.6440	56.00	-.16	11395.000	0.0	32552.573	0.0
472.6444	28.01	-1.07	100010.170	.5	121161.810	1.5
472.6589	23.01	-9.92	13594.730	2.0	34745.720	3.0
472.6623	9.02	-4.34	443770.900	3.5	464921.740	3.5
472.6741	21.00	-1.63	18571.400	2.5	39721.710	1.5
472.6829	14.00	-4.77	40991.884	1.0	62141.800	1.0
472.6864	18.01	-.11	138243.550	1.5	159393.310	1.5
472.6873	7.00	-2.55	95475.280	.5	116625.000	1.5
472.6886	24.00	-4.50	35572.940	2.0	56722.600	1.0
472.6989	24.00	-1.87	35884.400	5.0	57033.600	4.0
472.7012	17.01	-1.72	126456.600	4.0	147605.700	3.0
472.7013	26.00	-4.44	26406.490	1.0	47555.584	1.0
472.7078	28.01	-2.86	99040.750	1.5	120189.550	.5
472.7089	26.01	-3.84	44929.590	2.5	66078.340	2.5
472.7096	22.00	-2.60	27887.740	3.0	49036.460	4.0
472.7145	24.00	-.93	24200.230	6.0	45348.730	6.0
472.7183	28.01	-3.60	99132.780	5.5	120281.110	4.5
472.7235	25.00	-2.60	38669.600	3.5	59817.700	2.5
472.7330	41.00	-1.00	11453.368	0.0	32606.958	0.0
472.7384	26.00	-.95	29732.721	1.0	50880.152	1.0
472.7461	25.00	-.48	23549.200	2.5	44696.290	2.5
472.7463	10.01	-1.04	292033.150	2.5	313180.230	1.5
472.7481	24.00	-1.21	33671.550	3.0	54818.550	2.0
472.7513	26.00	-3.63	33412.706	3.0	54559.560	3.0
472.7600	75.00	-1.38	16534.792	0.0	37687.174	0.0
472.7648	20.02	-1.78	323003.560	1.0	344149.810	2.0
472.7689	23.00	-2.38	15270.420	1.5	36416.490	1.5
472.7744	27.00	-2.43	15184.040	2.5	36329.860	2.5
472.7841	28.00	-2.09	29320.782	3.0	50466.172	4.0
472.7854	25.01	-2.28	43311.000	1.0	64456.330	2.0
472.7932	22.00	-4.94	6742.757	4.0	27887.740	3.0
472.7935	27.00	-3.56	3682.820	4.5	24627.790	4.5
472.7975	23.00	-4.21	21032.520	3.5	42177.310	4.5
472.8071	23.02	.06	160681.480	3.5	181825.840	4.5
472.8120	24.01	-4.74	68477.110	4.5	89621.250	3.5
472.8178	22.01	-2.83	43740.770	3.5	64884.650	2.5
472.8212	26.01	-3.09	64040.960	3.5	85184.690	4.5
472.8308	27.00	-2.53	24733.280	2.5	45876.580	2.5
472.8308	17.01	-3.76	158723.700	1.0	179867.000	1.0
472.8339	24.00	-3.03	28679.430	1.0	49822.590	2.0
472.8387	28.00	-2.52	30163.140	2.0	51306.085	3.0
472.8420	57.01	-2.10	1371.178	0.0	22519.892	0.0
472.8420	62.00	.17	1451.835	0.0	22600.549	0.0
472.8470	64.01	-.89	8791.670	0.0	29940.160	0.0
472.8514	27.00	-3.89	25232.790	.5	46375.170	1.5
472.8530	39.00	-.73	10404.820	0.0	31553.042	0.0
472.8533	26.00	-4.35	29469.010	2.0	50611.303	3.0
472.8567	7.00	-3.37	94830.860	2.5	115973.000	1.5
472.8573	22.00	-2.57	25388.334	4.0	46530.450	4.0
472.8623	23.00	-1.89	17181.980	4.5	38823.870	4.5
472.8630	59.01	-2.20	1693.808	0.0	22841.582	0.0
472.8640	64.00	-1.37	483.945	0.0	21631.675	0.0
472.8661	22.00	-4.09	25102.880	2.0	46244.600	2.0
472.8668	23.00	-1.77	16361.450	1.5	37503.140	2.5
472.8724	22.00	-4.32	6598.749	2.0	27740.190	2.0
472.8755	21.00	-.49	11610.240	3.5	32751.540	3.5
472.8760	26.00	-4.22	33095.922	4.0	54237.200	4.0
472.8813	25.00	-2.22	30411.740	.5	51552.780	.5
472.8860	77.00	-1.34	13873.093	0.0	35019.839	0.0
472.8936	28.01	-4.37	115592.250	1.5	136732.740	1.5
472.8954	24.00	-2.74	28682.180	2.0	49822.590	2.0
472.9011	26.00	-2.34	32873.623	4.0	54013.780	5.0
472.9011	26.00	-2.69	32873.623	4.0	54013.780	5.0
472.9062	23.00	-4.34	18258.890	2.5	39398.620	3.5
472.9102	28.01	-4.77	99132.780	5.5	120272.530	4.5
472.9136	25.01	-4.21	49517.580	5.0	70657.180	5.0
472.9140	42.00	-.41	20809.640	0.0	41955.134	0.0
472.9169	23.02	-4.08	141196.430	2.5	162335.880	3.5
472.9225	21.00	-.39	11557.640	2.5	32696.840	2.5
472.9256	21.00	-.51	11520.150	1.5	32659.210	1.5
472.9273	28.00	-1.27	33112.368	3.0	54251.353	3.0
472.9373	21.00	-4.18	16009.710	.5	37148.250	1.5
472.9417	26.00	-4.52	21999.132	4.0	43137.472	3.0
472.9449	16.01	-.48	129858.070	1.5	150996.270	2.5
472.9460	24.01	-3.75	52298.120	3.5	73436.270	2.5
472.9536	23.00	-1.77	15270.420	1.5	36408.230	1.5
472.9570	28.01	-4.50	99132.780	5.5	120270.440	5.5
472.9582	22.00	-1.34	24694.895	4.0	45832.500	5.0
472.9637	23.00	-4.01	20812.990	1.5	41950.350	2.5
472.9650	74.00	-1.41	13227.833	0.0	34371.047	0.0
472.9659	25.00	-3.70	38120.180	4.5	59257.440	4.5
472.9668	26.00	-2.98	27394.676	3.0	48531.896	3.0
472.9676	22.00	-4.51	25107.417	2.0	46244.600	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
472.9767	25.01	-4.48	44521.520	4.0	65658.300	5.0
472.9773	22.00	-3.21	27665.570	1.0	48802.320	0.0
472.9780	23.01	-4.33	13609.000	4.0	34745.720	3.0
472.9787	22.00	-2.89	27887.740	3.0	49024.430	3.0
472.9831	23.00	-2.32	19189.280	1.5	40325.770	2.5
472.9834	24.00	-1.59	24940.610	2.0	46077.090	1.0
472.9870	90.01	-1.95	8307.725	0.0	29449.955	0.0
473.0029	12.00	-2.07	35051.264	1.0	56186.873	0.0
473.0042	25.00	-2.09	45013.550	2.5	66149.100	3.5
473.0120	73.00	-1.31	12743.888	0.0	33885.001	0.0
473.0129	27.00	-3.20	34133.590	3.5	55268.750	3.5
473.0130	58.01	-1.03	7097.862	0.0	28238.930	0.0
473.0192	27.01	-5.18	25317.720	1.0	46452.600	2.0
473.0250	27.00	-4.14	32654.500	2.5	53789.120	3.5
473.0310	41.00	-.94	11130.738	0.0	32271.002	0.0
473.0375	23.00	-.65	15688.800	2.5	36822.860	3.5
473.0382	25.01	-2.38	43339.100	2.0	64473.130	3.0
473.0411	29.01	-2.83	115665.400	1.0	136799.300	2.0
473.0595	28.01	-4.81	115592.250	1.5	136725.330	.5
473.0599	26.01	-4.29	78690.980	2.5	99824.040	2.5
473.0621	23.00	-4.97	2220.130	2.5	23353.090	3.5
473.0646	25.01	-3.80	82735.290	2.0	103868.140	1.0
473.0676	18.01	-1.53	161089.310	.5	182222.030	1.5
473.0704	24.00	-.24	24833.860	3.0	45966.450	2.0
473.0787	23.00	-3.45	21032.520	3.5	42164.740	3.5
473.0825	27.00	-1.59	33150.680	1.5	54282.730	2.5
473.0827	24.00	-3.76	24093.160	2.0	45225.200	2.0
473.0881	26.01	-6.96	21308.080	1.5	42439.680	.5
473.0904	30.02	-3.01	217073.800	2.0	238205.500	1.0
473.0985	7.00	-3.53	95493.660	1.5	116625.000	1.5
473.0985	7.00	-2.76	95493.660	1.5	116625.000	2.5
473.1016	26.00	-4.19	32873.623	4.0	54004.820	3.0
473.1027	24.01	-4.74	54678.950	4.5	75810.100	4.5
473.1042	28.01	-4.27	112719.750	3.5	133850.830	3.5
473.1140	40.00	-2.13	5000.766	0.0	26137.321	0.0
473.1171	22.00	.02	17540.205	3.0	38670.710	4.0
473.1177	24.00	-4.47	31987.060	4.0	53117.540	4.0
473.1221	24.00	-1.19	28682.180	2.0	49812.460	3.0
473.1239	26.02	-3.55	202200.510	3.0	223330.710	3.0
473.1280	23.00	-3.85	18805.050	.5	39935.070	1.5
473.1330	44.00	-1.21	9033.642	0.0	30169.348	0.0
473.1331	24.00	-1.27	33542.110	2.0	54671.900	1.0
473.1333	26.02	-4.23	147291.210	2.0	168420.990	2.0
473.1370	72.01	-1.06	17260.709	0.0	38396.236	0.0
473.1387	18.02	-1.37	210212.260	3.0	231341.800	2.0
473.1410	25.00	-3.08	37737.220	3.5	58866.660	4.5
473.1430	25.02	-3.42	174332.910	1.5	195462.260	.5
473.1440	42.00	.45	21051.613	0.0	42186.828	0.0
473.1443	26.01	-5.34	23317.600	2.5	44446.690	3.5
473.1535	23.00	-1.25	15571.900	2.5	36700.780	2.5
473.1546	23.00	-1.72	17116.920	3.5	38245.750	3.5
473.1600	92.01	-1.59	4516.821	0.0	25651.321	0.0
473.1735	22.00	-2.80	20209.444	2.0	41337.430	2.0
473.1770	60.00	-.48	1048.548	0.0	22182.289	0.0
473.1793	28.00	-1.06	30912.838	1.0	52040.568	2.0
473.1835	25.01	-4.55	52653.270	4.0	73780.810	3.0
473.1860	77.00	-1.42	16454.134	0.0	37587.473	0.0
473.1872	28.00	-4.71	35639.148	3.0	56766.523	4.0
473.1875	26.02	-4.76	202200.510	3.0	223327.870	2.0
473.1918	23.00	-2.21	19026.340	2.5	40153.510	2.5
473.1920	23.00	-1.33	15770.720	4.5	36897.880	4.5
473.1940	25.00	-2.30	30425.710	1.5	51552.780	.5
473.2046	25.01	-4.77	85759.300	4.0	106885.900	4.0
473.2048	27.00	-4.28	4142.660	3.5	25269.250	3.5
473.2057	18.01	-.87	151087.250	2.5	172213.800	1.5
473.2113	28.01	-1.84	99154.810	4.5	120281.110	4.5
473.2124	26.02	-3.10	202200.510	3.0	223326.760	4.0
473.2158	25.02	-3.53	115762.600	1.5	136888.700	1.5
473.2180	23.00	-3.47	15688.800	2.5	36814.800	1.5
473.2232	28.01	-4.80	99040.750	1.5	120166.520	1.5
473.2263	10.01	-3.74	317663.130	1.5	338768.760	.5
473.2285	21.00	-2.63	16022.720	2.5	37148.250	1.5
473.2319	24.00	-3.29	27382.180	2.0	48507.560	1.0
473.2330	40.00	-1.00	5000.766	0.0	26132.006	0.0
473.2370	39.00	-.59	15244.271	0.0	36375.332	0.0
473.2456	28.00	-.53	33112.368	3.0	54237.136	4.0
473.2487	24.00	-2.97	36577.730	4.0	57702.360	5.0
473.2600	64.01	-.74	8791.670	0.0	29921.704	0.0
473.2610	24.00	-2.04	33762.740	6.0	54886.820	6.0
473.2666	10.01	-.97	281720.280	1.5	302844.110	2.5
473.2713	25.01	-3.38	82712.550	3.0	103836.170	2.0
473.2800	76.00	-1.52	15082.956	0.0	36212.097	0.0
473.2863	18.01	-4.06	182222.030	1.5	203344.980	1.5
473.2886	24.00	-2.41	35862.820	4.0	56985.670	3.0
473.2935	27.01	-2.91	64359.560	3.0	85482.190	4.0
473.2957	22.01	-5.13	9118.150	4.5	30240.680	5.5
473.3000	7.03	-.87	484394.000	0.0	505522.248	0.0
473.3141	29.01	-4.77	110084.290	1.0	131206.000	0.0
473.3148	20.02	-2.58	322663.280	0.0	343784.960	1.0
473.3186	28.00	-2.22	33610.916	2.0	54732.425	2.0
473.3233	13.01	-1.94	121480.300	3.0	142601.600	3.0
473.3258	28.01	-4.01	94705.930	3.5	115827.120	3.5
473.3336	23.01	-3.40	34228.790	3.0	55349.630	3.0
473.3340	69.00	-1.27	0.000	0.0	21126.731	0.0
473.3368	13.01	-1.04	121480.900	2.0	142601.600	3.0
473.3381	25.02	-3.01	195592.090	1.5	216712.730	2.5
473.3406	22.00	-.30	17423.853	2.0	38544.380	3.0
473.3435	22.00	-1.60	18145.400	2.0	39265.800	2.0
473.3480	41.00	-2.19	322.630	0.0	21448.736	0.0
473.3506	25.01	-3.89	49820.160	2.0	70940.240	2.0
473.3520	44.00	-1.33	8711.012	0.0	29836.939	0.0
473.3520	58.01	-.57	10001.532	0.0	31127.459	0.0
473.3544	22.00	-3.40	26657.409	4.0	47777.320	5.0
473.3595	26.00	-2.71	11976.239	4.0	33095.922	4.0
473.3677	22.00	-4.87	27740.190	2.0	48859.510	1.0
473.3816	25.01	-3.54	49427.320	4.0	70546.020	4.0
473.3861	27.00	-3.39	27497.060	2.5	48615.560	2.5
473.3890	41.00	-1.01	8952.985	0.0	30077.261	0.0
473.3939	7.00	-4.06	94770.850	.5	115869.000	.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
473.3939	7.00	-2.59	94770.850	.5	115889.000	1.5
473.4007	16.01	-2.18	131186.860	2.5	152304.710	3.5
473.4035	28.01	-1.92	99154.810	4.5	120272.530	4.5
473.4092	26.00	-1.73	34636.820	2.0	55754.290	2.0
473.4094	28.01	-1.11	114836.630	3.5	135954.090	3.5
473.4141	21.00	-.13	11520.150	1.5	32637.400	.5
473.4145	25.01	-2.95	43339.100	2.0	64456.330	2.0
473.4168	27.00	-3.67	30443.630	1.5	51560.760	2.5
473.4179	22.01	-4.57	20951.770	2.5	42068.850	1.5
473.4180	59.01	-2.14	2984.328	0.0	24107.310	0.0
473.4260	6.00	-.09	64086.920	3.0	85203.640	2.0
473.4360	40.00	-.27	18631.887	0.0	39754.066	0.0
473.4388	7.00	-3.37	94770.850	.5	115887.000	.5
473.4388	7.00	-3.78	94770.850	.5	115887.000	1.5
473.4430	64.01	-1.87	5242.739	0.0	26364.606	0.0
473.4441	22.00	-3.33	18525.070	2.0	39640.980	3.0
473.4504	28.01	-1.61	99154.810	4.5	120270.440	5.5
473.4538	23.00	-1.81	20812.990	1.5	41928.470	.5
473.4565	28.01	-1.47	100078.780	1.5	121194.140	2.5
473.4578	23.03	-2.47	263111.400	4.0	284226.700	3.0
473.4614	24.00	-1.98	35870.530	4.0	56985.670	3.0
473.4641	26.02	-3.55	147305.970	3.0	168420.990	2.0
473.4683	22.00	-.89	18037.225	4.0	39152.057	5.0
473.4710	25.00	-2.03	38669.600	3.5	59784.310	3.5
473.4807	28.01	-4.11	115785.060	1.5	136899.340	2.5
473.4809	28.01	-3.58	115785.060	1.5	136899.330	1.5
473.4816	27.00	-1.03	26250.490	.5	47364.730	1.5
473.4870	28.01	-2.51	99154.810	4.5	120268.810	3.5
473.4899	28.01	-4.94	114869.350	1.5	135983.220	1.5
473.4917	6.00	-2.10	64089.850	1.0	85203.640	2.0
473.5163	6.00	-.89	64090.950	2.0	85203.640	2.0
473.5260	25.02	-4.15	115711.600	4.5	136823.860	3.5
473.5330	41.00	-1.06	10969.423	0.0	32087.275	0.0
473.5350	58.01	-1.54	7420.492	0.0	28538.255	0.0
473.5466	22.00	-2.84	25926.820	4.0	47038.160	3.0
473.5542	25.00	-4.84	30419.610	2.5	51530.610	3.5
473.5648	23.00	-3.78	19189.280	1.5	40299.810	.5
473.5692	6.00	-4.92	68856.330	1.0	89966.660	2.0
473.5750	64.00	-.16	6452.602	0.0	27568.582	0.0
473.5819	26.00	-4.50	21999.132	4.0	43108.899	4.0
473.5836	28.00	-3.80	33590.159	4.0	54699.652	3.0
473.5839	26.00	-.43	32873.623	4.0	53963.300	5.0
473.5861	23.01	-4.41	16421.510	4.0	37531.090	4.0
473.5906	18.01	-.11	134241.650	2.5	155351.030	1.5
473.5908	27.00	-3.67	33173.360	3.5	54282.730	2.5
473.6043	28.01	-4.59	113177.610	3.5	134286.380	4.5
473.6049	22.00	-5.45	6556.828	1.0	27665.570	1.0
473.6063	24.00	-4.81	24093.160	2.0	45201.840	1.0
473.6094	7.00	-3.79	94793.460	1.5	115902.000	2.5
473.6110	25.02	-3.87	115780.230	2.5	136888.700	1.5
473.6159	24.00	-1.78	27223.050	2.0	48331.300	1.0
473.6168	7.00	-2.95	94881.790	3.5	115990.000	2.5
473.6200	27.00	-1.26	33150.680	1.5	54258.750	2.5
473.6238	12.02	-.94	570112.800	0.0	591220.700	1.0
473.6490	41.00	-.18	17341.367	0.0	38454.047	0.0
473.6503	28.00	-3.22	28068.091	4.0	49174.811	4.0
473.6552	17.02	-3.14	222100.700	1.5	243207.200	.5
473.6615	24.00	-3.82	24200.230	6.0	45306.450	5.0
473.6673	20.02	-.19	344257.920	1.0	365363.880	1.0
473.6727	7.00	-2.91	95475.280	.5	116581.000	.5
473.6727	7.00	-4.61	95475.280	.5	116581.000	1.5
473.6781	26.00	-.90	25899.974	4.0	47005.455	5.0
473.6783	10.01	-1.42	292546.700	.5	313652.170	1.5
473.6994	24.01	-2.16	33521.230	3.5	54625.760	2.5
473.7000	6.03	-.68	471368.000	0.0	492478.407	0.0
473.7064	27.00	-1.78	29948.760	2.5	51052.980	3.5
473.7280	58.01	-.24	8711.012	0.0	29820.172	0.0
473.7380	24.00	-.09	24897.550	4.0	46000.360	3.0
473.7481	27.00	-6.03	8460.810	2.5	29563.170	1.5
473.7508	29.01	-3.27	108014.660	3.0	129116.900	3.0
473.7589	23.01	-3.44	13490.840	2.0	34592.720	2.0
473.7596	26.00	-3.27	24118.815	4.0	45220.662	3.0
473.7638	28.01	-4.26	113172.960	4.5	134274.620	5.5
473.7640	26.00	-3.19	26351.049	5.0	47452.702	4.0
473.7652	10.01	-3.53	291801.880	1.5	312903.480	2.5
473.7659	21.00	.07	11557.640	2.5	32659.210	1.5
473.7720	15.01	-4.60	110252.000	1.0	131353.300	2.0
473.7720	8.01	-4.97	255162.600	.5	276263.900	.5
473.7766	27.00	-2.35	15774.040	1.5	36875.130	1.5
473.7791	18.01	-3.82	184093.060	.5	205194.040	1.5
473.7814	25.01	-3.52	82735.290	2.0	103836.170	2.0
473.7944	17.01	-2.24	161348.400	1.0	182448.700	2.0
473.8011	25.01	-3.25	49427.320	4.0	70527.320	5.0
473.8040	76.00	-.40	24923.174	0.0	46028.948	0.0
473.8112	22.00	-2.84	27740.190	2.0	48839.740	3.0
473.8130	27.00	-2.04	31871.150	3.5	52970.620	2.5
473.8135	23.00	-4.28	19026.340	2.5	40125.790	3.5
473.8202	10.01	-3.66	303071.840	2.5	324170.990	2.5
473.8213	23.01	-7.51	16421.510	4.0	37520.610	3.0
473.8214	6.00	-.87	64089.850	1.0	85188.950	1.0
473.8214	17.01	-2.76	149952.400	1.0	171051.500	1.0
473.8243	10.01	-1.75	303071.840	2.5	324170.810	3.5
473.8312	23.00	-.55	15664.750	1.5	36763.410	2.5
473.8317	23.00	-1.30	15724.220	3.5	36822.860	3.5
473.8319	28.01	-4.33	113172.960	4.5	134271.590	4.5
473.8371	17.01	-4.35	158768.600	2.0	179867.000	1.0
473.8400	23.00	-1.40	20830.200	.5	41928.470	.5
473.8461	6.00	-.36	64090.950	2.0	85188.950	1.0
473.8514	26.01	-4.65	44915.070	3.5	66012.830	4.5
473.8541	27.00	-2.39	30102.960	2.5	51200.600	1.5
473.8564	10.01	-1.12	302425.870	1.5	323523.410	2.5
473.8570	28.01	-3.30	110573.360	2.5	131670.870	2.5
473.8580	72.00	-1.37	13953.751	0.0	35057.120	0.0
473.8582	9.02	-3.61	443630.960	3.5	464728.420	4.5
473.8770	27.00	-2.71	30102.960	2.5	51199.580	3.5
473.8833	14.00	-1.85	39760.285	1.0	60856.630	1.0
473.8932	24.00	-3.04	41575.100	3.0	62671.000	4.0
473.9012	7.00	-4.06	94793.460	1.5	115889.000	.5
473.9012	7.00	-3.13	94793.460	1.5	115889.000	1.5
473.9053	28.01	-2.48	99154.810	4.5	120250.170	3.5
473.9087	25.00	-.66	23719.520	1.5	44814.730	1.5
473.9120	58.01	-1.34	7097.862	0.0	28196.826	0.0
473.9134	17.01	-2.15	132162.000	3.0	153257.000	2.0
473.9145	27.00	-3.48	35450.560	3.5	56545.510	2.5
473.9145	23.00	-3.57	2424.890	4.5	23519.840	4.5
473.9426	17.01	-2.86	126032.000	2.0	147125.700	3.0
473.9462	7.00	-3.71	94793.460	1.5	115887.000	.5
473.9462	7.00	-2.78	94793.460	1.5	115887.000	1.5
473.9462	7.00	-2.43	94793.460	1.5	115887.000	2.5
473.9471	27.00	-2.66	29948.760	2.5	51042.260	2.5
473.9480	40.00	-.32	5162.081	0.0	26261.442	0.0
473.9491	25.01	-3.58	82774.730	1.0	103866.140	1.0
473.9527	26.01	-6.99	21308.080	1.5	42401.330	1.5
473.9530	58.01	-.58	10001.532	0.0	31100.671	0.0
473.9554	18.01	-1.69	183985.940	1.5	205079.070	2.5
473.9563	15.01	-1.22	103340.010	2.0	124433.100	1.0
473.9590	23.00	-.49	20767.570	3.5	41860.540	4.5
473.9592	12.01	-1.96	93310.590	2.5	114403.550	2.5
473.9592	12.01	-.66	93310.590	2.5	114403.550	3.5
473.9602	23.00	-3.75	19026.340	2.5	40119.260	2.5
473.9610	7.00	-3.56	95532.120	2.5	116625.000	1.5
473.9610	7.00	-3.34	95532.120	2.5	116625.000	2.5
473.9627	26.00	-4.28	20037.815	0.0	41130.620	1.0
473.9629	28.01	-4.74	101754.800	2.5	122847.600	3.5
473.9709	12.01	-.82	93311.110	1.5	114403.550	2.5
473.9943	8.01	-4.11	255172.500	1.5	276263.900	.5
473.9943	8.01	-3.46	25517Z.500	1.5	276263.900	1.5
474.0000	7.03	-1.54	484394.000	0.0	505491.046	0.0
474.0038	25.02	-2.60	194971.150	2.5	216062.130	2.5
474.0058	25.01	-3.67	82712.550	3.0	103803.440	3.0
474.0118	24.00	-4.23	35501.260	3.0	56591.880	2.0
474.0159	28.00	-1.96	28068.091	4.0	49158.529	5.0
474.0160	73.00	-1.42	9920.875	0.0	31017.209	0.0
474.0168	25.01	-3.14	49427.320	4.0	70517.720	3.0
474.0256	28.01	-3.46	100609.010	2.5	121699.020	1.5
474.0280	57.01	-1.81	967.890	0.0	22063.690	0.0
474.0343	26.00	-2.65	24338.766	3.0	45428.385	4.0
474.0377	10.01	-3.34	303071.840	2.5	324161.310	3.5
474.0393	17.01	-1.81	140259.000	2.0	161348.400	1.0
474.0458	28.01	-4.78	113172.960	4.5	134262.070	3.5
474.0500	63.00	-.69	13389.148	0.0	34483.969	0.0
474.0512	22.01	-5.40	10024.740	2.5	31113.610	3.5
474.0530	90.01	-1.59	6129.972	0.0	27224.660	0.0
474.0610	41.00	-1.67	5242.739	0.0	26337.071	0.0
474.0642	25.00	-3.15	45060.810	3.5	66149.100	3.5
474.0689	25.02	-3.42	195315.780	2.5	216403.860	2.5
474.0729	17.00	-2.18	74225.846	1.5	95313.749	1.5
474.0856	7.00	-2.21	95493.660	1.5	116581.000	.5
474.0856	7.00	-1.82	95493.660	1.5	116581.000	1.5
474.0856	7.00	-1.83	95493.660	1.5	116581.000	2.5
474.0865	18.01	-4.20	184093.060	.5	205160.360	.5
474.0921	19.00	-3.21	12985.170	.5	34072.220	.5
474.0964	24.00	-4.82	41575.100	3.0	62661.960	3.0
474.0975	27.00	-4.65	34196.210	1.5	55283.020	2.5
474.1000	27.01	-3.86	27469.200	5.0	48555.900	5.0
474.1022	21.00	.26	11610.240	3.5	32696.840	2.5
474.1058	26.00	-2.87	26874.534	5.0	47960.973	4.0
474.1058	18.03	-2.96	268151.380	2.5	289237.820	1.5
474.1094	24.00	-.97	33906.650	1.0	54992.930	2.0
474.1193	10.01	-3.17	303071.840	2.5	324157.680	2.5
474.1247	27.01	-4.47	24886.500	2.0	45972.100	3.0
474.1249	10.01	-4.02	303071.840	2.5	324157.430	1.5
474.1274	26.00	-4.24	34039.495	4.0	55124.974	3.0
474.1283	28.01	-3.95	99132.780	5.5	120218.220	6.5
474.1294	27.00	-1.09	33173.360	3.5	54258.750	2.5
474.1310	90.00	-1.88	6291.287	0.0	27382.504	0.0
474.1333	28.00	-2.82	29668.918	3.0	50754.137	2.0
474.1395	24.01	-4.58	69506.160	3.5	90591.100	2.5
474.1400	39.00	-.34	16050.847	0.0	37141.664	0.0
474.1420	18.01	-1.03	189040.870	1.5	210125.700	2.5
474.1532	26.00	-1.85	22838.320	2.0	43922.652	3.0
474.1573	7.00	-3.45	94770.850	.5	115855.000	.5
474.1573	7.00	-3.75	94770.850	.5	115855.000	1.5
474.1640	58.01	-1.15	8227.067	0.0	29316.817	0.0
474.1708	23.00	-3.05	18513.460	4.5	39597.010	4.5
474.1720	62.01	-2.17	3468.273	0.0	24557.667	0.0
474.1825	28.01	-2.53	100078.780	1.5	121161.810	1.5
474.1917	22.00	-4.62	386.874	4.0	21469.494	3.0
474.1920	38.00	-.32	14195.724	0.0	35284.228	0.0
474.1924	23.01	-6.12	19112.930	4.0	40195.520	3.0
474.2065	22.00	-2.49	17995.750	0.0	39077.713	1.0
474.2077	24.00	-3.65	35640.690	0.0	56722.600	1.0
474.2097	23.00	-3.83	17242.050	5.5	38323.870	4.5
474.2122	22.00	-.50	17369.590	1.0	38451.298	2.0
474.2149	24.01	-2.11	33418.110	2.5	54499.700	1.5
474.2178	28.01	-4.96	115120.000	2.5	136201.460	3.5
474.2214	17.02	-4.43	183042.700	2.5	204124.000	1.5
474.2219	22.00	-3.28	20006.032	2.0	41087.310	3.0
474.2228	27.00	-2.11	32430.590	5.5	53511.830	5.5
474.2260	90.01	-1.91	10566.135	0.0	31653.127	0.0
474.2268	9.02	-.69	444957.110	1.5	466038.170	2.5
474.2279	23.01	-9.19	13511.710	1.0	34592.720	2.0
474.2301	22.00	-1.94	11776.806	4.0	32857.721	3.0
474.2306	25.01	-3.43	49465.130	3.0	70546.020	4.0
474.2351	27.01	-2.71	64401.500	4.0	85482.190	4.0
474.2385	28.01	-1.03	100010.170	.5	121090.710	.5
474.2394	16.01	-4.10	109560.500	.5	130641.000	1.5
474.2538	27.00	-2.51	22475.360	4.5	43555.220	3.5
474.2561	6.00	-.72	64089.850	1.0	85169.610	0.0
474.2646	23.00	-.54	18805.050	.5	39884.430	1.5
474.2684	28.01	-.20	114874.880	2.5	135954.090	3.5
474.2689	22.00	-6.14	6661.003	3.0	27740.190	2.0
474.2788	28.01	-4.20	115209.850	3.5	136286.600	2.5
474.2792	22.00	.40	18037.225	4.0	39115.958	4.0
474.2840	28.01	-3.89	99132.780	5.5	120211.300	5.5
474.2887	29.01	-4.88	95565.650	4.0	116643.960	3.0
474.2919	26.00	-2.23	33801.555	2.0	54879.720	2.0
474.2934	29.01	-3.22	118163.500	2.0	139241.600	1.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
474.2940	40.00	-1.06	12259.943	0.0	33343.912	0.0
474.3009	28.00	-4.13	33590.159	4.0	54667.928	4.0
474.3013	27.01	-2.78	63509.370	4.0	84587.120	4.0
474.3020	44.00	-.17	22422.791	0.0	43506.404	0.0
474.3087	10.01	-3.79	307240.700	3.5	328318.120	3.5
474.3090	57.01	-.29	14276.381	0.0	35359.683	0.0
474.3096	24.00	-.52	33897.260	1.0	54974.640	2.0
474.3179	18.01	-1.71	190592.170	1.5	211669.180	2.5
474.3274	26.01	-5.48	21581.640	4.5	42658.230	3.5
474.3291	26.00	-4.72	22249.430	3.0	43325.946	3.0
474.3341	24.00	-4.07	24282.340	4.0	45358.630	4.0
474.3404	21.00	-3.88	16009.710	.5	37085.720	.5
474.3456	27.00	-3.54	31699.690	4.5	52775.470	4.5
474.3508	23.01	-2.60	34228.790	3.0	55304.340	4.0
474.3530	92.00	-1.02	6210.629	0.0	27291.976	0.0
474.3551	23.00	-.76	19078.150	3.5	40153.510	2.5
474.3578	28.01	-4.66	113177.610	3.5	134252.650	3.5
474.3643	27.00	-3.43	33439.720	4.5	54514.670	3.5
474.3650	64.00	.07	6694.574	0.0	27775.387	0.0
474.3680	90.01	-2.48	4032.876	0.0	25113.556	0.0
474.3719	23.00	-1.23	15688.800	2.5	36763.410	2.5
474.3805	21.00	.42	11677.310	4.5	32751.540	3.5
474.3814	9.02	-3.69	443865.310	1.5	464939.500	2.5
474.3823	25.02	-1.60	172682.640	3.5	193756.790	4.5
474.3840	41.00	-1.25	8630.355	0.0	29710.324	0.0
474.3870	25.02	-2.81	174874.500	4.5	195948.440	3.5
474.3890	76.00	-1.02	17583.339	0.0	38663.086	0.0
474.4120	23.02	-.27	160576.620	3.5	181649.450	3.5
474.4179	23.00	-1.18	18805.050	.5	39877.620	.5
474.4206	25.02	-3.05	174243.330	3.5	195315.780	2.5
474.4343	24.00	-3.05	24282.340	4.0	45354.180	5.0
474.4365	28.00	-4.71	35639.148	3.0	56710.889	2.0
474.4420	24.00	-4.41	41575.100	3.0	62646.600	2.0
474.4498	7.00	-3.25	94770.850	.5	115842.000	.5
474.4498	7.00	-4.75	94770.850	.5	115842.000	1.5
474.4501	7.00	-2.96	94830.860	2.5	115902.000	2.5
474.4501	7.00	-2.39	94830.860	2.5	115902.000	3.5
474.4573	9.02	-4.83	443868.680	2.5	464939.500	2.5
474.4586	29.01	-2.03	118071.340	1.0	139142.100	2.0
474.4586	9.02	-2.32	444470.240	1.5	465541.000	.5
474.4586	9.02	-2.05	444470.240	1.5	465541.000	1.5
474.4620	41.00	-.73	12259.943	0.0	33336.446	0.0
474.4638	26.00	-5.96	7985.783	2.0	29056.312	3.0
474.4694	18.01	-1.30	183985.940	1.5	205056.220	1.5
474.4733	28.01	-2.89	100490.950	1.5	121561.060	.5
474.4757	21.02	-.28	128183.000	.5	149253.000	.5
474.4802	27.02	-3.50	83938.900	3.5	105008.700	3.5
474.4818	25.02	-3.39	195462.260	.5	216531.990	1.5
474.4847	28.00	-2.49	33590.159	4.0	54659.759	5.0
474.4848	19.01	-2.59	166461.500	1.0	187531.100	1.0
474.4856	26.00	-3.43	26623.726	2.0	47693.289	3.0
474.4930	59.01	-2.01	1613.150	0.0	22688.277	0.0
474.4945	26.00	-3.25	26351.049	5.0	47420.215	5.0
474.5061	26.00	-4.34	21715.735	5.0	42784.387	6.0
474.5110	45.00	-1.81	7743.122	0.0	28817.449	0.0
474.5126	22.00	-2.91	20126.055	3.0	41194.420	3.0
474.5131	26.00	-3.89	17927.378	1.0	38995.717	1.0
474.5163	28.01	-1.27	100078.780	1.5	121146.980	2.5
474.5174	25.01	-4.14	82735.290	2.0	103803.440	3.0
474.5194	24.00	-2.06	25106.340	3.0	46174.400	3.0
474.5201	27.00	-4.53	21920.090	4.5	42988.120	3.5
474.5347	28.01	-4.38	115785.060	1.5	136852.440	1.5
474.5370	23.00	-3.91	18174.060	1.5	39241.340	2.5
474.5473	22.00	-5.92	6598.749	2.0	27665.570	1.0
474.5478	28.01	-3.48	100389.520	2.5	121456.320	1.5
474.5560	18.03	-4.25	268171.380	1.5	289237.820	1.5
474.5568	28.01	-3.78	112906.930	1.5	133973.330	2.5
474.5570	74.00	-1.43	17986.627	0.0	39058.911	0.0
474.5680	62.01	-1.51	806.575	0.0	21878.371	0.0
474.5753	16.01	-3.48	131028.760	1.5	152094.340	2.5
474.5780	25.02	-4.37	174243.330	3.5	195308.790	4.5
474.5788	26.00	-.59	29469.010	2.0	50534.435	3.0
474.5820	64.00	-.47	7017.204	0.0	28088.378	0.0
474.5821	25.00	-3.17	37420.240	5.5	58485.520	4.5
474.5825	26.00	-3.34	33095.922	4.0	54161.182	3.0
474.5930	73.00	-1.12	17260.709	0.0	38331.395	0.0
474.5956	28.01	-3.72	114052.040	3.5	135116.720	2.5
474.6026	25.00	-1.36	38351.780	.5	59416.150	1.5
474.6111	27.00	-.54	31699.690	4.5	52763.680	3.5
474.6122	21.00	-3.07	16021.780	1.5	37085.720	.5
474.6127	25.02	-4.36	174048.890	2.5	195112.810	3.5
474.6168	28.01	-2.69	110573.360	2.5	131637.100	3.5
474.6373	23.01	-2.01	19132.690	2.0	40195.520	3.0
474.6418	25.02	-1.29	194849.100	1.5	215911.730	1.5
474.6483	25.00	-2.36	38669.600	3.5	59731.940	4.5
474.6571	28.01	-4.86	109269.830	1.5	130331.780	1.5
474.6623	23.00	-.81	16361.450	1.5	37423.170	1.5
474.6663	7.00	-3.45	94793.460	1.5	115855.000	.5
474.6663	7.00	-2.95	94793.460	1.5	115855.000	1.5
474.6663	7.00	-4.20	94793.460	1.5	115855.000	2.5
474.6686	25.01	-3.92	82774.730	1.0	103836.170	2.0
474.6930	59.01	-1.36	5162.081	0.0	26228.328	0.0
474.7067	24.00	-2.32	24940.610	2.0	46000.360	3.0
474.7140	58.01	-.18	11614.683	0.0	32679.998	0.0
474.7177	22.00	-2.83	27665.570	1.0	48724.830	1.0
474.7260	22.00	-2.60	8602.340	2.0	29661.232	1.0
474.7288	22.00	-3.17	27665.570	1.0	48724.340	2.0
474.7411	20.02	-2.33	361794.080	1.0	382852.300	2.0
474.7429	7.00	-4.62	94830.860	2.5	115889.000	1.5
474.7450	24.00	-3.63	33934.880	3.0	54992.930	2.0
474.7547	24.01	-4.09	45669.540	1.5	66727.160	2.5
474.7606	23.00	-5.16	2153.200	1.5	23210.560	2.5
474.7624	24.00	-1.82	33935.650	2.0	54992.930	2.0
474.7666	22.00	-.85	18141.229	5.0	39198.320	6.0
474.7671	38.01	-1.81	47736.530	0.0	68799.489	0.0
474.7687	11.05	-1.67	949778.000	0.0	970835.000	1.0
474.7802	28.01	-1.55	99154.810	4.5	120211.300	5.5
474.7881	7.00	-4.01	94830.860	2.5	115887.000	1.5
474.7881	7.00	-2.67	94830.860	2.5	115887.000	3.5
474.7941	11.00	-2.39	16956.172	.5	38012.044	.5
474.7955	28.01	-2.94	94729.250	2.5	115765.060	1.5
474.7978	27.00	-3.09	32733.070	3.5	53788.780	4.5
474.7978	18.01	-4.95	185093.230	4.5	206148.940	3.5
474.7993	14.00	-1.75	39760.285	1.0	60815.925	2.0
474.8077	24.00	-4.18	31009.000	3.0	52064.270	4.0
474.8104	24.01	-2.54	67868.050	2.5	88923.200	2.5
474.8111	21.01	-3.03	39344.900	2.0	60400.020	1.0
474.8176	25.00	-1.93	38934.940	2.5	59989.770	1.5
474.8208	24.00	-3.73	24303.940	3.0	45356.630	4.0
474.8302	25.02	-4.65	109841.120	3.5	130895.390	4.5
474.8323	24.00	-4.53	20520.920	3.0	41575.100	3.0
474.8380	75.00	-1.42	16212.162	0.0	37271.976	0.0
474.8408	29.01	-3.10	118163.500	2.0	139217.300	2.0
474.8499	22.00	-6.24	13981.750	1.0	35035.147	2.0
474.8499	17.01	-2.28	149952.400	1.0	171005.800	2.0
474.8523	23.00	-.63	16449.850	2.5	37503.140	2.5
474.8620	28.01	-1.85	94067.140	1.5	115120.000	2.5
474.8656	24.01	-3.45	67870.500	1.5	88923.200	2.5
474.8681	25.01	-3.37	49465.130	3.0	70517.720	3.0
474.8730	57.01	-1.22	7420.492	0.0	28478.754	0.0
474.8783	23.00	-2.17	15770.720	4.5	36822.860	3.5
474.8850	27.00	-4.72	33462.830	2.5	54514.670	3.5
474.8898	24.00	-1.15	21856.940	3.0	42908.570	4.0
474.8905	9.02	-1.63	444489.400	2.5	465541.000	1.5
474.8952	21.00	-1.79	16096.860	1.5	37148.250	1.5
474.9030	75.00	-2.06	14115.066	0.0	35171.998	0.0
474.9162	25.02	-4.76	173920.690	1.5	194971.150	2.5
474.9180	25.01	-2.18	49889.860	3.0	70940.240	2.0
474.9234	24.00	-1.59	27176.220	1.0	48226.360	0.0
474.9257	23.01	-4.16	13542.680	3.0	34592.720	2.0
474.9279	24.00	-1.35	33906.650	1.0	54956.590	1.0
474.9293	23.01	-3.24	18353.890	3.0	39403.770	4.0
474.9297	25.02	-3.76	115774.000	3.5	136823.860	3.5
474.9322	27.00	-5.29	4690.180	2.5	25739.930	2.5
474.9347	27.00	-1.87	32654.500	2.5	53704.140	2.5
474.9369	23.02	.08	161027.320	4.5	182076.860	5.5
474.9412	27.00	-3.89	23152.570	3.5	44201.920	2.5
474.9489	27.00	-2.31	27497.060	2.5	48546.070	1.5
474.9500	58.01	-1.06	12663.231	0.0	33718.079	0.0
474.9519	7.00	-1.97	95532.120	2.5	116581.000	1.5
474.9519	7.00	-2.35	95532.120	2.5	116581.000	2.5
474.9595	7.00	-3.25	94793.460	1.5	115842.000	.5
474.9595	7.00	-3.95	94793.460	1.5	115842.000	1.5
474.9597	26.00	-4.89	12968.552	2.0	34017.084	1.0
474.9624	28.01	-3.59	114052.040	3.5	135100.450	3.5
474.9638	26.00	-3.08	33507.102	3.0	54555.450	4.0
474.9669	27.00	-.22	24627.790	4.5	45676.000	5.5
474.9700	41.00	-.38	11453.368	0.0	32507.329	0.0
474.9703	26.02	-4.75	202282.650	2.0	223330.710	3.0
474.9750	60.00	-.48	3629.588	0.0	24683.328	0.0
474.9762	27.00	-3.69	33466.870	3.5	54514.670	3.5
474.9764	24.01	-3.57	53271.070	2.5	74318.860	3.5
474.9798	23.00	-2.78	19078.150	3.5	40125.790	3.5
474.9800	27.00	-1.61	32654.500	2.5	53702.130	3.5
474.9825	24.01	-1.78	67875.680	3.5	88923.200	2.5
474.9902	28.01	-1.36	117074.700	3.5	138121.880	4.5
474.9920	27.00	-2.48	32464.730	4.5	53511.830	5.5
474.9922	28.01	-4.85	110573.360	2.5	131620.450	1.5
474.9938	26.00	-1.12	36766.950	3.0	57813.970	3.0
474.9945	22.00	-4.13	18593.990	3.0	39640.980	3.0
474.9950	90.00	-1.46	8065.752	0.0	29118.605	0.0
474.9954	23.02	.61	161240.020	5.5	182286.970	5.5
474.9979	24.00	-2.39	27163.200	0.0	48210.040	1.0
475.0105	24.01	-3.60	67379.920	1.5	88426.200	.5
475.0288	7.00	-2.62	86137.320	.5	107182.788	1.5
475.0312	20.02	-.99	340748.720	2.0	361794.080	1.0
475.0390	42.00	-.49	20245.038	0.0	41295.941	0.0
475.0410	57.00	-.43	9840.217	0.0	30891.032	0.0
475.0486	26.01	-4.23	54870.620	2.5	75915.210	2.5
475.0613	22.00	-3.73	18482.860	1.0	39526.890	2.0
475.0656	25.01	-4.06	81659.500	3.0	102703.340	4.0
475.0683	27.00	-3.91	33945.900	2.5	54989.620	3.5
475.0703	25.02	-4.44	115780.230	2.5	136823.860	3.5
475.0720	62.00	-.46	2258.411	0.0	23307.852	0.0
475.0807	18.01	-2.95	183090.810	1.5	204133.980	2.5
475.0895	28.01	-.53	114836.630	3.5	135879.410	3.5
475.0966	10.00	-4.07	151038.452	1.0	172080.916	1.0
475.0974	23.00	-.57	16572.540	3.5	37614.970	3.5
475.1000	7.04	.51	712464.000	0.0	733512.200	0.0
475.1028	23.00	-2.14	18805.050	.5	39847.240	1.5
475.1042	24.00	-.87	33762.560	0.0	54804.690	1.0
475.1134	23.00	-3.96	2311.370	3.5	23353.090	3.5
475.1150	25.00	-1.83	44978.980	1.5	66020.630	2.5
475.1159	24.00	-2.08	27176.220	1.0	48217.830	2.0
475.1272	23.00	-1.10	19078.150	3.5	40119.260	2.5
475.1297	12.02	.07	561798.700	3.0	582839.700	3.0
475.1297	12.02	.07	561798.700	3.0	582839.700	3.0
475.1299	28.01	-4.68	97273.830	2.5	118314.820	2.5
475.1308	28.01	-2.70	94067.140	1.5	115108.090	2.5
475.1420	41.00	-.24	16857.422	0.0	37903.762	0.0
475.1453	23.00	-3.22	19023.470	4.5	40063.780	5.5
475.1507	27.00	-.95	32654.500	2.5	53694.570	3.5
475.1543	23.00	-1.36	15571.900	2.5	36611.810	2.5
475.1651	18.01	-3.34	185093.230	4.5	206132.660	4.5
475.1706	23.00	-3.02	15724.220	3.5	36763.410	2.5
475.1767	24.00	-3.64	27597.220	3.0	48636.140	3.0
475.1822	11.00	-2.09	16973.368	1.5	38012.044	.5
475.1828	23.00	-1.11	17181.980	4.5	38220.630	5.5
475.1910	40.00	-1.89	5000.766	0.0	26044.936	0.0
475.2000	7.03	-.62	484525.000	0.0	505568.771	0.0
475.2017	24.01	-4.63	68583.440	2.5	89621.250	3.5
475.2083	24.00	-2.02	33762.740	6.0	54800.260	6.0
475.2112	28.00	-2.11	29668.918	3.0	50706.310	4.0
475.2121	27.00	-3.19	33439.720	4.5	54477.070	3.5
475.2128	26.01	-3.91	64425.460	2.5	85462.780	3.5
475.2155	22.00	-4.70	26803.417	2.0	47840.620	3.0
475.2160	76.00	.39	34198.789	0.0	55241.852	0.0
475.2210	74.00	-1.15	18873.860	0.0	39916.701	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
475.2240	58.01	-.87	12179.286	0.0	33221.994	0.0
475.2311	25.02	-2.75	195112.810	3.5	216149.320	3.5
475.2327	24.00	-4.94	33762.740	6.0	54799.180	5.0
475.2363	26.01	-4.11	62689.960	2.5	83726.240	3.5
475.2404	23.00	-1.09	19189.280	1.5	40225.380	1.5
475.2415	28.00	-.86	29500.690	1.0	50536.742	1.0
475.2420	23.00	-3.59	15664.750	1.5	36700.780	2.5
475.2580	74.00	-1.85	13227.833	0.0	34269.036	0.0
475.2600	24.00	-2.67	36552.130	3.0	57587.360	4.0
475.2632	25.02	-2.72	194545.780	.5	215580.870	.5
475.2632	9.02	-1.16	445006.130	2.5	466041.220	3.5
475.2779	24.01	-4.75	69478.060	2.5	90512.500	1.5
475.2786	26.00	-3.42	34692.130	1.0	55726.540	0.0
475.2790	39.00	-.18	15244.271	0.0	36284.544	0.0
475.2876	25.02	-4.48	115762.600	1.5	136796.610	2.5
475.2899	25.00	-2.89	30411.740	.5	51445.650	1.5
475.2919	24.00	-2.33	27176.220	1.0	48210.040	1.0
475.3050	40.00	-.50	15002.299	0.0	36041.421	0.0
475.3055	28.01	-2.59	94705.930	3.5	115739.150	4.5
475.3117	10.00	-3.38	151038.452	1.0	172071.396	2.0
475.3154	21.00	-1.37	0.000	1.5	21032.780	2.5
475.3179	25.00	-2.22	38351.780	.5	59384.450	1.5
475.3189	7.00	-2.15	86220.480	1.5	107253.106	2.5
475.3218	17.01	-2.63	150019.000	0.0	171051.500	1.0
475.3251	28.01	-2.67	100010.170	.5	121042.520	1.5
475.3321	27.00	-3.71	34133.590	3.5	55165.630	2.5
475.3322	9.02	-1.31	445006.130	2.5	466038.170	2.5
475.3337	24.01	-3.75	68305.730	1.5	89337.700	1.5
475.3608	27.00	-4.10	23152.570	3.5	44183.340	4.5
475.3615	23.00	-2.84	15664.750	1.5	36695.490	.5
475.3626	28.01	-2.33	113177.610	3.5	134208.300	2.5
475.3818	25.01	-4.32	52653.270	4.0	73683.110	4.0
475.3893	25.00	-2.01	42053.730	2.5	63083.240	1.5
475.3932	19.00	-2.91	13042.880	1.5	34072.220	.5
475.3936	23.00	-.61	16728.750	4.5	37758.070	4.5
475.4040	24.00	-2.25	27223.050	2.0	48251.910	3.0
475.4042	25.00	-.08	18402.460	2.5	39431.310	3.5
475.4087	25.01	-3.85	82839.490	0.0	103868.140	1.0
475.4135	25.01	-2.98	49517.580	5.0	70546.020	4.0
475.4225	23.01	-6.46	16340.970	3.0	37369.010	2.0
475.4243	22.01	-4.05	9930.740	1.5	30958.700	2.5
475.4338	27.00	-.78	26063.110	1.5	47090.650	2.5
475.4360	22.00	-.98	17423.853	2.0	38451.298	2.0
475.4386	22.00	-4.50	27887.740	3.0	48915.070	2.0
475.4464	22.00	-2.45	24694.895	4.0	45721.878	4.0
475.4510	26.01	-6.79	21308.080	1.5	42334.860	2.5
475.4524	7.00	-2.86	95475.280	.5	116502.000	.5
475.4524	7.00	-3.61	95475.280	.5	116502.000	1.5
475.4544	25.02	-2.08	194849.100	1.5	215875.730	2.5
475.4605	23.00	-3.03	18372.460	3.5	39398.820	3.5
475.4678	25.00	-1.96	30419.610	2.5	51445.650	1.5
475.4723	24.00	-1.39	24940.610	2.0	45966.450	2.0
475.4756	28.00	-1.32	29320.782	3.0	50346.477	2.0
475.4788	23.02	-1.96	141734.730	5.5	162760.280	4.5
475.5037	25.00	-4.32	27201.540	2.5	48225.990	3.5
475.5107	7.00	-2.65	94830.860	2.5	115855.000	1.5
475.5107	7.00	-3.24	94830.860	2.5	115855.000	2.5
475.5114	24.00	-1.58	24282.340	4.0	45306.450	5.0
475.5116	16.01	-4.04	119294.700	2.5	140318.800	3.5
475.5161	17.01	-2.58	161348.400	1.0	182372.300	1.0
475.5207	26.02	-4.33	147305.970	3.0	168329.670	3.0
475.5276	14.00	-2.66	39683.163	0.0	60706.558	1.0
475.5281	28.01	-3.71	115565.980	2.5	136589.350	3.5
475.5320	41.00	-1.11	13066.518	0.0	34095.597	0.0
475.5350	64.01	-.45	17905.969	0.0	38934.915	0.0
475.5370	62.01	-2.42	2177.753	0.0	23206.611	0.0
475.5386	25.00	-4.53	27248.000	1.5	48270.910	2.5
475.5388	18.01	-3.15	183090.810	1.5	204113.710	1.5
475.5413	25.01	-4.84	52373.180	3.0	73395.970	2.0
475.5429	24.00	-4.49	31009.000	3.0	52031.720	3.0
475.5453	25.02	-3.94	115774.000	3.5	136796.610	2.5
475.5540	58.01	-1.36	5726.684	0.0	26754.790	0.0
475.5546	28.02	-4.93	121412.200	2.0	142434.400	2.0
475.5580	45.00	-1.79	14276.381	0.0	35304.310	0.0
475.5607	28.01	-2.06	70778.120	3.5	91800.050	4.5
475.5659	17.01	-3.97	126032.000	2.0	147053.700	2.0
475.5681	22.00	-4.95	27750.124	5.0	48771.730	5.0
475.5723	25.01	-1.51	43528.300	5.0	64549.720	6.0
475.5730	92.01	-2.25	0.000	0.0	21027.266	0.0
475.5761	28.01	-2.56	71770.830	2.5	92792.080	3.5
475.5831	24.00	-1.56	33935.650	2.0	54956.590	1.0
475.5850	60.00	-.65	3629.588	0.0	24656.323	0.0
475.5886	11.02	-2.97	444748.100	1.5	465768.800	2.5
475.5889	22.00	-4.76	26892.926	3.0	47913.610	4.0
475.5935	9.02	-2.44	469119.520	2.5	490140.000	1.5
475.5935	9.02	-1.29	469119.520	2.5	490140.000	2.5
475.5967	28.01	-3.38	97273.830	2.5	118294.170	3.5
475.5996	7.00	-4.38	94881.790	3.5	115902.000	2.5
475.5996	7.00	-3.17	94881.790	3.5	115902.000	3.5
475.6030	24.00	-2.56	24093.160	2.0	45113.220	3.0
475.6057	25.00	-2.13	30425.710	1.5	51445.650	1.5
475.6123	9.02	-1.48	469120.350	1.5	490140.000	1.5
475.6123	9.02	-2.44	469120.350	1.5	490140.000	2.5
475.6132	24.00	-4.97	33113.270	4.0	54132.680	3.0
475.6137	24.00	.24	25038.610	5.0	46058.200	4.0
475.6230	44.00	-1.58	8469.040	0.0	29494.096	0.0
475.6284	25.00	-3.76	45130.160	4.5	66149.100	3.5
475.6284	24.00	-3.83	35572.940	2.0	56591.880	2.0
475.6460	77.00	.40	33714.843	0.0	54738.882	0.0
475.6510	28.00	-.31	28068.091	4.0	49086.030	4.0
475.6510	73.00	-2.01	3871.561	0.0	24895.379	0.0
475.6515	26.00	-4.79	32873.623	4.0	53891.540	3.0
475.6567	27.00	-2.23	23184.230	2.5	44201.920	2.5
475.6636	22.00	-3.49	25227.217	3.0	46244.600	2.0
475.6734	25.02	-1.85	194894.780	1.5	215911.730	1.5
475.6800	92.00	-1.11	564.603	0.0	21587.139	0.0
475.6816	25.01	-4.08	52379.380	2.0	73395.970	2.0
475.6861	26.01	-4.75	44915.070	3.5	65931.460	3.5
475.6862	22.00	-3.75	24694.895	4.0	45711.280	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
475.6863	25.02	-3.45	115780.230	2.5	136796.610	2.5
475.6910	22.00	-2.84	18061.540	1.0	39077.713	1.0
475.7003	24.00	-1.74	28637.000	3.0	49652.760	2.0
475.7067	23.00	-2.67	19023.470	4.5	40036.950	4.5
475.7198	23.03	-1.69	265271.600	3.0	286286.500	4.0
475.7212	18.01	-1.56	183914.560	.5	204929.400	.5
475.7257	28.01	-4.05	72375.420	1.5	93390.060	2.5
475.7305	26.01	-4.74	65109.710	3.5	86124.140	4.5
475.7334	24.00	-.24	34190.490	2.0	55204.790	3.0
475.7343	23.00	-.79	16917.150	5.5	37931.410	5.5
475.7348	27.00	-2.63	33462.830	2.5	54477.070	3.5
475.7395	25.02	-3.74	173835.070	.5	194849.100	1.5
475.7508	23.00	-.51	16361.450	1.5	37374.980	.5
475.7513	26.00	-1.82	26406.490	1.0	47420.000	2.0
475.7550	74.00	-2.45	2903.671	0.0	23922.893	0.0
475.7578	24.00	-.47	28637.000	3.0	49650.220	3.0
475.7580	72.00	-1.99	8872.327	0.0	29891.417	0.0
475.7583	24.02	-3.94	138362.400	2.0	159375.600	3.0
475.7588	25.02	-2.64	195948.440	3.5	216961.620	3.5
475.7676	26.01	-4.63	54902.420	1.5	75915.210	2.5
475.7678	28.01	-1.17	114836.630	3.5	135849.410	2.5
475.7777	26.00	-3.47	26351.049	5.0	47363.390	6.0
475.7780	74.00	-1.71	15002.299	0.0	36020.505	0.0
475.7834	9.02	-1.45	443927.410	3.5	464939.500	2.5
475.7840	44.00	-.87	7420.492	0.0	28438.433	0.0
475.7840	58.01	-.82	7662.464	0.0	28680.405	0.0
475.7859	24.00	-3.42	15688.800	2.5	36700.780	2.5
475.7871	28.01	-3.86	100078.780	1.5	121090.710	.5
475.7940	59.01	-1.49	6371.944	0.0	27389.443	0.0
475.7960	77.00	-1.63	16534.792	0.0	37552.203	0.0
475.7984	26.00	-3.12	36686.159	4.0	57697.590	4.0
475.7991	25.01	-3.39	52383.720	4.0	73395.120	3.0
475.8005	18.00	-2.81	104102.144	1.0	125113.480	2.0
475.8030	73.00	-1.85	10888.765	0.0	31905.867	0.0
475.8049	7.00	-3.65	94830.860	2.5	115842.000	1.5
475.8120	22.00	.54	18141.229	5.0	39152.057	5.0
475.8147	26.01	-4.49	54904.500	3.5	75915.210	2.5
475.8154	21.00	-1.92	18711.030	.5	39721.710	1.5
475.8210	74.00	-.73	23793.968	0.0	44810.275	0.0
475.8260	64.00	-1.68	483.945	0.0	21500.031	0.0
475.8262	27.00	-3.52	33466.870	3.5	54477.070	3.5
475.8353	28.00	-3.30	27943.543	1.0	48953.344	1.0
475.8366	25.01	-3.12	49517.580	5.0	70527.320	5.0
475.8391	24.00	-3.03	36577.730	4.0	57587.360	4.0
475.8415	28.00	-1.84	31031.042	3.0	52040.568	2.0
475.8500	42.00	.18	29601.310	0.0	50616.336	0.0
475.8518	20.02	-4.84	339198.090	1.0	360207.160	2.0
475.8634	23.00	-1.81	15571.900	2.5	36580.460	1.5
475.8667	9.02	-3.52	443913.330	4.5	464921.740	3.5
475.8683	7.00	-2.26	95493.660	1.5	116502.000	.5
475.8683	7.00	-3.47	95493.660	1.5	116502.000	1.5
475.8700	64.00	0.00	7017.204	0.0	28031.347	0.0
475.8725	10.00	-2.45	150315.861	2.0	171324.017	1.0
475.8751	22.00	-2.05	27907.026	2.0	48915.070	2.0
475.8761	23.00	-2.57	9824.580	2.5	30832.580	2.5
475.8830	75.00	-2.18	11534.025	0.0	32547.593	0.0
475.8840	23.02	.19	161027.320	4.5	182034.970	4.5
475.8904	22.00	-1.97	6742.757	4.0	27750.124	5.0
475.8940	21.00	-.83	16141.040	2.5	37148.250	1.5
475.8962	23.00	-3.67	18120.120	.5	39127.230	1.5
475.8969	25.00	-2.65	45013.550	2.5	66020.630	2.5
475.8974	25.00	-3.55	37420.240	5.5	58427.300	5.5
475.8975	14.00	-2.43	39955.053	2.0	60962.105	2.0
475.8994	10.01	-4.12	317781.790	1.5	338788.760	.5
475.9001	18.01	-4.99	185624.730	3.5	206631.670	2.5
475.9023	23.00	-1.18	17116.920	3.5	38123.760	4.5
475.9060	22.00	-5.80	14028.470	2.0	35035.147	2.0
475.9086	22.00	-.46	25643.695	3.0	46650.260	3.0
475.9266	25.01	-3.34	52379.380	2.0	73385.150	1.0
475.9272	22.00	.63	18192.577	6.0	39198.320	6.0
475.9393	7.00	-4.46	94881.790	3.5	115887.000	2.5
475.9393	7.00	-2.34	94881.790	3.5	115887.000	3.5
475.9463	24.00	-3.15	36552.130	3.0	57557.030	3.0
475.9547	28.01	-.97	114874.880	2.5	135879.410	3.5
475.9586	22.00	-2.04	26772.965	5.0	47777.320	5.0
475.9606	24.00	-3.39	27820.230	3.0	48824.500	4.0
475.9627	22.00	-.78	17540.205	3.0	38544.380	3.0
475.9642	23.01	-7.84	13741.610	3.0	34745.720	3.0
475.9726	24.00	-2.18	24282.340	4.0	45286.080	4.0
475.9805	24.00	-4.82	31028.330	2.0	52031.720	3.0
475.9912	24.00	-1.61	25106.340	3.0	46109.260	2.0
475.9920	58.01	-1.54	8711.012	0.0	29719.768	0.0
475.9934	26.02	-3.40	147326.850	4.0	168329.670	3.0
475.9993	25.00	-2.51	41031.480	4.5	62034.040	3.5
475.9996	18.01	-3.85	187589.230	2.5	208591.780	1.5
476.0020	66.01	-2.03	4274.849	0.0	25263.164	0.0
476.0027	24.01	-3.79	53271.070	2.5	74273.480	1.5
476.0045	18.01	-2.57	184191.710	.5	205194.040	1.5
476.0073	26.00	-3.71	24506.902	2.0	45509.112	1.0
476.0150	26.01	-3.60	44929.590	2.5	65931.460	3.5
476.0161	22.00	-4.08	18525.070	2.0	39526.890	2.0
476.0190	42.00	.51	21212.928	0.0	42220.493	0.0
476.0205	28.00	-3.96	29832.810	3.0	50834.435	2.0
476.0270	62.00	.05	806.575	0.0	21813.787	0.0
476.0347	27.00	-4.67	33945.900	2.5	54946.900	2.5
476.0381	10.01	-1.94	292651.320	1.5	313652.170	1.5
476.0383	25.02	-1.44	172755.950	3.5	193756.790	4.5
476.0450	60.00	-1.31	1048.548	0.0	22054.965	0.0
476.0546	27.01	-3.45	63587.000	3.0	84587.120	4.0
476.0637	22.00	-4.58	22081.198	2.0	43080.920	2.0
476.0740	64.00	-1.14	1693.808	0.0	22698.946	0.0
476.0748	28.00	-3.81	29832.810	3.0	50832.039	3.0
476.0771	29.01	-4.16	118142.970	3.0	139142.100	2.0
476.0785	18.01	-4.91	185624.730	3.5	206623.800	3.5
476.0789	24.00	-2.99	27825.450	5.0	48824.500	4.0
476.0861	23.00	-4.17	17116.920	3.5	38115.650	3.5
476.0882	23.00	-6.75	9636.960	1.5	30635.600	2.5
476.0914	25.02	-2.99	195308.790	4.5	216307.290	4.5
476.0918	24.00	-3.35	36558.550	2.0	57557.030	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
476.0980	39.00	-1.58	483.945	0.0	21488.024	0.0
476.1007	23.01	-3.50	16533.000	5.0	37531.090	4.0
476.1029	23.01	-7.60	13594.730	2.0	34592.720	2.0
476.1204	26.01	-3.71	78690.980	2.5	99688.200	3.5
476.1222	29.01	-3.96	116080.460	3.0	137077.600	3.0
476.1251	24.00	-1.32	25177.390	4.0	46174.400	3.0
476.1306	24.00	-2.31	37205.880	3.0	58202.650	3.0
476.1385	24.01	-2.71	45730.740	2.5	66727.160	2.5
476.1417	28.01	-3.24	100389.520	2.5	121385.800	1.5
476.1458	28.01	-1.55	92325.850	3.5	113321.950	4.5
476.1512	25.00	-.38	23818.870	.5	44814.730	1.5
476.1708	22.00	-4.46	24694.895	4.0	45689.890	3.0
476.1730	28.01	-1.48	115081.360	4.5	136076.260	4.5
476.1757	24.00	-2.88	27223.050	2.0	48217.830	2.0
476.1798	23.03	-1.71	236148.600	1.0	257143.200	2.0
476.1859	9.02	-3.10	443927.410	3.5	464921.740	3.5
476.1898	27.00	-3.25	23207.760	1.5	44201.920	2.5
476.1947	18.01	-1.83	190592.170	1.5	211586.110	2.5
476.1973	25.00	-4.79	34463.370	1.5	55457.200	.5
476.2000	7.03	-1.52	484525.000	0.0	505524.580	0.0
476.2059	26.01	-3.72	63273.030	2.5	84266.480	2.5
476.2102	27.00	-.74	31871.150	3.5	52864.410	4.5
476.2263	26.00	-4.98	21999.132	4.0	42991.680	5.0
476.2313	6.00	-2.21	60333.430	0.0	81325.760	1.0
476.2367	25.00	.21	23296.670	3.5	44288.760	4.5
476.2467	18.01	-1.16	183985.940	1.5	204977.590	2.5
476.2476	28.01	-3.53	115209.850	3.5	136201.460	3.5
476.2533	6.00	-2.04	60352.630	1.0	81343.990	2.0
476.2599	26.02	-3.47	114325.350	5.0	135316.420	5.0
476.2627	28.00	-2.18	15609.861	2.0	36600.805	2.0
476.2637	28.01	-2.87	115085.360	3.5	136076.260	4.5
476.2651	23.00	-1.45	20767.570	3.5	41758.410	3.5
476.2730	59.01	-1.75	3387.616	0.0	24383.977	0.0
476.2744	23.00	-4.38	2220.130	2.5	23210.560	2.5
476.2780	25.01	-2.66	43528.300	5.0	64518.570	5.0
476.2780	21.00	-1.76	18711.030	.5	39701.300	.5
476.2780	40.00	-.04	14679.669	0.0	35675.810	0.0
476.2801	22.01	-2.97	8744.270	2.5	29734.450	3.5
476.2810	23.02	-2.62	140933.140	3.5	161923.280	2.5
476.2910	23.03	-1.25	263111.400	4.0	284101.100	3.0
476.2955	23.03	-1.38	265067.400	2.0	286056.900	3.0
476.2955	17.01	-2.36	161348.400	1.0	182337.900	0.0
476.3100	21.00	-1.08	16096.860	1.5	37085.720	.5
476.3100	76.00	.61	38392.980	0.0	59387.710	0.0
476.3148	18.01	-1.92	184191.710	.5	205180.360	.5
476.3293	26.00	-3.97	33695.378	5.0	54683.390	4.0
476.3375	16.01	-3.59	119242.130	1.5	140229.780	2.5
476.3459	27.00	-6.74	5075.830	1.5	26063.110	1.5
476.3525	24.00	-3.61	27223.050	2.0	48210.040	1.0
476.3577	26.01	-4.17	63876.380	5.5	84863.140	5.5
476.3620	60.01	-2.14	2984.328	0.0	23976.767	0.0
476.3670	75.00	-1.79	17099.394	0.0	38091.612	0.0
476.3790	26.01	-6.62	25981.650	3.5	46967.470	2.5
476.3820	64.00	.06	10808.108	0.0	31799.665	0.0
476.3836	22.01	-2.52	9850.900	.5	30836.520	1.5
476.3856	27.00	-3.27	31871.150	3.5	52856.680	3.5
476.3870	60.01	-2.10	1451.835	0.0	22443.172	0.0
476.3900	58.01	-.98	8227.067	0.0	29218.272	0.0
476.3942	28.00	-1.02	29481.020	4.0	50466.172	4.0
476.4020	27.00	-2.79	33173.360	3.5	54158.170	4.5
476.4058	22.00	-3.21	27740.190	2.0	48724.630	1.0
476.4113	8.01	-4.99	254895.200	1.5	275879.600	2.5
476.4113	8.01	-4.98	254895.200	2.5	275879.600	3.5
476.4169	22.00	-2.58	27740.190	2.0	48724.340	2.0
476.4178	24.00	-4.54	31028.330	2.0	52012.440	2.0
476.4208	26.00	-3.65	33507.102	3.0	54491.080	3.0
476.4274	24.00	-.20	28637.000	3.0	49620.690	4.0
476.4400	44.00	.18	27342.899	0.0	48331.901	0.0
476.4420	42.00	-.85	18389.915	0.0	39378.829	0.0
476.4449	25.00	-3.04	44978.980	1.5	65961.900	1.5
476.4478	21.00	-4.93	21032.780	2.5	42015.570	3.5
476.4480	22.01	-2.84	9975.920	1.5	30958.700	2.5
476.4544	8.01	-3.81	255281.400	.5	276263.900	.5
476.4544	8.01	-3.84	255281.400	.5	276263.900	1.5
476.4555	23.00	-3.18	18258.890	2.5	39241.340	2.5
476.4626	24.00	-1.61	24303.940	3.0	45286.080	4.0
476.4732	25.01	-1.63	43536.900	4.0	64518.570	5.0
476.4787	28.01	-1.80	115785.060	1.5	136766.490	2.5
476.4862	18.01	-.10	139258.250	.5	160239.350	1.5
476.4896	25.02	-3.14	194894.780	1.5	215875.730	2.5
476.4969	25.01	-4.11	54938.100	1.0	75918.730	2.0
476.5073	24.01	-2.53	45669.540	1.5	66649.710	1.5
476.5090	18.01	-2.60	190592.170	1.5	211572.270	1.5
476.5112	17.02	-2.89	222100.700	1.5	243080.700	1.5
476.5144	25.01	-4.40	49517.580	5.0	70497.440	4.0
476.5220	59.01	-1.97	2984.328	0.0	23969.718	0.0
476.5249	17.01	-2.48	126219.000	3.0	147198.400	4.0
476.5271	24.00	-3.68	36577.730	4.0	57557.030	3.0
476.5434	23.00	-2.16	17242.050	5.5	38220.630	5.5
476.5482	26.00	-4.56	12968.552	2.0	33946.920	2.0
476.5632	23.00	-3.57	19023.470	4.5	40001.180	3.5
476.5689	27.00	-1.22	33449.180	.5	54426.640	1.5
476.5696	28.01	-3.58	98122.630	.5	119100.060	1.5
476.5846	25.00	-.20	23719.520	1.5	44696.290	2.5
476.5893	23.00	-4.65	15724.220	3.5	36700.780	2.5
476.5900	29.01	-3.14	118142.970	3.0	139119.500	3.0
476.5934	24.00	-2.70	31987.060	4.0	52963.440	4.0
476.6080	23.00	-5.65	2112.320	.5	23088.060	1.5
476.6284	23.00	-3.75	19026.340	2.5	40001.180	3.5
476.6295	25.02	-4.18	195308.790	4.5	216283.580	3.5
476.6309	24.00	-4.72	31028.330	2.0	52003.060	1.0
476.6309	22.00	-.83	18141.229	5.0	39115.958	4.0
476.6354	28.01	-.86	114874.880	2.5	135849.410	2.5
476.6418	25.00	-.01	23549.200	2.5	44523.450	3.5
476.6454	25.02	-4.13	173920.690	1.5	194894.780	1.5
476.6510	72.00	-1.01	13953.751	0.0	34933.462	0.0
476.6577	23.00	-2.95	19026.340	2.5	39999.890	2.5
476.6600	90.00	-2.19	3790.903	0.0	24770.217	0.0
476.6618	24.00	-3.65	35618.510	1.0	56591.880	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
476.6627	24.00	-.91	28679.430	1.0	49652.760	2.0
476.6629	23.00	-.34	16449.850	2.5	37423.170	1.5
476.6654	7.00	-2.59	94881.790	3.5	115855.000	2.5
476.6664	24.00	-3.28	24282.340	4.0	45255.510	3.0
476.6664	25.00	-.19	41932.640	3.5	62905.810	2.5
476.6668	26.00	-4.35	27543.000	1.0	48516.150	1.0
476.6673	6.00	-2.38	60352.630	1.0	81325.760	1.0
476.6734	29.01	-4.07	114511.440	1.0	135484.300	0.0
476.6773	25.01	-4.12	82830.750	4.0	103803.440	3.0
476.6810	41.00	-.21	17180.052	0.0	38156.442	0.0
476.6855	26.00	-2.90	27559.568	2.0	48531.896	3.0
476.6890	57.00	-1.11	0.000	0.0	20978.038	0.0
476.6921	26.00	-4.88	26224.961	3.0	47197.000	2.0
476.6957	28.01	-3.47	100078.780	1.5	121050.660	2.5
476.7141	27.00	-1.28	32733.070	3.5	53704.140	2.5
476.7237	26.00	-4.10	33095.922	4.0	54066.570	4.0
476.7240	64.00	.21	7420.492	0.0	28396.990	0.0
476.7252	24.00	-.84	28682.180	2.0	49652.760	2.0
476.7295	22.01	-7.77	8997.690	3.5	29968.080	4.5
476.7405	28.01	-2.47	109846.000	3.5	130815.910	3.5
476.7412	7.00	-4.46	95532.120	2.5	116502.000	1.5
476.7490	29.00	-.81	46136.101	0.0	67111.499	0.0
476.7516	27.00	-2.86	34196.210	1.5	55165.630	2.5
476.7548	23.00	-.66	20789.130	2.5	41758.410	3.5
476.7598	27.00	-3.19	32733.070	3.5	53702.130	3.5
476.7830	24.00	-.75	28682.180	2.0	49650.220	3.0
476.7846	23.02	-1.09	160681.480	3.5	181649.450	3.5
476.7864	25.00	-4.07	44978.980	1.5	65946.870	2.5
476.7884	25.02	-1.91	195315.780	2.5	216283.580	3.5
476.8067	18.01	-2.11	182951.150	.5	203918.150	1.5
476.8089	27.00	-.59	25739.930	2.5	46706.830	3.5
476.8306	26.00	-1.02	29732.721	1.0	50698.666	2.0
476.8358	7.00	-2.17	95475.280	.5	116441.000	1.5
476.8374	9.02	-4.23	444575.350	2.5	465541.000	1.5
476.8401	25.01	-4.40	43528.300	5.0	64493.830	4.0
476.8403	26.00	-2.65	23711.443	4.0	44676.963	4.0
476.8437	28.01	-4.73	100490.950	1.5	121456.320	1.5
476.8437	22.00	-4.39	13981.750	1.0	34947.120	1.0
476.8553	24.00	-1.60	33113.270	4.0	54078.130	5.0
476.8660	92.00	-1.72	564.603	0.0	21534.855	0.0
476.8696	23.00	-.30	19189.280	1.5	40153.510	2.5
476.8704	17.01	.11	137804.400	1.0	158768.600	2.0
476.8714	24.01	-4.62	68305.730	1.5	89269.880	.5
476.8770	58.01	-.96	6936.547	0.0	27906.315	0.0
476.8785	24.00	-3.34	35398.020	4.0	56361.860	5.0
476.8792	27.00	-3.85	33462.830	2.5	54426.640	1.5
476.8796	28.01	-4.24	100078.780	1.5	121042.570	1.5
476.8808	28.01	-1.78	100078.780	1.5	121042.520	1.5
476.8811	28.00	-3.39	33610.916	2.0	54574.640	1.0
476.8828	22.01	-5.26	9872.870	.5	30836.520	1.5
476.8980	73.00	-1.26	12179.286	0.0	33148.130	0.0
476.9056	23.00	-.84	20789.130	2.5	41751.780	1.5
476.9099	26.00	-4.87	26627.612	4.0	47590.070	4.0
476.9133	7.00	-3.38	86220.480	1.5	107182.788	1.5
476.9201	24.00	-2.76	37205.880	3.0	58167.890	4.0
476.9260	92.01	-2.38	0.000	0.0	20967.613	0.0
476.9271	8.01	-4.92	255104.600	2.5	276066.300	2.5
476.9300	44.00	-1.71	6452.602	0.0	27420.040	0.0
476.9373	22.00	-3.48	20126.055	3.0	41087.310	3.0
476.9413	24.00	-3.78	28637.000	3.0	49598.080	2.0
476.9417	28.01	-4.23	56371.410	3.5	77332.470	2.5
476.9417	26.01	-4.24	64087.500	2.5	85048.560	1.5
476.9433	25.02	-4.02	195462.260	.5	216423.250	.5
476.9477	23.00	-3.76	19078.150	3.5	40038.950	4.5
476.9526	26.00	-4.78	22249.430	3.0	43210.011	2.0
476.9531	22.00	-4.10	20209.444	2.0	41170.003	3.0
476.9558	10.01	-4.01	317828.320	.5	338788.760	.5
476.9602	25.02	-3.02	195752.480	2.5	216712.730	2.5
476.9700	25.00	-4.01	45060.810	3.5	66020.630	2.5
476.9777	22.00	-.82	18192.577	6.0	39152.057	5.0
476.9866	27.00	-4.63	33945.900	2.5	54904.990	2.5
476.9902	18.01	-3.50	191974.530	1.5	212933.460	2.5
476.9916	24.01	-4.73	66355.130	1.5	87314.000	.5
477.0005	24.00	-1.20	37244.170	4.0	58202.650	3.0
477.0027	6.00	-2.16	60352.630	1.0	81311.010	0.0
477.0071	28.00	-5.00	28212.997	0.0	49171.187	1.0
477.0161	18.01	-4.41	191974.530	1.5	212932.320	1.5
477.0200	62.00	-.60	2258.411	0.0	23221.893	0.0
477.0223	9.02	-3.74	443770.900	3.5	464728.420	4.5
477.0351	24.00	-1.67	37205.880	3.0	58162.840	2.0
477.0357	25.01	-3.51	43536.900	4.0	64493.830	4.0
477.0430	57.00	-.92	6936.547	0.0	27899.018	0.0
477.0656	24.00	-1.75	24299.890	2.0	45255.510	3.0
477.0722	28.01	-1.98	109846.000	3.5	130801.330	4.5
477.0813	28.01	-4.13	100845.410	.5	121800.340	1.5
477.0911	18.03	-3.76	268171.380	1.5	289125.880	.5
477.0977	24.00	-4.55	31048.850	1.0	52003.060	1.0
477.1014	9.00	-3.66	116987.394	3.5	137941.440	2.5
477.1079	27.00	-.42	25269.250	3.5	46223.010	4.5
477.1101	22.00	-2.14	6661.003	3.0	27614.667	4.0
477.1116	17.01	-.24	137770.100	0.0	158723.700	1.0
477.1213	23.00	-3.45	18174.060	1.5	39127.230	1.5
477.1279	22.00	-4.64	22081.198	2.0	43034.080	1.0
477.1370	22.00	-4.81	27907.026	2.0	48859.510	1.0
477.1405	24.01	-4.66	69638.770	1.5	90591.100	2.5
477.1480	22.00	-2.40	27887.740	3.0	48839.740	3.0
477.1512	24.00	-2.89	25106.340	3.0	46058.200	4.0
477.1526	15.03	.20	320053.000	1.0	341004.800	2.0
477.1578	24.00	-2.02	24303.940	3.0	45255.510	3.0
477.1662	17.01	.27	138623.000	1.0	159574.200	2.0
477.1662	25.00	-1.72	30354.210	3.5	51305.410	2.5
477.1685	24.01	-3.53	47354.630	2.5	68305.730	1.5
477.1701	26.00	-3.23	17726.985	2.0	38678.015	2.0
477.1728	25.02	-4.28	109780.400	2.5	130731.310	3.5
477.1742	6.00	-1.56	60393.140	2.0	81343.990	2.0
477.1760	24.00	-4.73	31048.850	1.0	51999.620	0.0
477.1783	27.00	-4.40	33945.900	2.5	54896.570	3.5
477.1850	41.00	-1.49	9275.615	0.0	30231.848	0.0
477.1865	22.00	-2.19	25699.950	2.0	46650.260	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
477.1874	18.01	-2.61	181594.050	2.5	202544.320	2.5
477.1885	25.02	-3.29	172547.850	2.5	193498.070	3.5
477.1931	27.00	-3.92	30102.960	2.5	51052.980	3.5
477.2090	25.02	-4.16	195112.810	3.5	216062.130	2.5
477.2255	12.02	-1.13	561798.700	3.0	582747.300	2.0
477.2255	12.02	-1.13	561798.700	3.0	582747.300	2.0
477.2259	18.02	-2.08	231627.300	1.0	252575.880	1.0
477.2310	40.00	-.56	5000.766	0.0	25954.979	0.0
477.2311	25.00	-2.09	45013.550	2.5	65961.900	1.5
477.2464	28.01	-3.08	115785.060	1.5	136732.740	1.5
477.2542	7.00	-2.25	95493.660	1.5	116441.000	.5
477.2542	7.00	-2.23	95493.660	1.5	116441.000	1.5
477.2542	7.00	-3.50	95493.660	1.5	116441.000	2.5
477.2569	18.02	-2.63	231341.800	2.0	252289.020	3.0
477.2589	27.00	-4.50	32841.990	4.5	53789.120	3.5
477.2605	23.00	-1.18	15664.750	1.5	36611.810	2.5
477.2667	27.00	-2.06	32841.990	4.5	53788.780	4.5
477.2683	29.01	-3.23	110365.980	2.0	131312.700	3.0
477.2687	27.00	-3.92	27497.060	2.5	48443.760	2.5
477.2700	92.01	-1.98	2258.411	0.0	23210.912	0.0
477.2753	28.01	-3.33	115108.090	2.5	136054.500	1.5
477.2769	26.01	-6.68	21711.890	3.5	42658.230	3.5
477.2785	14.00	-3.63	39760.285	1.0	60706.558	1.0
477.2808	26.00	-3.15	12560.933	3.0	33507.102	3.0
477.2835	26.00	-2.42	24335.764	2.0	45281.816	2.0
477.2863	28.00	-3.22	29888.505	2.0	50834.435	2.0
477.2879	23.02	-.13	160879.980	4.5	181825.840	4.5
477.2954	29.01	-3.32	117231.690	1.0	138177.220	2.0
477.3150	44.00	-1.76	11372.710	0.0	32323.235	0.0
477.3250	41.00	-1.14	8952.985	0.0	29903.071	0.0
477.3325	9.02	-2.77	444470.240	1.5	465414.140	2.5
477.3348	11.02	-3.68	444825.000	2.5	465768.600	2.5
477.3409	28.00	-1.75	29888.505	2.0	50832.039	3.0
477.3425	18.01	-4.56	183985.940	1.5	204929.400	.5
477.3440	42.00	-.63	20164.380	0.0	41113.633	0.0
477.3503	27.00	-1.43	32027.500	3.5	52970.620	2.5
477.3519	26.00	-3.72	24338.766	3.0	45281.816	2.0
477.3681	7.00	-2.63	95493.660	1.5	116436.000	1.5
477.3681	7.00	-2.93	95493.660	1.5	116436.000	2.5
477.3720	72.00	-2.12	5484.711	0.0	26432.735	0.0
477.3809	23.00	-2.23	17181.980	4.5	38123.760	4.5
477.3827	25.00	-4.04	47774.520	3.5	68716.220	4.5
477.3910	74.00	-1.73	13711.778	0.0	34658.968	0.0
477.3918	15.03	.50	320063.500	1.0	341004.800	2.0
477.3940	58.01	-.56	7420.492	0.0	28367.550	0.0
477.4000	44.00	-.46	20083.723	0.0	41030.518	0.0
477.4082	25.02	-2.92	194971.150	2.5	215911.730	1.5
477.4087	28.01	-1.49	99340.550	3.5	120281.110	4.5
477.4150	62.01	-2.08	1451.835	0.0	22397.972	0.0
477.4153	28.01	-3.61	115785.060	1.5	136725.330	.5
477.4173	23.01	-3.52	18293.870	2.0	39234.050	3.0
477.4220	42.00	-.80	21212.928	0.0	42158.758	0.0
477.4237	25.02	-3.40	195592.090	1.5	216531.990	1.5
477.4244	7.01	-1.64	166521.690	1.0	187461.560	2.0
477.4269	25.01	-4.53	49291.310	3.0	70231.070	2.0
477.4270	90.01	-2.01	6613.917	0.0	27559.528	0.0
477.4280	14.01	-2.11	103556.290	3.5	124496.000	2.5
477.4290	25.00	.35	42143.570	1.5	63083.240	1.5
477.4310	14.01	-3.41	103556.420	2.5	124496.000	2.5
477.4310	14.01	-2.26	103556.420	2.5	124496.000	1.5
477.4490	23.00	-1.22	20812.990	1.5	41751.780	.5
477.4490	23.00	-.98	20812.990	1.5	41751.780	1.5
477.4491	26.00	-4.94	19552.474	1.0	40491.260	0.0
477.4520	24.00	-1.93	24286.540	1.0	45225.200	2.0
477.4604	24.01	-4.08	53566.220	3.5	74504.510	4.5
477.4666	27.01	-4.47	65408.710	2.0	86346.730	3.0
477.4890	72.00	-.47	22745.421	0.0	43688.312	0.0
477.5074	25.01	-3.81	43536.900	4.0	64473.130	3.0
477.5104	15.00	-4.36	55939.300	.5	76875.400	1.5
477.5120	24.00	-3.03	28637.000	3.0	49573.030	4.0
477.5165	23.00	-1.73	19026.340	2.5	39962.170	2.5
477.5225	28.01	-3.03	100389.520	2.5	121325.090	2.5
477.5337	16.01	-2.74	119294.700	2.5	140229.780	2.5
477.5387	23.00	-4.99	2153.200	1.5	23088.060	1.5
477.5439	26.02	-4.40	179579.830	5.0	200514.460	4.0
477.5469	28.01	-3.77	115120.000	2.5	136054.500	1.5
477.5494	24.00	-1.02	37233.500	5.0	58167.890	4.0
477.5592	22.01	-4.40	10024.740	2.5	30958.700	2.5
477.5658	23.00	-2.77	17181.980	4.5	38115.650	3.5
477.5660	42.00	-.60	21051.613	0.0	41991.127	0.0
477.5738	25.00	-3.11	45013.550	2.5	65946.870	2.5
477.5793	10.01	-1.93	303237.910	1.5	324170.990	2.5
477.5815	24.01	-3.60	47372.750	1.5	68305.730	1.5
477.5875	24.00	-4.01	27728.870	2.0	48661.590	3.0
477.5898	6.00	-1.97	60393.140	2.0	81325.760	1.0
477.5968	22.00	-2.70	18145.400	2.0	39077.713	1.0
477.5971	24.00	-2.69	27703.840	4.0	48636.140	3.0
477.6044	28.01	-2.82	99340.550	3.5	120272.530	4.5
477.6071	26.00	-3.41	26623.726	2.0	47555.584	1.0
477.6171	28.01	-2.80	99340.550	3.5	120271.970	2.5
477.6217	28.01	-4.46	113225.060	.5	134156.280	1.5
477.6220	29.00	-1.59	43716.376	0.0	64653.435	0.0
477.6224	7.01	-1.51	202170.630	1.0	223101.820	1.0
477.6240	18.02	-4.91	231341.800	2.0	252272.920	1.0
477.6268	17.01	-1.30	140740.000	1.0	161671.000	0.0
477.6295	23.01	-5.51	16421.510	4.0	37352.390	5.0
477.6313	27.00	-.38	26597.640	1.5	47528.440	.5
477.6324	25.00	-3.01	38669.600	3.5	59600.350	2.5
477.6340	42.00	-.58	18147.942	0.0	39084.475	0.0
477.6347	16.01	-4.12	131028.760	1.5	151959.410	1.5
477.6349	26.00	-.53	36766.950	3.0	57697.590	4.0
477.6358	23.00	-.18	16572.540	3.5	37503.140	2.5
477.6374	28.01	-4.01	115120.000	2.5	136050.530	2.5
477.6500	23.00	-2.23	19189.280	1.5	40119.260	2.5
477.6557	21.00	-3.12	21085.840	3.5	42015.570	3.5
477.6684	18.01	-3.12	182222.030	1.5	203151.200	2.5
477.6858	25.02	-4.99	173920.690	1.5	194849.100	1.5
477.6893	28.01	-2.32	99340.550	3.5	120268.810	3.5
477.6906	23.00	-4.67	2424.890	4.5	23353.090	3.5
477.6934	21.00	-3.03	21032.780	2.5	41960.860	2.5
477.7018	27.00	-4.74	33439.720	4.5	54367.430	5.5
477.7084	25.02	-3.03	194545.780	.5	215473.200	1.5
477.7153	26.02	-4.10	114351.920	3.0	135279.040	2.0
477.7292	27.00	-2.30	23855.620	4.5	44782.130	4.5
477.7310	28.01	-4.07	114052.040	3.5	134976.470	2.5
477.7317	25.00	-4.56	37148.660	5.5	58075.060	5.5
477.7317	9.01	-4.56	256262.460	1.0	277188.860	1.0
477.7545	8.01	-4.88	255140.900	1.5	276066.300	2.5
477.7566	24.00	-2.03	24299.890	2.0	45225.200	2.0
477.7620	41.00	-1.29	12421.258	0.0	33352.182	0.0
477.7673	27.01	-7.01	25861.460	0.0	46786.300	1.0
477.7687	24.00	-2.19	24277.060	0.0	45201.840	1.0
477.7696	9.02	-1.68	444489.400	2.5	465414.140	2.5
477.7712	25.01	-3.07	81780.700	3.0	102705.370	3.0
477.7728	24.01	-4.92	30864.610	2.5	51789.210	3.5
477.7850	62.01	-1.97	322.630	0.0	21252.546	0.0
477.7888	23.03	-1.93	236766.900	3.0	257690.800	3.0
477.7929	24.00	-2.21	37244.170	4.0	58167.890	4.0
477.8016	28.01	-3.36	115108.090	2.5	136031.430	2.5
477.8034	27.00	-3.49	22475.360	4.5	43398.620	3.5
477.8075	23.00	-4.23	25111.500	4.5	46034.580	5.5
477.8087	23.00	-2.33	19078.150	3.5	40001.180	3.5
477.8091	23.00	-1.88	15688.800	2.5	36611.610	2.5
477.8160	77.00	-1.40	12824.546	0.0	33753.104	0.0
477.8176	25.01	-3.06	81780.700	3.0	102703.340	4.0
477.8224	27.00	-.49	32781.710	2.5	53704.140	2.5
477.8259	22.00	-.66	18037.225	4.0	38959.499	4.0
477.8262	25.02	-3.53	174048.890	2.5	194971.150	2.5
477.8300	90.00	-2.37	0.000	0.0	20927.945	0.0
477.8310	21.01	-4.54	39344.900	2.0	60266.950	3.0
477.8381	23.00	-1.53	19078.150	3.5	39999.890	2.5
477.8418	23.00	-1.53	20830.200	.5	41751.780	.5
477.8418	23.00	-1.90	20830.200	.5	41751.780	1.5
477.8429	8.02	-2.50	273080.070	1.0	294001.600	2.0
477.8476	28.00	-3.50	29832.810	3.0	50754.137	2.0
477.8484	24.00	-2.38	33897.260	1.0	54816.550	2.0
477.8491	24.00	-2.97	24303.940	3.0	45225.200	2.0
477.8831	10.01	-2.29	303237.910	1.5	324157.680	2.5
477.8888	10.01	-3.06	303237.910	1.5	324157.430	1.5
477.8939	17.01	-.34	137804.400	1.0	158723.700	1.0
477.8948	28.01	-2.34	109846.000	3.5	130765.260	3.5
477.9014	24.01	-2.12	45730.740	2.5	66649.710	1.5
477.9058	17.00	-3.06	74225.846	1.5	95144.623	2.5
477.9087	24.00	-1.56	28679.430	1.0	49598.080	2.0
477.9087	22.00	-5.75	14028.470	2.0	34947.120	1.0
477.9087	23.00	-2.04	19145.130	5.5	40063.780	5.5
477.9137	25.00	-1.23	37420.240	5.5	58338.670	6.5
477.9146	25.01	-4.67	82917.780	2.0	103836.170	2.0
477.9200	59.01	-1.79	7581.807	0.0	28505.611	0.0
477.9229	24.01	-3.85	53566.220	3.5	74484.250	2.5
477.9327	11.02	-3.17	442710.500	1.5	463628.100	2.5
477.9350	21.00	-1.30	168.340	2.5	21085.840	3.5
477.9427	24.00	-2.64	26787.500	3.0	47704.660	4.0
477.9437	26.00	-2.27	27543.000	1.0	48460.120	0.0
477.9489	23.00	-3.45	18680.120	5.5	39597.010	4.5
477.9526	27.00	-4.60	33439.720	4.5	54356.450	4.5
477.9569	6.00	-4.96	68856.330	1.0	89772.870	2.0
477.9630	92.01	-1.77	6371.944	0.0	27294.066	0.0
477.9715	24.00	-2.51	28682.180	2.0	49598.080	2.0
477.9723	7.01	-.61	166521.690	1.0	187437.560	1.0
477.9759	23.00	-3.05	15664.750	1.5	36580.460	1.5
477.9853	24.00	-2.17	24286.540	1.0	45201.840	1.0
477.9862	25.01	-3.54	49427.320	4.0	70342.580	3.0
477.9967	24.00	-3.00	26787.500	3.0	47702.300	3.0
477.9967	17.01	-1.20	140740.000	1.0	161654.800	1.0
477.9976	22.01	-1.22	16515.790	.5	37430.550	.5
477.9987	27.00	-.18	26450.020	2.5	47364.730	1.5
477.9990	24.00	-3.58	35807.900	2.0	56722.600	1.0
478.0060	26.02	-4.60	114325.350	5.0	135239.740	4.0
478.0081	26.01	-3.08	63948.840	4.5	84863.140	5.5
478.0179	29.01	-4.97	88362.030	2.0	109275.900	3.0
478.0180	39.00	-1.17	15082.956	0.0	36002.670	0.0
478.0230	58.01	-.91	11856.655	0.0	32776.151	0.0
478.0275	24.00	-3.66	26787.500	3.0	47700.950	2.0
478.0328	23.01	-2.44	34228.790	3.0	55142.010	3.0
478.0410	27.00	-1.81	32781.710	2.5	53694.570	3.5
478.0432	26.00	-4.73	21999.132	4.0	42911.897	5.0
478.0449	7.01	-1.38	190120.240	1.0	211032.930	2.0
478.0474	27.00	-4.58	33439.720	4.5	54352.300	3.5
478.0591	26.01	-7.24	26055.400	2.5	46967.470	2.5
478.0632	18.02	-3.70	231341.800	2.0	252253.690	2.0
478.0719	28.01	-3.58	109846.000	3.5	130757.510	4.5
478.0737	28.01	-3.39	115120.000	2.5	136031.430	2.5
478.0813	26.00	-3.36	26224.961	3.0	47136.058	2.0
478.0814	22.00	-2.29	17540.205	3.0	38451.298	2.0
478.0879	25.00	-4.00	37164.250	6.5	58075.060	5.5
478.0940	73.00	-1.59	10566.135	0.0	31482.524	0.0
478.0990	64.00	-.19	11211.395	0.0	32127.565	0.0
478.1040	39.00	-.80	11211.395	0.0	32127.346	0.0
478.1073	29.01	-2.51	118071.340	1.0	138981.300	2.0
478.1151	28.01	-1.85	99340.550	3.5	120250.170	3.5
478.1169	24.00	-2.97	28679.430	1.0	49588.970	1.0
478.1190	7.01	-2.04	166582.450	2.0	187491.900	3.0
478.1194	28.01	-4.88	114836.630	3.5	135746.060	3.5
478.1213	28.01	-3.12	107082.210	2.5	127991.560	3.5
478.1215	24.00	-3.72	33762.560	0.0	54671.900	1.0
478.1320	7.00	-1.91	95532.120	2.5	116441.000	1.5
478.1320	7.00	-1.61	95532.120	2.5	116441.000	2.5
478.1338	17.01	.40	137877.600	2.0	158786.400	3.0
478.1345	24.00	-3.06	41782.190	4.0	62690.960	5.0
478.1354	23.00	-1.55	19026.340	2.5	39935.070	1.5
478.1368	38.01	-2.73	47736.530	0.0	68651.047	0.0
478.1430	27.00	-2.41	15184.040	2.5	36092.440	2.5
478.1640	16.01	-3.04	131186.860	2.5	152094.340	2.5
478.1652	24.00	-.97	33897.260	1.0	54804.690	1.0
478.1714	22.00	-1.82	6842.964	5.0	27750.124	5.0
478.1751	26.00	-2.11	28819.966	5.0	49726.964	4.0
478.1752	28.01	-.17	114942.420	1.5	135849.410	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
478.1819	17.01	-2.64	126219.000	3.0	147125.700	3.0
478.1840	62.01	-1.98	3871.561	0.0	24784.013	0.0
478.1920	64.00	-1.00	967.890	0.0	21879.992	0.0
478.1974	24.00	-2.86	26796.280	2.0	47702.300	3.0
478.2029	22.01	-5.35	9930.740	1.5	30836.520	1.5
478.2080	28.01	-4.40	113753.040	4.5	134658.600	4.5
478.2256	23.00	-2.80	17054.870	2.5	37959.660	2.5
478.2283	24.00	-2.94	26796.280	2.0	47700.950	2.0
478.2304	25.02	-2.56	194971.150	2.5	215875.730	2.5
478.2363	27.00	-2.82	31871.150	3.5	52775.470	4.5
478.2459	24.00	-3.24	26796.280	2.0	47700.180	1.0
478.2464	7.00	-2.77	95532.120	2.5	116436.000	1.5
478.2464	7.00	-4.79	95532.120	2.5	116436.000	2.5
478.2482	27.01	-7.28	27484.300	3.0	48388.100	2.0
478.2562	27.00	-4.23	7442.410	3.5	28345.860	4.5
478.2740	72.00	-.26	18147.942	0.0	39056.459	0.0
478.2793	26.00	-4.30	26105.908	6.0	47008.351	5.0
478.2905	24.00	-2.97	24299.890	2.0	45201.840	1.0
478.2940	42.00	-.83	20003.065	0.0	40910.708	0.0
478.2947	25.02	-.42	172855.020	4.5	193756.790	4.5
478.2991	14.00	-2.47	39955.053	2.0	60856.630	1.0
478.3089	27.00	-4.07	31871.150	3.5	52772.300	2.5
478.3100	62.00	-.11	241.973	0.0	21148.916	0.0
478.3246	24.00	-1.55	24833.860	3.0	45734.320	2.0
478.3300	22.00	-2.59	6598.749	2.0	27498.975	3.0
478.3315	25.01	-4.88	82936.010	3.0	103836.170	2.0
478.3350	59.01	-1.76	2984.328	0.0	23890.179	0.0
478.3352	23.01	-4.68	52245.680	2.0	73145.680	3.0
478.3400	26.02	-4.05	114339.950	4.0	135239.740	4.0
478.3427	25.00	.05	18531.640	3.5	39431.310	3.5
478.3537	23.00	-4.86	2311.370	3.5	23210.560	2.5
478.3542	21.00	-1.28	18855.760	1.5	39754.930	2.5
478.3576	24.00	-3.98	26801.930	1.0	47700.950	2.0
478.3734	24.00	-2.84	31987.060	4.0	52885.390	5.0
478.3752	24.00	-4.29	26801.930	1.0	47700.180	1.0
478.3798	6.00	-.56	64086.920	3.0	84984.970	3.0
478.3970	10.01	-4.46	307420.820	2.5	328318.120	3.5
478.4086	23.02	-3.62	141488.320	4.5	162385.110	3.5
478.4108	23.03	-3.21	264902.200	3.0	285798.900	2.0
478.4270	44.00	-1.41	11372.710	0.0	32274.540	0.0
478.4320	38.00	-.51	14437.696	0.0	35339.308	0.0
478.4464	23.00	-2.65	137.380	2.5	21032.520	3.5
478.4519	17.01	-2.21	140740.000	1.0	161634.900	2.0
478.4531	28.01	-2.55	100490.950	1.5	121385.800	1.5
478.4565	28.01	-4.26	109675.720	.5	130570.420	.5
478.4620	64.00	.07	7904.437	0.0	28804.738	0.0
478.4629	25.00	-1.92	44978.980	1.5	65873.400	2.5
478.4691	25.01	-1.81	53017.160	1.0	73911.310	1.0
478.4720	6.00	-1.47	64090.950	2.0	84984.970	3.0
478.4721	24.00	-3.95	25106.340	3.0	46000.360	3.0
478.4767	23.00	-4.13	19145.130	5.5	40038.950	4.5
478.4771	8.01	-3.99	255172.500	1.5	276066.300	1.5
478.4771	8.01	-3.20	255172.500	1.5	276066.300	2.5
478.4874	26.02	-4.03	179630.770	4.0	200524.120	5.0
478.4920	40.00	-1.12	5484.711	0.0	26383.702	0.0
478.5062	27.00	-.59	31871.150	3.5	52763.680	3.5
478.5120	42.00	-.82	18147.942	0.0	39046.059	0.0
478.5178	22.00	-2.15	15108.121	3.0	36000.144	4.0
478.5247	7.00	-2.42	95475.280	.5	116367.000	.5
478.5247	7.00	-4.26	95475.280	.5	116367.000	1.5
478.5261	23.00	-2.80	15688.800	2.5	36580.460	1.5
478.5266	24.01	-3.68	68583.440	2.5	89475.080	2.5
478.5332	27.00	-4.77	21920.090	4.5	42811.440	3.5
478.5412	17.01	-.31	137877.600	2.0	158768.600	2.0
478.5420	71.01	-1.37	17180.052	0.0	38076.859	0.0
478.5641	21.02	.03	128363.000	1.5	149253.000	.5
478.5700	41.00	-1.14	12905.203	0.0	33800.788	0.0
478.5715	24.01	-4.44	53566.220	3.5	74455.900	4.5
478.5720	26.00	-3.25	32873.623	4.0	53763.280	3.0
478.5738	27.00	-4.38	33466.870	3.5	54356.450	4.5
478.5788	23.00	-2.54	15571.900	2.5	36461.260	2.5
478.5788	23.00	-3.30	15571.900	2.5	36461.260	3.5
478.5806	25.00	-3.24	37630.620	4.5	58519.900	3.5
478.5816	24.00	-3.05	27935.260	4.0	48824.500	4.0
478.5834	21.00	-4.04	21032.780	2.5	41921.940	1.5
478.5859	28.01	-4.14	113753.040	4.5	134642.090	3.5
478.5860	62.00	-.27	806.575	0.0	21701.461	0.0
478.5914	24.00	-4.46	41782.190	4.0	62671.000	4.0
478.5937	18.02	-3.60	225147.930	2.0	246036.640	3.0
478.5950	26.00	-2.46	33412.706	3.0	54301.360	4.0
478.5950	26.00	-1.94	33412.706	3.0	54301.360	4.0
478.5965	9.02	-.72	468605.940	4.5	489494.530	3.5
478.5990	9.02	-2.38	468606.050	3.5	489494.530	3.5
478.6141	26.02	-4.89	114351.920	3.0	135239.740	4.0
478.6150	18.01	-2.01	174409.830	1.5	195297.610	1.5
478.6173	28.01	-3.35	113407.310	2.5	134294.990	2.5
478.6194	23.00	-2.75	15724.220	3.5	36611.810	2.5
478.6278	28.00	-3.79	13521.352	2.0	34408.574	1.0
478.6299	23.00	-3.36	20767.570	3.5	41654.700	2.5
478.6329	17.01	-4.00	129065.400	2.0	149952.400	1.0
478.6333	23.01	-3.47	52391.940	3.0	73278.920	4.0
478.6385	22.00	-2.38	25643.695	3.0	46530.450	4.0
478.6460	42.00	-2.10	10646.793	0.0	31539.060	0.0
478.6492	19.00	-3.07	12985.170	.5	33871.460	.5
478.6508	23.00	-.03	16728.750	4.5	37614.970	3.5
478.6531	28.00	-.30	27580.411	5.0	48466.530	5.0
478.6544	25.00	-1.75	45060.810	3.5	65946.670	2.5
478.6580	39.01	-1.61	8227.067	0.0	29118.810	0.0
478.6590	18.02	-3.64	225147.930	2.0	246033.790	2.0
478.6604	25.00	-2.24	30419.610	2.5	51305.410	2.5
478.6610	70.01	-.09	31456.433	0.0	52348.045	0.0
478.6640	73.00	-2.32	9598.245	0.0	30489.726	0.0
478.6689	27.00	-4.77	33466.870	3.5	54352.300	3.5
478.6728	25.02	-1.75	195308.790	4.5	216194.050	5.5
478.6750	64.00	-.43	7501.149	0.0	28392.150	0.0
478.6811	26.00	-1.58	24335.764	2.0	45220.662	3.0
478.6861	25.00	-.75	42198.560	.5	63083.240	1.5
478.6890	39.00	-.14	15405.586	0.0	36295.976	0.0
478.6895	28.01	-2.93	109846.000	3.5	130730.530	2.5

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
478.6910	64.01	-1.42	9033.642	0.0	29923.945	0.0
478.6971	25.02	-.25	172613.870	2.5	193498.070	3.5
478.7012	23.00	-1.68	19078.150	3.5	39962.170	2.5
478.7088	26.02	-3.67	179630.770	4.0	200514.460	4.0
478.7301	25.00	-2.75	38934.940	2.5	59817.700	2.5
478.7310	24.00	-1.64	28637.000	3.0	49519.720	3.0
478.7400	60.00	-1.32	1048.548	0.0	21936.713	0.0
478.7499	26.00	-4.17	24338.766	3.0	45220.662	3.0
478.7500	3.01	.29	561749.000	0.0	582636.728	0.0
478.7514	18.02	-4.22	225147.930	2.0	246029.760	1.0
478.7541	23.00	-4.23	17242.050	5.5	38123.760	4.5
478.7580	24.00	-4.03	35398.020	4.0	56279.560	4.0
478.7589	26.00	-3.72	26224.961	3.0	47106.463	4.0
478.7636	22.00	-3.80	6598.749	2.0	27480.047	3.0
478.7748	24.00	-2.27	25177.390	4.0	46058.200	4.0
478.7833	26.00	-2.85	24180.848	3.0	45061.287	3.0
478.7897	23.01	-4.50	18353.890	3.0	39234.050	3.0
478.7940	74.00	-1.93	13227.833	0.0	34113.642	0.0
478.7986	24.00	-4.53	41782.190	4.0	62661.960	3.0
478.8002	25.00	-3.14	30425.710	1.5	51305.410	2.5
478.8119	25.02	-3.97	174436.590	2.5	195315.780	2.5
478.8137	7.01	-.32	166582.450	2.0	187461.560	2.0
478.8180	46.00	.04	33876.158	0.0	54760.920	0.0
478.8180	42.00	-1.43	18389.915	0.0	39274.677	0.0
478.8252	18.02	-4.18	225155.180	1.0	246033.790	2.0
478.8404	25.00	-.66	35689.980	1.5	56567.930	1.5
478.8430	74.00	-1.65	16292.819	0.0	37176.491	0.0
478.8505	25.01	-4.53	81802.580	6.0	102680.090	5.0
478.8518	25.01	-4.73	49465.130	3.0	70342.580	3.0
478.8528	23.02	-.07	141507.700	3.5	162385.110	3.5
478.8644	23.03	-2.78	263822.400	4.0	284699.300	5.0
478.8670	40.00	-1.19	5807.341	0.0	26689.966	0.0
478.8761	26.00	-2.07	26105.908	6.0	46982.302	6.0
478.8862	27.00	-1.87	33439.720	4.5	54315.670	5.5
478.8915	7.00	-2.67	95475.280	.5	116351.000	.5
478.8915	7.00	-1.99	95475.280	.5	116351.000	1.5
478.8925	10.00	-1.81	149657.042	3.0	170532.717	2.0
478.9000	6.03	-.15	449887.000	0.0	470768.186	0.0
478.9110	40.00	-1.90	5000.766	0.0	25881.472	0.0
478.9177	18.02	-3.95	225155.180	1.0	246029.760	1.0
478.9340	24.00	-.73	20519.600	6.0	41393.470	5.0
478.9372	16.01	-3.47	110313.130	2.5	131186.860	2.5
478.9390	90.00	-1.74	3629.588	0.0	24509.074	0.0
478.9404	25.01	-4.25	54846.000	0.0	75719.590	1.0
478.9425	28.00	-2.49	29832.810	3.0	50706.310	4.0
478.9461	7.00	-3.54	95493.660	1.5	116367.000	.5
478.9461	7.00	-4.17	95493.660	1.5	116367.000	1.5
478.9461	7.00	-2.63	95493.660	1.5	116367.000	2.5
478.9493	21.01	-1.59	39001.590	0.0	59874.790	1.0
478.9519	18.01	-4.10	181594.050	2.5	202467.140	1.5
478.9548	21.01	-3.74	55715.520	1.0	76588.480	2.0
478.9690	58.01	-1.57	5887.999	0.0	26766.177	0.0
478.9691	26.00	-3.89	33507.102	3.0	54379.440	3.0
478.9789	22.00	-2.70	6742.757	4.0	27614.667	4.0
478.9872	18.01	-4.21	174409.830	1.5	195281.380	.5
478.9941	28.01	-1.74	114874.880	2.5	135746.130	1.5
478.9960	41.01	0.00	19599.777	0.0	40476.778	0.0
478.9960	62.00	-.34	3064.986	0.0	23941.987	0.0
479.0060	92.00	-1.27	3710.246	0.0	24586.811	0.0
479.0152	10.01	-2.80	292033.150	2.5	312903.480	2.5
479.0212	23.00	-4.13	24830.180	1.5	45700.250	2.5
479.0278	24.00	-3.52	20523.690	4.0	41393.470	5.0
479.0283	23.00	-6.45	9824.580	2.5	30694.340	3.5
479.0336	24.00	-1.97	20523.940	5.0	41393.470	5.0
479.0347	25.02	-3.47	174243.330	3.5	195112.810	3.5
479.0464	23.01	-3.03	19132.690	2.0	40001.660	2.0
479.0485	23.00	-4.45	18372.460	3.5	39241.340	2.5
479.0545	26.00	-3.53	33507.102	3.0	54375.719	2.0
479.0609	23.00	-4.25	18258.890	2.5	39127.230	1.5
479.0703	23.00	-5.30	2220.130	2.5	23088.060	1.5
479.0720	72.01	-1.11	17583.339	0.0	38457.028	0.0
479.0748	26.00	-3.43	26224.961	3.0	47092.693	3.0
479.0818	25.01	-3.94	82936.010	3.0	103803.440	3.0
479.0951	24.00	-1.67	33060.740	3.0	53927.590	4.0
479.0965	28.00	-3.40	15734.018	1.0	36600.805	2.0
479.1005	22.00	-.98	26910.705	6.0	47777.320	5.0
479.1013	9.02	-3.49	443625.310	2.5	464491.890	3.5
479.1050	19.00	-2.78	12985.170	.5	33851.590	1.5
479.1075	25.02	-1.25	194849.100	1.5	215715.410	1.5
479.1132	28.01	-3.10	115120.000	2.5	135986.060	3.5
479.1150	64.01	-1.42	9033.642	0.0	29905.458	0.0
479.1158	21.00	-1.50	18855.760	1.5	39721.710	1.5
479.1229	28.01	-3.60	32499.530	4.5	53365.170	4.5
479.1231	28.00	-1.14	29888.505	2.0	50754.137	2.0
479.1245	23.00	-1.30	20789.130	2.5	41654.700	2.5
479.1259	26.00	-2.30	26406.490	1.0	47271.999	1.0
479.1298	7.00	-1.98	95493.660	1.5	116359.000	2.5
479.1420	75.00	-1.09	14921.641	0.0	35792.281	0.0
479.1489	18.01	-1.41	184191.710	.5	205056.220	1.5
479.1491	22.00	-2.15	18287.560	4.0	39152.057	5.0
479.1504	21.00	-2.22	168.340	2.5	21032.780	2.5
479.1580	62.01	-1.83	806.575	0.0	21676.518	0.0
479.1596	23.01	-4.40	16340.970	3.0	37205.010	3.0
479.1733	6.00	-1.58	64086.920	3.0	84950.360	2.0
479.1760	22.00	-4.75	16961.420	3.0	37824.748	4.0
479.1778	25.01	-4.33	46903.260	2.0	67766.510	2.0
479.1784	28.01	-4.11	115120.000	2.5	135983.220	1.5
479.1835	28.01	-3.79	94729.250	2.5	115592.250	1.5
479.1849	28.01	-2.45	99340.550	3.5	120203.490	2.5
479.1851	25.01	-1.82	49882.150	4.0	70745.080	3.0
479.1883	25.00	-2.08	45013.550	2.5	65876.340	3.5
479.1919	26.00	-3.00	34017.084	1.0	54879.720	2.0
479.1972	17.01	-.53	126743.300	2.0	147605.700	3.0
479.2021	16.01	-.11	130134.080	2.5	150996.270	2.5
479.2050	9.02	-1.20	444552.080	3.5	465414.140	2.5
479.2083	18.01	-1.19	156730.210	2.5	179594.130	2.5
479.2177	28.01	-3.51	113753.040	4.5	134614.550	5.5
479.2212	14.00	-2.35	39760.285	1.0	60621.640	0.0
479.2251	22.00	-3.64	6556.828	1.0	27418.015	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
479.2310	9.02	-1.87	443630.960	3.5	464491.890	3.5
479.2323	14.00	-1.66	39955.053	2.0	60815.925	2.0
479.2361	29.01	-3.64	110084.290	1.0	130945.000	2.0
479.2386	22.01	-3.38	9975.920	1.5	30836.520	1.5
479.2407	6.00	-1.47	64089.850	1.0	84950.360	2.0
479.2471	28.01	-3.59	100332.090	4.5	121192.320	3.5
479.2476	22.00	-.83	18825.890	1.0	39686.100	2.0
479.2492	27.00	-2.53	32841.990	4.5	53702.130	3.5
479.2499	24.00	-.44	25106.340	3.0	45966.450	2.0
479.2508	26.00	-4.47	33695.378	5.0	54555.450	4.0
479.2559	25.00	-2.38	45013.550	2.5	65873.400	2.5
479.2590	63.00	-.48	13389.148	0.0	34254.693	0.0
479.2600	79.00	-.01	40974.020	0.0	61839.521	0.0
479.2659	6.00	-.79	64090.950	2.0	84950.360	2.0
479.2740	42.00	-.63	20809.640	0.0	41674.531	0.0
479.2768	28.01	-4.72	95332.530	2.5	116191.470	2.5
479.2846	27.00	-.03	26232.050	3.5	47090.650	2.5
479.2963	23.00	-.81	19026.340	2.5	39884.430	1.5
479.2993	25.00	-3.96	38008.700	5.5	58866.660	4.5
479.3071	24.01	-3.32	53566.220	3.5	74423.640	3.5
479.3135	7.00	-1.97	95493.660	1.5	116351.000	.5
479.3280	40.00	-.83	14276.381	0.0	35138.922	0.0
479.3410	42.00	-.63	20809.640	0.0	41671.615	0.0
479.3423	28.00	-1.09	29888.505	2.0	50744.593	1.0
479.3436	27.00	-4.63	34133.590	3.5	54989.620	3.5
479.3561	23.00	-2.52	23210.560	2.5	44066.050	3.5
479.3623	25.01	-3.82	49889.860	3.0	70745.080	3.0
479.3648	7.01	-1.11	166582.450	2.0	187437.560	1.0
479.3696	25.00	-2.83	37630.620	4.5	58485.520	4.5
479.3820	42.00	-.36	27262.242	0.0	48122.433	0.0
479.3827	28.01	-3.05	113753.040	4.5	134607.370	4.5
479.3965	26.00	-3.89	24574.655	4.0	45428.385	4.0
479.3990	76.00	-1.51	4113.534	0.0	24972.985	0.0
479.4138	26.02	-3.88	179661.480	3.0	200514.460	4.0
479.4211	22.00	-1.68	25797.600	3.0	46650.260	3.0
479.4229	27.00	-.98	32841.990	4.5	53694.570	3.5
479.4344	25.00	.59	42053.730	2.5	62905.810	2.5
479.4359	26.00	-3.91	19552.474	1.0	40404.492	1.0
479.4379	16.01	-2.06	110176.830	1.5	131028.760	1.5
479.4380	44.00	-1.89	8469.040	0.0	29326.794	0.0
479.4524	17.01	.42	107878.500	2.0	128729.800	3.0
479.4567	23.01	-8.61	13741.610	3.0	34592.720	2.0
479.4839	22.01	-4.22	9118.150	4.5	29968.080	4.5
479.4960	40.00	-1.15	12259.943	0.0	33115.174	0.0
479.4968	25.00	-2.34	38934.940	2.5	59784.310	3.5
479.4991	28.01	-3.10	100475.820	3.5	121325.090	2.5
479.5011	23.00	-4.34	24789.360	.5	45638.540	1.5
479.5095	26.00	-1.68	32873.623	4.0	53722.440	5.0
479.5107	22.00	-3.37	27480.047	3.0	48328.810	4.0
479.5170	24.01	-4.30	68477.110	4.5	89325.600	4.5
479.5179	28.01	-1.39	100332.090	4.5	121180.540	4.5
479.5257	25.00	-1.83	45060.810	3.5	65908.920	4.5
479.5317	27.01	-4.63	65028.650	1.0	85876.500	1.0
479.5384	23.02	-1.93	141488.320	4.5	162335.880	3.5
479.5411	22.00	-3.61	27614.667	4.0	48462.110	5.0
479.5425	28.01	-3.69	113407.310	2.5	134254.690	1.5
479.5444	29.01	-3.55	118484.000	3.0	139331.300	3.0
479.5478	7.00	-4.68	94770.850	.5	115618.000	.5
479.5485	25.02	-.94	195315.780	2.5	216162.900	1.5
479.5520	24.00	-.86	39158.630	4.0	60005.600	5.0
479.5570	44.00	-1.96	7985.094	0.0	28837.673	0.0
479.5635	28.01	-2.58	100332.090	4.5	121178.560	3.5
479.5670	77.00	-1.79	12098.628	0.0	32950.772	0.0
479.5719	17.01	-1.46	137877.600	2.0	158723.700	1.0
479.5768	25.02	-3.54	174048.890	2.5	194894.780	1.5
479.5792	28.00	-2.91	29500.690	1.0	50346.477	2.0
479.5849	28.01	-3.43	113407.310	2.5	134252.850	3.5
479.5849	21.00	-2.27	18855.760	1.5	39701.300	.5
479.5853	26.01	-4.81	64834.120	1.5	85679.640	2.5
479.5860	6.00	-1.02	64089.850	1.0	84935.340	1.0
479.5998	23.00	-4.05	24898.730	2.5	45743.620	3.5
479.6021	28.00	-4.83	29832.810	3.0	50677.599	3.0
479.6037	25.02	-4.00	174464.070	4.5	195308.790	4.5
479.6037	25.00	-2.65	41230.300	3.5	62075.020	2.5
479.6067	23.00	-2.15	15571.900	2.5	36416.490	1.5
479.6113	28.01	-3.06	113753.040	4.5	134597.430	5.5
479.6113	6.00	-1.60	64090.950	2.0	84935.340	1.0
479.6221	22.00	-1.11	18818.230	0.0	39662.150	1.0
479.6351	22.00	-2.80	15156.787	4.0	36000.144	4.0
479.6366	27.00	-4.89	3482.820	4.5	24326.110	3.5
479.6366	25.00	-3.72	41789.480	4.5	62632.770	3.5
479.6481	25.00	-3.02	38008.700	5.5	58851.490	5.5
479.6493	23.00	-2.77	17116.920	3.5	37959.660	2.5
479.6520	42.00	-.38	21212.928	0.0	42061.376	0.0
479.6541	25.01	-4.90	81862.840	4.0	102705.370	3.0
479.6645	25.00	-1.06	35725.850	2.5	56567.930	1.5
479.6690	57.01	-2.28	7420.492	0.0	28268.202	0.0
479.6730	23.00	-.83	20812.990	1.5	41654.700	2.5
479.6811	24.00	-2.82	27820.230	3.0	48661.590	3.0
479.6912	23.00	.10	16917.150	5.5	37758.070	4.5
479.6924	17.00	-1.49	74865.667	.5	95706.534	1.5
479.6934	22.00	-1.97	25227.217	3.0	46068.040	4.0
479.6967	28.01	-4.84	115209.850	3.5	136050.530	2.5
479.7002	25.02	-4.13	195308.790	4.5	216149.320	3.5
479.7042	29.00	-2.07	41538.623	0.0	62384.803	0.0
479.7057	27.00	-2.35	33674.380	2.5	54514.670	3.5
479.7114	24.00	-2.18	28637.000	3.0	49477.040	2.0
479.7150	60.01	-1.58	4436.164	0.0	25281.874	0.0
479.7204	23.00	-4.35	8578.520	2.5	29418.170	3.5
479.7402	9.02	-3.66	444575.350	2.5	465414.140	2.5
479.7411	28.01	-4.84	95893.760	1.5	116732.510	2.5
479.7437	29.01	-2.84	108014.660	3.0	128853.300	2.0
479.7508	29.01	-4.96	118142.970	3.0	138981.300	2.0
479.7526	28.01	-1.19	99442.860	4.5	120281.110	4.5
479.7550	74.00	-1.14	19680.435	0.0	40524.407	0.0
479.7590	22.00	-4.25	6661.003	3.0	27498.975	3.0
479.7690	24.00	-1.78	28682.180	2.0	49519.720	3.0
479.7743	27.00	-1.40	27497.060	2.5	48334.370	1.5
479.7764	23.02	-3.81	140750.820	2.5	161588.040	3.5
479.7835	27.00	-1.11	32027.500	3.5	52864.410	4.5
479.7851	23.02	-.20	161240.020	5.5	182076.860	5.5
479.7876	28.01	-2.56	94729.250	2.5	115565.960	2.5
479.7879	7.00	-4.41	95475.280	.5	116312.000	.5
479.7879	7.00	-3.32	95475.280	.5	116312.000	1.5
479.7906	22.00	-3.25	27887.740	3.0	48724.340	2.0
479.7922	23.00	-4.81	11100.650	4.5	31937.180	5.5
479.7968	23.00	-.67	15571.900	2.5	36408.230	1.5
479.7973	28.01	-3.53	115108.090	2.5	135944.400	3.5
479.7985	22.00	-1.17	18825.890	1.0	39662.150	1.0
479.8093	18.01	-2.15	181594.050	2.5	202429.840	3.5
479.8167	23.01	-2.31	19166.190	1.0	40001.660	2.0
479.8261	26.00	-.68	33765.291	2.0	54600.350	3.0
479.8303	7.00	-3.64	95532.120	2.5	116367.000	2.5
479.8303	7.00	-2.54	95532.120	2.5	116367.000	3.5
479.8344	17.01	-.29	126219.000	3.0	147053.700	2.0
479.8346	25.00	-1.54	38008.700	5.5	58843.390	6.5
479.8440	44.00	-1.71	8952.985	0.0	29793.091	0.0
479.8473	28.01	-2.72	100490.950	1.5	121325.090	2.5
479.8528	22.01	-2.72	8710.470	1.5	29544.370	2.5
479.8572	27.00	-5.71	8460.810	2.5	29294.520	3.5
479.8611	25.02	-2.61	195315.780	2.5	216149.320	3.5
479.8735	26.00	-3.86	12968.552	2.0	33801.555	2.0
479.9014	23.00	-1.05	20767.570	3.5	41599.360	4.5
479.9046	26.00	-3.12	34547.192	2.0	55378.842	2.0
479.9116	22.00	-3.54	17369.590	1.0	38200.940	0.0
479.9128	18.01	-3.65	188766.150	2.5	209597.450	1.5
479.9159	25.02	-4.47	195592.090	1.5	216423.250	.5
479.9224	24.00	-2.85	24282.340	4.0	45113.220	3.0
479.9247	23.01	-4.93	52391.940	3.0	73222.720	4.0
479.9300	39.00	-.65	10969.423	0.0	31805.795	0.0
479.9307	23.00	-2.19	23088.060	1.5	43918.580	2.5
479.9362	23.00	-3.33	14548.830	2.5	35379.110	3.5
479.9415	28.00	-.77	31441.665	2.0	52271.716	2.0
479.9419	26.00	-2.67	29356.780	2.0	50186.814	2.0
479.9420	60.01	-2.43	0.000	0.0	20835.851	0.0
479.9436	28.01	-4.59	87538.090	3.5	108368.050	2.5
479.9454	26.01	-3.19	64040.960	3.5	84870.840	2.5
479.9465	22.00	-3.97	27498.975	3.0	48328.810	4.0
479.9480	24.00	-4.87	28637.000	3.0	49466.770	2.0
479.9491	7.00	-4.19	95475.280	.5	116305.000	.5
479.9491	7.00	-4.28	95475.280	.5	116305.000	1.5
479.9496	24.00	-4.36	27728.870	2.0	48558.570	2.0
479.9503	28.01	-.84	99442.860	4.5	120272.530	4.5
479.9604	23.00	-5.02	10892.500	3.5	31721.730	4.5
479.9616	27.00	-2.70	32027.500	3.5	52856.680	3.5
479.9674	26.00	-3.77	34547.192	2.0	55376.117	1.0
479.9753	19.00	-2.77	13042.880	1.5	33871.460	.5
479.9763	7.00	-4.52	94793.460	1.5	115662.000	2.5
479.9765	22.00	-3.14	20795.599	5.0	41624.130	4.0
479.9773	26.00	-2.88	28604.610	2.0	49433.108	2.0
479.9777	23.00	-2.54	0.000	1.5	20828.480	2.5
479.9790	28.00	-4.28	29888.505	2.0	50716.927	1.0
479.9796	22.00	-.38	18287.560	4.0	39115.958	4.0
479.9846	23.02	-2.01	141507.700	3.5	162335.880	3.5
479.9864	26.02	-4.04	179676.890	2.0	200504.990	3.0
479.9920	48.00	.69	30488.543	0.0	51322.224	0.0
479.9920	74.00	-.66	19519.120	0.0	40352.801	0.0
479.9934	24.02	-3.77	138975.500	3.0	159803.300	4.0
479.9940	59.01	-2.84	1693.808	0.0	22527.402	0.0
479.9943	23.01	-5.55	14655.630	5.0	35483.390	6.0
479.9972	20.01	-2.19	68056.910	3.5	88884.540	3.5
479.9972	20.01	-.65	68056.910	3.5	88884.540	4.5
479.9972	20.01	-.76	68056.910	2.5	88884.540	3.5
479.9984	28.01	-.62	99442.860	4.5	120270.440	5.5
480.0000	57.00	-.64	9840.217	0.0	30673.550	0.0
480.0039	18.01	-1.90	183090.810	1.5	203918.150	1.5
480.0097	29.01	-2.23	118071.340	1.0	138898.430	1.0
480.0134	26.00	-3.34	24506.902	2.0	45333.834	2.0
480.0145	7.00	-1.81	95532.120	2.5	116359.000	2.5
480.0145	7.00	-2.27	95532.120	2.5	116359.000	3.5
480.0250	57.00	-1.02	7581.807	0.0	28414.055	0.0
480.0314	7.00	-3.89	94770.850	.5	115597.000	1.5
480.0355	26.01	-3.91	77742.780	2.5	98568.750	3.5
480.0360	28.01	-1.67	99442.860	4.5	120268.810	3.5
480.0500	72.00	-1.51	5565.369	0.0	26396.532	0.0
480.0558	26.00	-3.26	26627.612	4.0	47452.702	4.0
480.0602	27.01	-5.85	25147.200	4.0	45972.100	3.0
480.0636	26.00	-.49	33412.706	3.0	54237.460	4.0
480.0648	29.01	-3.52	116388.000	2.0	137212.700	1.0
480.0685	7.00	-3.46	94793.460	1.5	115618.000	.5
480.0685	7.00	-4.25	94793.460	1.5	115618.000	1.5
480.0685	7.00	-2.92	94793.460	1.5	115618.000	2.5
480.0717	28.01	-3.61	115120.000	2.5	135944.400	3.5
480.1017	15.00	-4.09	55939.300	.5	76762.400	.5
480.1047	24.00	-.30	25177.390	4.0	46000.360	3.0
480.1050	64.01	-.91	9033.642	0.0	29862.419	0.0
480.1063	17.01	-1.13	126782.800	3.0	147605.700	3.0
480.1150	59.01	-1.75	3871.561	0.0	24699.904	0.0
480.1261	24.01	-4.04	69903.460	3.5	90725.500	3.5
480.1367	28.01	-4.06	115209.850	3.5	136031.430	2.5
480.1437	14.03	-2.18	315230.270	2.5	336051.550	2.5
480.1437	14.03	-.88	315230.270	3.5	336051.550	2.5
480.1437	14.03	-1.04	315230.270	2.5	336051.550	1.5
480.1483	18.02	-2.71	231754.800	0.0	252575.880	1.0
480.1524	23.00	-2.34	19026.340	2.5	39847.240	1.5
480.1547	23.03	-.44	236322.400	2.0	257143.200	2.0
480.1563	25.00	-3.55	41932.640	3.5	62753.370	2.5
480.1568	26.01	-4.73	62158.190	4.5	82978.900	4.5
480.1587	25.02	-2.43	194894.780	1.5	215715.410	1.5
480.1646	23.00	-4.07	24992.880	3.5	45813.250	4.5
480.1668	8.00	-2.38	86625.769	1.0	107446.048	2.0
480.1679	23.00	-4.41	8476.200	1.5	29296.430	2.5
480.1706	27.00	-2.07	27497.060	2.5	48317.170	3.5
480.1755	27.00	-2.55	33462.830	2.5	54282.730	2.5
480.1872	23.01	-4.13	16533.000	5.0	37352.390	5.0
480.1901	22.00	-3.38	6598.749	2.0	27418.015	2.0
480.1952	22.00	-3.55	6661.003	3.0	27480.047	3.0
480.1990	7.00	-2.44	95532.120	2.5	116351.000	1.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
480.2057	23.02	-2.65	140750.820	2.5	161569.410	1.5
480.2105	27.00	-4.61	32841.990	4.5	53660.370	5.5
480.2115	7.00	-3.72	95493.660	1.5	116312.000	.5
480.2115	7.00	-3.81	95493.660	1.5	116312.000	1.5
480.2115	7.00	-3.46	95493.660	1.5	116312.000	2.5
480.2122	23.01	-4.21	30267.460	2.0	51085.770	3.0
480.2131	22.00	-3.18	18141.229	5.0	38959.499	4.0
480.2134	8.00	-2.16	86627.790	2.0	107446.048	2.0
480.2195	23.00	-4.19	13801.530	1.5	34619.520	2.5
480.2290	24.00	-3.92	32097.360	6.0	52914.940	6.0
480.2351	22.00	-2.58	27907.026	2.0	48724.340	2.0
480.2366	25.01	-3.09	81862.840	4.0	102680.090	5.0
480.2421	25.01	-4.83	81886.330	5.0	102703.340	4.0
480.2438	24.00	-2.70	28637.000	3.0	49453.940	4.0
480.2450	41.00	-2.65	645.260	0.0	21467.965	0.0
480.2513	26.00	-1.03	37157.546	2.0	57974.160	2.0
480.2530	25.00	-4.21	34463.370	1.5	55279.910	1.5
480.2580	64.01	-2.07	4758.794	0.0	25580.935	0.0
480.2586	12.02	-.02	562634.200	1.0	583450.500	1.0
480.2586	12.02	-.02	562634.200	1.0	583450.500	1.0
480.2627	28.01	-4.47	100309.290	5.5	121125.410	4.5
480.2687	6.01	-2.20	168978.340	3.5	189794.200	3.5
480.2687	6.01	-.66	168978.340	3.5	189794.200	4.5
480.2687	6.01	-.77	168978.340	2.5	189794.200	3.5
480.2701	23.03	-4.50	264482.800	2.0	285298.600	1.0
480.2728	24.01	-4.83	42986.730	1.5	63802.410	.5
480.2763	25.00	-2.25	45060.810	3.5	65876.340	3.5
480.2786	25.02	-2.63	172682.640	3.5	193498.070	3.5
480.2865	9.02	-2.04	443913.330	4.5	466728.420	4.5
480.2871	26.00	-2.05	29798.960	4.0	50614.020	4.0
480.2896	26.00	-2.03	29371.860	3.0	50186.614	2.0
480.2946	21.01	-1.23	39114.440	1.0	59929.180	2.0
480.2954	9.00	-4.51	116987.394	3.5	137802.100	2.5
480.2981	8.00	-2.01	86631.466	3.0	107446.048	2.0
480.3033	23.00	-1.11	15724.220	3.5	36538.580	4.5
480.3042	24.00	-2.16	33113.270	4.0	53927.590	4.0
480.3162	17.01	-.16	161634.900	2.0	182448.700	2.0
480.3271	24.00	-4.27	24299.890	2.0	45113.220	3.0
480.3286	7.01	-.06	166678.640	3.0	187491.900	3.0
480.3310	28.01	-4.03	95332.530	2.5	116145.690	3.5
480.3347	23.00	-3.05	15664.750	1.5	36477.750	.5
480.3441	25.00	-3.97	45060.810	3.5	65873.400	2.5
480.3474	26.02	-1.23	205694.090	1.0	226506.540	1.0
480.3481	25.00	-3.24	47903.800	4.5	68716.220	4.5
480.3540	64.01	-1.19	11372.710	0.0	32190.690	0.0
480.3628	22.01	-5.17	10024.740	2.5	30836.520	1.5
480.3631	25.02	-4.88	195592.090	1.5	216403.860	2.5
480.3665	9.02	-1.28	468682.910	3.5	489494.530	3.5
480.3672	28.01	-2.64	100309.290	5.5	121120.880	5.5
480.3709	26.00	-4.43	37162.729	3.0	57974.160	2.0
480.3730	7.00	-3.49	95493.660	1.5	116305.000	.5
480.3730	7.00	-4.77	95493.660	1.5	116305.000	1.5
480.3762	25.00	-2.64	38669.600	3.5	59480.800	2.5
480.3785	9.02	-2.76	468683.430	2.5	489494.530	3.5
480.3804	23.00	-7.64	9824.580	2.5	30635.600	2.5
480.3898	23.00	-1.90	19189.280	1.5	39999.890	2.5
480.4040	57.01	-2.22	1855.123	0.0	22670.936	0.0
480.4081	29.01	-4.50	95565.650	4.0	116375.470	3.0
480.4104	16.01	-4.43	109831.280	1.5	130641.000	1.5
480.4132	23.01	-5.88	16340.970	3.0	37150.570	4.0
480.4205	24.00	-4.80	24303.940	3.0	45113.220	3.0
480.4310	39.00	-.70	15244.271	0.0	36058.915	0.0
480.4337	19.00	-3.46	13042.880	1.5	33851.590	1.5
480.4346	19.00	-2.50	13042.880	1.5	33851.550	2.5
480.4418	23.00	-4.34	24830.180	1.5	45638.540	1.5
480.4525	26.00	-2.84	28819.966	5.0	49627.861	4.0
480.4543	27.01	-3.23	64359.560	3.0	85167.380	3.0
480.4589	26.00	-3.72	27543.000	1.0	48350.620	1.0
480.4660	28.01	-2.10	99442.860	4.5	120250.170	3.5
480.4810	39.00	-.53	15244.271	0.0	36056.748	0.0
480.4880	44.00	-1.73	7985.094	0.0	28797.268	0.0
480.4900	62.01	-3.01	806.575	0.0	21618.663	0.0
480.4910	42.00	-1.28	20003.065	0.0	40815.109	0.0
480.4940	8.03	-2.44	554001.600	3.5	574807.700	3.5
480.4940	8.03	-.90	554001.600	4.5	574807.700	3.5
480.4940	8.03	-1.01	554001.600	3.5	574807.700	2.5
480.5032	22.00	-2.97	25438.898	2.0	46244.600	2.0
480.5119	9.00	-4.06	116987.394	3.5	137792.720	2.5
480.5125	22.01	-.93	16625.250	1.5	37430.550	.5
480.5161	24.01	-4.59	30864.610	2.5	51669.750	2.5
480.5217	25.02	-2.80	195752.480	2.5	216557.380	3.5
480.5261	25.02	-1.62	195112.810	3.5	215917.520	4.5
480.5282	28.01	-2.08	100389.520	2.5	121194.140	2.5
480.5416	22.00	-.56	18911.399	2.0	39715.437	3.0
480.5439	14.00	-3.72	39683.163	0.0	60487.103	1.0
480.5459	26.01	-4.95	64040.960	3.5	84844.810	2.5
480.5485	25.00	-3.90	41230.300	3.5	62034.040	3.5
480.5492	28.01	-1.92	114942.420	1.5	135746.130	1.5
480.5531	7.00	-3.24	94793.460	1.5	115597.000	1.5
480.5552	28.01	-4.46	116732.510	2.5	137535.960	3.5
480.5580	42.00	-1.25	18228.600	0.0	39037.743	0.0
480.5649	29.01	-3.43	115639.020	2.0	136442.050	3.0
480.5672	25.01	-3.84	55115.800	2.0	75918.730	2.0
480.5690	25.00	-3.54	25281.040	2.5	46083.890	1.5
480.5702	28.01	-1.75	100389.520	2.5	121192.320	3.5
480.5702	27.01	-6.90	27585.300	1.0	48388.100	2.0
480.5727	27.00	-2.92	33674.380	2.5	54477.070	3.5
480.5820	64.01	-1.70	8469.040	0.0	29277.144	0.0
480.5838	28.01	-2.73	94067.140	1.5	114869.350	1.5
480.5870	40.00	-1.04	5484.711	0.0	26292.598	0.0
480.5962	9.00	-2.75	116987.394	3.5	137789.070	3.5
480.5963	24.00	-3.32	33934.880	3.0	54736.550	4.0
480.5980	12.02	-1.30	564664.600	2.0	585466.200	1.0
480.5980	12.02	-1.30	564664.600	2.0	585466.200	1.0
480.5998	23.00	-4.07	24898.730	2.5	45700.250	2.5
480.6021	18.01	.22	134241.650	2.5	155043.070	2.5
480.6051	26.01	-4.21	63465.190	1.5	84266.480	2.5
480.6116	9.02	-4.54	443927.410	3.5	464728.420	4.5
480.6120	28.01	-3.07	113407.310	2.5	134208.300	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
480.6162	25.00	-.81	35689.980	1.5	56490.790	2.5
480.6224	25.00	-3.29	38669.600	3.5	59470.140	3.5
480.6261	24.00	-1.09	21847.880	2.0	42648.260	3.0
480.6300	25.02	-3.01	174048.890	2.5	194849.100	1.5
480.6326	22.01	-3.89	8744.270	2.5	29544.370	2.5
480.6444	28.01	-4.81	113408.710	1.5	134208.300	2.5
480.6545	29.01	-4.60	118532.150	2.0	139331.300	3.0
480.6620	60.00	-1.04	1048.548	0.0	21853.188	0.0
480.6624	26.02	-4.65	179725.310	6.0	200524.120	5.0
480.6680	40.00	-1.02	12663.231	0.0	33467.612	0.0
480.6691	23.02	-1.05	161027.320	4.5	181825.840	4.5
480.6762	22.00	-3.38	6556.828	1.0	27355.042	1.0
480.6771	15.01	-2.01	87125.400	2.0	107923.570	2.0
480.6894	25.01	-1.75	43696.190	3.0	64493.830	4.0
480.6901	24.00	-2.32	28679.430	1.0	49477.040	1.0
480.6901	24.00	-2.09	28679.430	1.0	49477.040	2.0
480.6984	28.00	-.84	29668.918	3.0	50466.172	4.0
480.7003	25.01	-4.89	83070.970	2.0	103868.140	1.0
480.7040	29.01	-.25	117231.690	1.0	138028.700	1.0
480.7060	41.00	-1.08	12017.970	0.0	32820.706	0.0
480.7116	25.00	-1.19	37630.620	4.5	58427.300	5.5
480.7140	77.00	-1.37	19438.462	0.0	40240.852	0.0
480.7156	23.00	-2.04	15664.750	1.5	36461.260	2.5
480.7197	24.00	-1.98	34190.490	2.0	54986.820	3.0
480.7210	26.00	-3.96	26623.726	2.0	47420.000	2.0
480.7218	26.00	-2.73	34328.733	3.0	55124.974	3.0
480.7220	28.01	-4.78	79823.030	3.5	100619.260	4.5
480.7292	27.00	-2.28	33462.830	2.5	54258.750	2.5
480.7338	28.01	-2.11	113177.610	3.5	133973.330	2.5
480.7370	74.00	-1.78	12098.628	0.0	32900.023	0.0
480.7450	64.00	-.02	8388.382	0.0	29189.430	0.0
480.7500	27.01	-4.19	63792.100	4.0	84587.120	4.0
480.7512	23.00	.22	17136.440	6.5	37931.410	5.5
480.7516	23.02	-.63	161240.020	5.5	182034.970	4.5
480.7537	24.00	-4.29	28682.180	2.0	49477.040	1.0
480.7537	24.00	-1.33	28682.180	2.0	49477.040	2.0
480.7674	26.00	-2.59	33765.291	2.0	54559.560	3.0
480.7685	28.01	-4.40	116732.510	2.5	137526.730	2.5
480.7697	26.00	-2.30	27166.804	4.0	47960.973	4.0
480.7759	17.01	-.72	161654.800	1.0	182448.700	2.0
480.7766	28.01	-4.59	115108.090	2.5	135901.960	2.5
480.7791	25.01	-2.03	81886.330	5.0	102680.090	5.0
480.7803	24.00	-2.93	24940.610	2.0	45734.320	2.0
480.7893	28.01	-2.86	100332.090	4.5	121125.410	4.5
480.8010	64.00	-.05	13792.436	0.0	34591.062	0.0
480.8059	26.00	-4.81	26627.612	4.0	47420.215	5.0
480.8090	42.00	-.60	23551.996	0.0	44350.276	0.0
480.8150	26.00	-3.66	26224.961	3.0	47017.170	3.0
480.8226	27.00	-1.12	33466.870	3.5	54258.750	2.5
480.8249	28.01	-4.58	114836.630	3.5	135628.410	4.5
480.8356	24.00	-2.08	21856.940	3.0	42648.260	3.0
480.8397	7.00	-3.44	94830.860	2.5	115622.000	2.5
480.8425	9.02	-3.46	444623.120	3.5	465414.140	2.5
480.8463	22.00	-3.52	27418.015	2.0	48208.870	3.0
480.8543	26.00	-3.17	26406.490	1.0	47197.000	2.0
480.8556	22.00	-1.12	24694.895	4.0	45485.350	5.0
480.8693	23.00	-4.81	8412.940	.5	29202.800	1.5
480.8841	25.00	-3.53	47903.800	4.5	68693.020	5.5
480.8870	28.00	-1.19	29888.505	2.0	50677.599	3.0
480.8883	28.01	-1.79	100389.520	2.5	121178.560	3.5
480.8941	28.01	-.50	100332.090	4.5	121120.880	5.5
480.9010	57.01	-2.22	1855.123	0.0	22649.424	0.0
480.9117	24.00	-3.69	32097.360	6.0	52885.390	5.0
480.9124	17.01	.38	153257.000	2.0	174045.000	3.0
480.9147	26.00	-2.17	29798.960	4.0	50586.857	3.0
480.9238	26.00	-2.41	32873.623	4.0	53661.130	3.0
480.9269	25.01	-3.27	84268.060	1.0	105055.430	2.0
480.9276	24.00	-2.21	28679.430	1.0	49466.770	2.0
480.9323	7.00	-3.03	94830.860	2.5	115618.000	1.5
480.9323	7.00	-2.65	94830.860	2.5	115618.000	2.5
480.9370	41.00	-.95	12017.970	0.0	32810.714	0.0
480.9470	40.00	-.42	12663.231	0.0	33455.543	0.0
480.9470	77.00	-1.87	12985.861	0.0	33778.173	0.0
480.9586	27.00	-2.51	33150.680	1.5	53936.680	2.5
480.9593	28.01	-4.75	114836.630	3.5	135622.600	3.5
480.9612	26.02	-1.87	184951.620	3.0	205737.510	2.0
480.9665	18.01	-2.27	182222.030	1.5	203007.690	1.5
480.9748	23.03	-2.75	265271.600	3.0	286056.900	3.0
480.9774	8.02	-1.95	273080.070	1.0	293865.260	1.0
480.9829	15.00	-3.40	56090.450	1.5	76875.400	1.5
480.9841	8.01	-3.28	255281.400	.5	276066.300	1.5
480.9878	22.00	-4.41	16875.190	2.0	37659.927	3.0
480.9912	24.00	-2.98	28682.180	2.0	49466.770	2.0
480.9948	26.00	-2.67	28819.966	5.0	49604.402	5.0
481.0003	25.02	-.29	172451.230	1.5	193235.430	2.5
481.0014	24.00	-.94	34190.490	2.0	54974.640	2.0
481.0049	17.01	.27	107878.500	2.0	128662.500	2.0
481.0054	24.00	-2.31	35807.900	2.0	56591.880	2.0
481.0084	24.01	-4.24	53923.570	4.5	74707.420	5.5
481.0114	7.00	-3.78	95475.280	.5	116259.000	.5
481.0114	7.00	-3.68	95475.280	.5	116259.000	1.5
481.0165	23.01	-3.61	16421.510	4.0	37205.010	3.0
481.0202	26.01	-3.55	64087.500	2.5	84870.840	2.5
481.0202	24.00	-2.76	36552.130	3.0	57335.470	4.0
481.0299	7.01	-1.09	166678.640	3.0	187461.560	2.0
481.0355	25.00	-2.64	37737.220	3.5	58519.900	3.5
481.0490	45.00	.04	26939.612	0.0	47727.515	0.0
481.0505	24.00	-3.24	24093.160	2.0	44875.190	2.0
481.0521	28.01	-3.45	115120.000	2.5	135901.960	2.5
481.0530	30.00	.86	32746.953	0.0	53534.683	0.0
481.0600	41.00	-1.10	9436.930	0.0	30224.358	0.0
481.0630	25.01	-4.62	54938.100	1.0	75719.590	1.0
481.0635	29.01	-3.38	108335.430	2.0	129116.900	3.0
481.0650	20.02	-1.65	323003.560	1.0	343784.960	1.0
481.0695	22.00	-2.20	20062.980	1.0	40844.190	1.0
481.0716	26.01	-2.55	62945.120	3.5	83726.240	3.5
481.0725	23.01	-2.96	52245.680	2.0	73026.760	2.0
481.0732	23.00	-3.36	25253.530	5.5	46034.580	5.5
481.0734	26.01	-3.27	44915.070	3.5	65696.110	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
481.0739	24.00	-.38	24833.860	3.0	45614.880	4.0
481.0801	26.02	-2.08	184951.620	3.0	205732.370	3.0
481.0900	92.00	-1.34	3710.246	0.0	24496.377	0.0
481.0949	23.00	-3.39	17054.870	2.5	37834.980	1.5
481.1002	7.00	-3.28	95532.120	2.5	116312.000	1.5
481.1002	7.00	-3.10	95532.120	2.5	116312.000	2.5
481.1032	22.00	-2.37	15220.390	5.0	36000.144	4.0
481.1042	18.01	-4.18	182951.150	.5	203730.860	1.5
481.1060	42.00	.53	30327.228	0.0	51112.668	0.0
481.1088	25.02	-4.01	195752.480	2.5	216531.990	1.5
481.1095	27.00	-2.45	24326.110	3.5	45105.590	3.5
481.1112	28.01	-4.41	110021.920	4.5	130801.330	4.5
481.1121	23.01	-2.94	30306.400	3.0	51085.770	3.0
481.1142	29.01	-4.08	115662.770	4.0	136442.050	3.0
481.1160	23.03	-1.63	265019.700	1.0	285798.900	2.0
481.1262	25.00	-2.39	45130.160	4.5	65908.920	4.5
481.1278	24.00	-4.95	27728.870	2.0	48507.560	1.0
481.1301	24.00	-3.44	24940.610	2.0	45719.200	1.0
481.1340	60.01	-1.77	483.945	0.0	21268.176	0.0
481.1350	26.00	-4.64	33095.922	4.0	53874.300	5.0
481.1369	24.00	-3.52	35501.260	3.0	56279.560	4.0
481.1403	24.00	-2.26	35813.730	3.0	56591.880	2.0
481.1426	28.01	-.88	114874.880	2.5	135652.930	1.5
481.1498	24.01	-3.48	68843.510	3.5	89621.250	3.5
481.1569	9.00	-3.42	117164.006	2.5	137941.440	2.5
481.1623	17.01	-.13	149798.300	2.0	170575.500	3.0
481.1683	25.01	-2.57	43696.190	3.0	64473.130	3.0
481.1718	24.01	-3.31	67859.910	.5	88636.700	1.5
481.1725	25.01	-4.99	86190.180	2.0	106966.940	2.0
481.1880	38.00	.07	14760.326	0.0	35542.224	0.0
481.1913	26.02	-4.41	179748.170	5.0	200524.120	5.0
481.1915	28.01	-.30	114970.190	.5	135746.130	1.5
481.1979	28.00	-.54	29500.690	1.0	50276.354	0.0
481.2082	7.01	-2.11	223643.300	0.0	244418.520	1.0
481.2126	25.01	-3.81	49882.150	4.0	70657.180	5.0
481.2133	8.01	-4.44	255104.600	2.5	275879.600	3.5
481.2198	10.01	-2.44	302750.810	3.5	323525.530	4.5
481.2202	22.00	-1.14	18911.399	2.0	39686.100	2.0
481.2216	24.00	-2.23	33897.260	1.0	54671.900	1.0
481.2304	24.01	-2.23	31168.780	3.5	51943.040	4.5
481.2318	28.01	-3.47	113753.040	4.5	134527.240	3.5
481.2605	23.02	-.83	141987.320	3.5	162760.280	4.5
481.2622	23.00	-2.36	19189.280	1.5	39962.170	2.5
481.2624	7.00	-4.24	95532.120	2.5	116305.000	1.5
481.2666	23.03	-1.85	263593.000	2.0	284365.700	1.0
481.2689	10.01	-3.38	302750.810	3.5	323523.410	2.5
481.2700	16.01	-4.92	131186.860	2.5	151959.410	1.5
481.2721	23.00	-2.73	15688.800	2.5	36461.260	2.5
481.2721	23.00	-1.83	15688.800	2.5	36461.260	3.5
481.2750	73.00	-2.51	0.000	0.0	20778.141	0.0
481.2761	28.01	-2.69	100389.520	2.5	121161.810	1.5
481.2884	28.00	-.18	32982.280	1.0	53754.036	2.0
481.2897	22.00	-3.24	6842.964	5.0	27614.667	4.0
481.2921	6.00	-2.69	60333.430	0.0	81105.030	1.0
481.2927	23.00	-3.04	20767.570	3.5	41539.140	4.5
481.2941	29.01	.42	117231.690	1.0	138003.200	2.0
481.2967	27.00	-3.70	34133.590	3.5	54904.990	2.5
481.2983	23.01	-2.53	44159.430	2.0	64930.760	1.0
481.2990	24.01	-4.73	69954.200	2.5	90725.500	3.5
481.3124	26.00	-4.45	26406.490	1.0	47177.210	1.0
481.3143	24.01	-3.46	68737.990	5.5	89508.630	5.5
481.3303	28.01	-4.04	79823.030	3.5	100592.980	3.5
481.3333	14.02	.85	209531.400	2.0	230301.220	3.0
481.3414	23.02	-1.90	160879.980	4.5	181649.450	3.5
481.3424	22.00	-4.49	25388.334	4.0	46157.760	5.0
481.3449	27.00	-3.12	23152.570	3.5	43921.890	2.5
481.3467	27.00	.09	25937.590	4.5	46706.830	3.5
481.3516	26.02	-1.17	205737.510	2.0	226506.540	1.0
481.3604	24.01	-2.02	67868.050	2.5	88636.700	1.5
481.3653	28.01	-.36	99442.860	4.5	120211.300	5.5
481.3718	26.00	-2.56	36940.600	2.0	57708.760	2.0
481.3734	25.01	-4.75	53017.160	1.0	73785.250	2.0
481.3787	23.00	-1.61	15770.720	4.5	36538.580	4.5
481.3800	76.00	-1.68	14760.326	0.0	35533.935	0.0
481.3836	23.01	-4.66	52252.700	6.0	73020.350	7.0
481.3880	28.01	-3.48	115209.850	3.5	135977.310	4.5
481.3954	23.01	-2.54	30318.630	4.0	51085.770	3.0
481.3966	27.00	-.99	26597.640	1.5	47364.730	1.5
481.4151	26.02	-3.50	179748.170	5.0	200514.460	4.0
481.4172	24.01	-2.46	67870.500	1.5	88636.700	1.5
481.4186	26.02	-4.19	179757.980	4.0	200524.120	5.0
481.4186	7.00	-3.82	94830.860	2.5	115597.000	1.5
481.4196	8.02	-4.71	306584.800	2.0	327350.900	3.0
481.4232	25.01	-4.00	49465.130	3.0	70231.070	2.0
481.4246	27.01	-4.70	64401.500	4.0	85167.380	3.0
481.4281	24.00	-.27	24897.550	4.0	45663.280	5.0
481.4340	59.01	-1.43	8872.327	0.0	29643.606	0.0
481.4371	7.00	-2.94	95493.660	1.5	116259.000	.5
481.4371	7.00	-2.62	95493.660	1.5	116259.000	1.5
481.4371	7.00	-3.00	95493.660	1.5	116259.000	2.5
481.4404	25.01	-4.52	83070.970	2.0	103836.170	2.0
481.4443	26.00	-4.58	26406.490	1.0	47171.520	0.0
481.4450	8.01	-3.57	255301.300	2.5	276066.300	1.5
481.4450	8.01	-4.92	255301.300	2.5	276066.300	2.5
481.4464	25.00	-.55	35725.850	2.5	56490.790	2.5
481.4470	42.00	-2.44	10646.793	0.0	31417.511	0.0
481.4511	24.00	-2.27	33040.100	2.0	53804.840	3.0
481.4515	7.00	-3.39	95475.280	.5	116240.000	1.5
481.4591	28.00	-1.69	29013.228	2.0	49777.619	3.0
481.4598	10.01	-2.67	302750.810	3.5	323515.170	3.5
481.4615	25.02	-3.89	195948.440	3.5	216712.730	2.5
481.4749	24.00	-3.84	23305.010	2.0	44068.720	3.0
481.4770	25.00	-4.91	34343.900	4.5	55107.520	3.5
481.4812	29.01	-2.32	108014.660	3.0	128778.100	4.0
481.4840	27.00	-3.16	33173.360	3.5	53936.680	2.5
481.4916	23.01	-3.17	32040.760	2.0	52803.750	1.0
481.4933	25.02	-3.68	195112.810	3.5	215875.730	2.5
481.4986	10.01	-2.65	302750.810	3.5	323513.500	3.5
481.5040	40.00	-1.22	5162.081	0.0	25930.340	0.0
481.5050	71.00	-2.96	0.000	0.0	20768.216	0.0
481.5090	25.00	-1.00	42143.570	1.5	62905.810	2.5
481.5095	10.01	-1.79	302750.810	3.5	323513.030	4.5
481.5188	26.01	-4.35	63948.840	4.5	84710.660	3.5
481.5216	27.01	-4.46	65114.800	0.0	85876.500	1.0
481.5220	6.00	-2.13	64089.850	1.0	84851.530	1.0
481.5233	26.00	-2.54	27543.000	1.0	48304.623	2.0
481.5475	6.00	-2.42	64090.950	2.0	84851.530	1.0
481.5498	26.01	-3.15	65363.660	5.5	86124.140	4.5
481.5500	76.00	-1.87	13308.491	0.0	34074.767	0.0
481.5510	16.01	-.08	110268.330	2.5	131028.760	1.5
481.5520	44.00	-.68	11372.710	0.0	32138.899	0.0
481.5528	21.01	-1.73	39114.440	1.0	59874.790	1.0
481.5577	25.01	-3.97	43696.190	3.0	64456.330	2.0
481.5596	25.01	-4.99	86190.180	2.0	106950.240	3.0
481.5617	7.01	-1.76	223658.550	1.0	244418.520	1.0
481.5630	40.00	-.69	4839.451	0.0	25605.166	0.0
481.5807	7.00	-3.99	94770.850	.5	115530.000	.5
481.5807	7.00	-4.11	94770.850	.5	115530.000	1.5
481.5810	62.01	-1.49	1451.835	0.0	22216.774	0.0
481.5814	23.01	-3.32	52657.510	4.0	73416.630	5.0
481.5926	28.00	-.13	28569.210	2.0	49327.845	2.0
481.5960	76.00	.37	30085.255	0.0	50849.547	0.0
481.6010	62.01	-1.93	3468.273	0.0	24232.349	0.0
481.6110	74.00	-1.31	19115.832	0.0	39879.477	0.0
481.6134	24.00	-4.63	36577.730	4.0	57335.470	4.0
481.6199	28.01	-2.59	100389.520	2.5	121146.980	2.5
481.6271	25.00	-1.74	45130.160	4.5	65887.310	5.5
481.6303	22.00	-6.56	6661.003	3.0	27418.015	2.0
481.6313	27.00	-3.81	30443.630	1.5	51200.600	1.5
481.6331	26.02	-4.02	114339.950	4.0	135096.840	3.0
481.6380	41.00	-.76	11130.738	0.0	31893.219	0.0
481.6470	22.00	-4.51	6598.749	2.0	27355.042	1.0
481.6485	28.01	-3.83	99040.750	1.5	119796.980	2.5
481.6487	22.00	-3.86	6742.757	4.0	27498.975	3.0
481.6580	28.00	-2.82	31441.665	2.0	52197.482	3.0
481.6596	28.01	-4.74	114874.880	2.5	135630.630	2.5
481.6640	27.00	-4.79	8460.810	2.5	29216.370	2.5
481.6674	26.00	-3.44	26351.049	5.0	47106.463	4.0
481.6820	74.00	-.23	28472.105	0.0	49232.690	0.0
481.6830	64.00	-.22	11775.998	0.0	32536.540	0.0
481.6863	28.00	-3.99	28578.046	3.0	49332.643	4.0
481.6881	28.01	-4.56	114874.880	2.5	135629.400	3.5
481.6895	25.00	-1.52	41031.480	4.5	61785.940	3.5
481.6942	24.01	-4.39	68583.440	2.5	89337.700	1.5
481.7002	27.00	-4.63	21215.900	.5	41969.900	.5
481.7051	26.02	-2.85	205694.090	1.0	226447.880	2.0
481.7062	23.01	-4.01	52391.940	3.0	73145.680	3.0
481.7062	26.02	-3.75	179760.720	3.0	200514.460	4.0
481.7170	57.00	-.74	9114.300	0.0	29873.376	0.0
481.7200	7.00	-3.27	94770.850	.5	115524.000	.5
481.7200	7.00	-2.34	94770.850	.5	115524.000	1.5
481.7210	72.01	-.71	21535.558	0.0	42294.462	0.0
481.7318	24.01	-3.71	53566.220	3.5	74318.860	2.5
481.7325	25.01	-3.14	84268.060	1.0	105020.670	1.0
481.7340	44.00	-1.38	14921.641	0.0	35679.985	0.0
481.7374	6.00	-2.34	60352.630	1.0	81105.030	1.0
481.7379	22.00	-4.10	27355.042	1.0	48107.420	2.0
481.7406	27.00	-1.37	33674.380	2.5	54426.640	1.5
481.7510	46.00	-.03	33876.158	0.0	54633.769	0.0
481.7527	23.00	-4.07	15664.750	1.5	36416.490	1.5
481.7536	11.02	-4.27	442710.500	1.5	463462.200	1.5
481.7582	14.00	-1.91	39955.053	2.0	60706.558	1.0
481.7587	24.00	-1.50	27223.050	2.0	47974.530	3.0
481.7700	42.00	-1.12	20164.380	0.0	40921.173	0.0
481.7727	22.00	-2.32	25493.722	2.0	46244.600	2.0
481.7756	22.00	-2.49	18911.399	2.0	39662.150	1.0
481.7759	23.00	-3.80	24992.880	3.5	45743.620	3.5
481.7783	26.00	-3.48	17927.378	1.0	38678.015	2.0
481.7815	28.00	-.95	33500.854	3.0	54251.353	3.0
481.7834	26.00	-2.98	33507.102	3.0	54257.520	2.0
481.7845	24.01	-4.12	68305.730	1.5	89056.100	2.5
481.7877	28.01	-4.92	115209.850	3.5	135960.080	4.5
481.7977	28.00	-3.65	28578.046	3.0	49327.845	2.0
481.8053	14.00	-1.38	39955.053	2.0	60704.530	3.0
481.8061	22.00	-4.45	17075.310	4.0	37824.748	4.0
481.8070	28.02	-4.53	97996.300	3.0	118745.700	3.0
481.8170	28.01	-4.81	113407.310	2.5	134156.280	1.5
481.8177	24.00	-2.96	33897.260	1.0	54646.200	0.0
481.8235	26.01	-6.40	18360.650	1.5	39109.340	.5
481.8325	25.00	-1.21	37737.220	3.5	58485.520	4.5
481.8402	27.00	-1.69	32027.500	3.5	52775.470	4.5
481.8433	17.00	-1.49	74225.846	1.5	94973.683	.5
481.8460	28.01	-4.12	114874.880	2.5	135622.600	3.5
481.8495	28.01	-4.93	113408.710	1.5	134156.280	1.5
481.8662	26.00	-4.15	27543.000	1.0	48289.852	1.0
481.8699	17.00	-2.08	74865.667	.5	95612.357	1.5
481.8748	25.00	-2.33	38120.180	4.5	58866.660	4.5
481.8778	25.02	-2.60	195315.780	2.5	216062.130	2.5
481.8780	7.00	-3.44	95493.660	1.5	116240.000	1.5
481.8780	7.00	-3.58	95493.660	1.5	116240.000	2.5
481.8795	25.00	-3.49	30354.210	3.5	51100.490	4.5
481.8818	25.00	-3.65	45130.160	4.5	65876.340	3.5
481.8870	72.00	-.63	18228.600	0.0	38980.353	0.0
481.8883	30.02	.49	214878.000	3.0	235623.900	3.0
481.8908	23.00	-1.88	19189.280	1.5	39935.070	1.5
481.8976	26.02	-3.56	179759.490	2.0	200504.990	3.0
481.9085	28.01	-4.29	114874.880	2.5	135619.910	1.5
481.9110	26.02	-4.45	114351.920	3.0	135096.840	3.0
481.9127	26.00	-3.53	31322.603	3.0	52067.450	2.0
481.9138	27.00	-4.08	32027.500	3.5	52772.300	2.5
481.9175	28.00	-1.45	28569.210	2.0	49313.851	3.0
481.9250	42.00	.22	21212.928	0.0	41963.045	0.0
481.9261	26.02	-4.30	179760.720	3.0	200504.990	3.0
481.9264	25.02	-3.18	194971.150	2.5	215715.410	1.5
481.9301	24.00	-2.05	33060.740	3.0	53804.840	3.0
481.9412	28.01	-.43	114836.630	3.5	135560.250	4.5
481.9445	23.00	-3.64	15664.750	1.5	36408.230	1.5
481.9450	22.00	-4.74	22404.690	3.0	43148.150	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
481.9461	16.01	-.49	129787.710	.5	150531.120	1.5
481.9463	17.01	.05	107878.500	2.0	128621.900	1.0
481.9510	28.01	-3.98	114874.880	2.5	135618.080	2.5
481.9517	24.01	-4.02	70107.830	4.5	90851.000	4.5
481.9530	73.00	-1.28	13227.833	0.0	33976.744	0.0
481.9540	92.01	-2.03	4355.506	0.0	25104.374	0.0
481.9596	16.01	-.21	130641.000	1.5	151383.830	.5
481.9631	14.02	.57	209559.330	3.0	230302.010	4.0
481.9640	39.00	-.77	10888.765	0.0	31637.203	0.0
481.9712	27.01	-3.38	65604.400	3.0	86346.730	3.0
481.9712	14.02	.75	209559.330	3.0	230301.660	4.0
481.9761	25.02	-.15	172755.950	3.5	193498.070	3.5
481.9814	14.02	-.21	209559.330	3.0	230301.220	3.0
481.9824	25.01	-2.99	52653.270	4.0	73395.120	3.0
481.9835	17.01	-.77	126456.600	4.0	147198.400	4.0
481.9856	24.00	-1.85	27176.220	1.0	47917.930	2.0
481.9896	7.00	-3.62	94793.460	1.5	115535.000	2.5
482.0173	28.00	-4.12	28212.997	0.0	48953.344	1.0
482.0205	7.00	-3.08	94881.790	3.5	115622.000	2.5
482.0247	29.01	-3.05	118142.970	3.0	138883.000	4.0
482.0250	70.01	-.90	28633.420	0.0	49379.232	0.0
482.0275	25.02	-3.44	174575.870	3.5	195315.780	2.5
482.0298	23.00	-4.13	24898.730	2.5	45638.540	1.5
482.0340	60.01	-1.86	1613.150	0.0	22358.575	0.0
482.0410	22.00	-.45	12118.394	4.0	32857.721	3.0
482.0526	9.02	-4.35	443753.060	2.5	464491.890	3.5
482.0640	24.00	-3.88	27820.230	3.0	48558.570	2.0
482.0674	25.01	-3.31	47073.560	3.0	67811.750	3.0
482.0791	18.01	-4.82	184191.710	.5	204929.400	.5
482.0798	27.00	-1.07	23184.230	2.5	43921.890	2.5
482.0858	17.01	-.60	161634.900	2.0	182372.300	1.0
482.0884	22.00	-4.19	6742.757	4.0	27480.047	3.0
482.0905	25.01	-4.49	44745.460	2.0	65482.660	3.0
482.0942	23.00	-2.57	15724.220	3.5	36461.260	2.5
482.0942	23.00	-2.17	15724.220	3.5	36461.260	3.5
482.0998	17.01	-.76	149798.300	2.0	170535.100	2.0
482.1007	22.01	-6.42	8997.690	3.5	29734.450	3.5
482.1058	7.00	-4.36	94793.460	1.5	115530.000	.5
482.1058	7.00	-3.03	94793.460	1.5	115530.000	1.5
482.1109	26.01	-2.95	63948.840	4.5	84685.160	3.5
482.1118	28.00	-.73	33500.854	3.0	54237.136	4.0
482.1135	7.00	-3.33	94881.790	3.5	115618.000	2.5
482.1142	27.00	-.49	32027.500	3.5	52763.680	3.5
482.1167	14.00	-2.89	39760.285	1.0	60496.358	2.0
482.1217	22.00	-2.67	17423.853	2.0	38159.710	3.0
482.1229	28.00	-2.16	28578.046	3.0	49313.851	3.0
482.1258	23.00	-4.64	13801.530	1.5	34537.210	1.5
482.1304	25.01	-4.39	65567.070	2.0	86302.550	3.0
482.1346	28.01	-3.93	115592.250	1.5	136327.550	1.5
482.1407	26.00	-2.26	33095.922	4.0	53830.960	3.0
482.1486	17.02	-4.37	188448.100	1.5	209182.800	1.5
482.1509	12.02	-.19	564731.600	1.0	585466.200	1.0
482.1509	12.02	-.19	564731.600	1.0	585466.200	1.0
482.1521	28.01	-3.61	115209.850	3.5	135944.400	3.5
482.1611	26.02	-1.25	185003.350	2.0	205737.510	2.0
482.1686	23.00	-3.49	20767.570	3.5	41501.410	4.5
482.1718	24.00	-2.87	28637.000	3.0	49370.700	3.0
482.1805	7.01	-2.24	223658.550	1.0	244391.880	2.0
482.1811	29.01	-2.72	118484.000	3.0	139217.300	2.0
482.1853	26.00	-3.98	36975.640	3.0	57708.760	2.0
482.1879	24.00	-3.71	31987.060	4.0	52720.070	4.0
482.1900	25.02	-4.35	174575.870	3.5	195308.790	4.5
482.1904	17.01	-2.79	129065.400	2.0	149798.300	2.0
482.1916	22.00	-3.58	25797.600	3.0	46530.450	4.0
482.1920	10.00	-2.21	149824.221	2.0	170557.050	1.0
482.2077	24.00	-2.37	24833.860	3.0	45566.020	3.0
482.2088	28.01	-3.10	100592.980	3.5	121325.090	2.5
482.2130	39.00	-.31	15244.271	0.0	35981.995	0.0
482.2131	17.00	-1.64	74865.667	.5	95597.593	.5
482.2160	23.03	-3.10	263608.300	3.0	284340.100	4.0
482.2167	25.02	-3.37	194849.100	1.5	215580.670	.5
482.2230	23.03	-2.96	265067.400	2.0	285798.900	2.0
482.2274	25.00	-1.85	38120.180	4.5	58851.490	5.5
482.2363	28.01	-1.54	106007.890	2.5	126738.820	1.5
482.2420	42.00	-1.27	20164.380	0.0	40900.857	0.0
482.2453	7.00	-3.60	94793.460	1.5	115524.000	.5
482.2453	7.00	-3.30	94793.460	1.5	115524.000	1.5
482.2453	7.00	-2.39	94793.460	1.5	115524.000	2.5
482.2556	26.00	-2.69	33507.102	3.0	54237.200	4.0
482.2562	7.01	-1.87	223688.450	2.0	244418.520	1.0
482.2586	25.00	-1.29	37789.930	2.5	58519.900	3.5
482.2628	23.01	-2.08	44200.970	1.0	64930.760	1.0
482.2679	26.00	-3.75	26406.490	1.0	47136.058	2.0
482.2786	28.01	-3.89	110021.920	4.5	130751.030	5.5
482.2798	23.01	-4.58	16421.510	4.0	37150.570	4.0
482.2807	26.02	-.48	185003.350	2.0	205732.370	3.0
482.2853	22.00	-3.90	27480.047	3.0	48208.870	3.0
482.2939	10.01	-1.88	292451.780	1.5	313180.230	1.5
482.3028	28.01	-.84	114942.420	1.5	135670.490	.5
482.3116	23.00	-2.95	15688.800	2.5	36416.490	1.5
482.3198	27.00	-2.06	34133.590	3.5	54860.930	4.5
482.3200	90.01	-2.78	4113.534	0.0	24846.657	0.0
482.3227	26.00	-2.34	31322.603	3.0	52049.820	2.0
482.3247	27.00	-1.69	23184.230	2.5	43911.360	1.5
482.3305	7.00	-2.63	95532.120	2.5	116259.000	1.5
482.3305	7.00	-3.03	95532.120	2.5	116259.000	2.5
482.3310	39.01	-1.57	7904.437	0.0	28637.087	0.0
482.3312	23.02	-.38	141196.430	2.5	161923.280	2.5
482.3319	14.00	-2.99	39760.285	1.0	60487.103	1.0
482.3370	23.01	-1.60	32040.760	2.0	52767.360	3.0
482.3370	23.00	-4.15	8476.200	1.5	29202.800	1.5
482.3433	24.00	-4.35	27935.260	4.0	48661.590	3.0
482.3438	23.00	-5.75	13810.900	.5	34537.210	1.5
482.3510	28.01	-4.63	112719.750	3.5	133445.750	4.5
482.3524	25.00	.14	18705.370	4.5	39431.310	3.5
482.3610	90.00	-1.50	6291.287	0.0	27022.648	0.0
482.3612	28.01	-2.64	99418.610	3.5	120144.170	2.5
482.3689	15.01	-1.76	103166.370	1.0	123891.600	2.0
482.3808	23.00	-1.98	20767.570	3.5	41492.290	3.5
482.3908	24.00	-2.33	36552.130	3.0	57276.420	3.0
482.4020	16.01	.03	131186.860	2.5	151910.670	1.5
482.4060	57.01	-1.70	5162.081	0.0	25891.508	0.0
482.4080	24.01	-1.20	31219.490	4.5	51943.040	4.5
482.4106	22.00	-2.36	25926.820	4.0	46650.260	3.0
482.4161	26.00	-2.36	29320.050	1.0	50043.250	1.0
482.4180	60.01	-2.51	4436.164	0.0	25165.075	0.0
482.4255	25.00	-3.83	34463.370	1.5	55186.170	2.5
482.4290	40.00	-1.05	5162.081	0.0	25890.520	0.0
482.4387	24.01	-3.85	44307.440	.5	65029.670	.5
482.4401	28.01	-3.92	114836.630	3.5	135558.800	4.5
482.4408	25.02	-1.71	195948.440	3.5	216670.580	4.5
482.4418	17.02	-2.87	222100.700	1.5	242822.800	2.5
482.4530	28.00	-2.19	32982.280	1.0	53703.899	1.0
482.4531	22.00	-4.26	16817.190	1.0	37538.804	2.0
482.4676	9.02	-2.44	443770.900	3.5	464491.890	3.5
482.4716	25.00	-1.49	35769.970	3.5	56490.790	2.5
482.4816	26.02	-.15	184951.620	3.0	205672.010	4.0
482.4846	27.00	-2.25	27497.060	2.5	48217.320	3.5
482.4866	26.00	-4.10	24574.655	4.0	45294.830	5.0
482.4881	26.01	-2.42	65696.110	4.5	86416.220	3.5
482.5039	23.00	-3.41	15688.800	2.5	36408.230	1.5
482.5051	28.01	-4.33	115827.120	3.5	136546.500	4.5
482.5177	29.01	-4.34	116080.460	3.0	136799.300	2.0
482.5267	27.00	-2.45	33439.720	4.5	54158.170	4.5
482.5298	28.01	-2.19	100475.820	3.5	121194.140	2.5
482.5321	28.01	-3.22	109269.830	1.5	129988.050	2.5
482.5393	23.00	-3.70	8578.520	2.5	29296.430	2.5
482.5403	24.00	-2.50	36558.550	2.0	57276.420	3.0
482.5430	73.00	-1.54	11130.738	0.0	31854.280	0.0
482.5477	22.00	-1.35	18695.230	4.0	39412.780	5.0
482.5480	60.01	-1.48	1451.835	0.0	22175.162	0.0
482.5489	17.01	-.83	161654.800	1.0	182372.300	1.0
482.5519	10.00	-2.79	150772.112	1.0	171489.485	1.0
482.5528	24.00	-1.83	24897.550	4.0	45614.880	4.0
482.5589	25.00	-3.11	31001.150	2.5	51718.220	1.5
482.5708	26.01	-5.00	21251.550	6.5	41968.110	5.5
482.5722	28.01	-2.34	100475.820	3.5	121192.320	3.5
482.5745	17.01	-1.87	149798.300	2.0	170514.700	1.0
482.5920	28.01	-2.44	100845.410	.5	121561.060	.5
482.5924	16.01	-1.11	110313.130	2.5	131028.760	1.5
482.5952	26.02	-.90	205732.370	3.0	226447.880	2.0
482.6032	22.00	-2.17	21469.494	3.0	42184.660	4.0
482.6034	28.01	-5.00	115827.120	3.5	136542.280	3.5
482.6223	24.00	-2.28	27163.200	0.0	47877.550	1.0
482.6271	22.00	-2.71	27614.667	4.0	48328.810	4.0
482.6274	27.00	-1.97	23207.760	1.5	43921.890	2.5
482.6546	23.00	-3.50	23353.090	3.5	44066.050	3.5
482.6621	28.01	-.83	99559.330	2.5	120271.970	2.5
482.6640	25.00	-2.45	41031.480	4.5	61744.040	5.5
482.6660	76.00	-1.78	13953.751	0.0	34672.012	0.0
482.6710	90.00	-.60	12985.861	0.0	33703.907	0.0
482.6735	7.00	-3.28	94770.850	.5	115483.000	.5
482.6735	7.00	-3.58	94770.850	.5	115483.000	1.5
482.6773	22.00	-2.26	27750.124	5.0	48462.110	5.0
482.6796	6.00	-2.50	60393.140	2.0	81105.030	1.0
482.6880	57.01	-3.13	1371.178	0.0	22088.494	0.0
482.6887	25.00	-3.09	31076.420	1.5	51787.920	.5
482.7064	18.01	-2.05	189414.960	3.5	210125.700	2.5
482.7071	25.02	-3.90	173835.070	.5	194545.780	.5
482.7117	28.01	-.73	114942.420	1.5	135652.930	1.5
482.7150	26.02	-1.57	205737.510	2.0	226447.880	2.0
482.7169	23.00	-4.41	14514.750	1.5	35225.040	2.5
482.7248	21.00	-.17	17947.980	1.5	38657.930	2.5
482.7250	20.02	-1.21	326186.320	3.0	346896.260	2.0
482.7260	26.02	-.58	205672.010	4.0	226381.910	3.0
482.7261	22.00	-3.33	27498.975	3.0	48208.870	3.0
482.7338	10.00	-2.68	148257.790	1.0	168967.353	1.0
482.7355	25.01	-2.16	81993.850	4.0	102703.340	4.0
482.7358	28.01	-.73	99559.330	2.5	120268.810	3.5
482.7364	29.01	-3.12	118532.150	2.0	139241.600	1.0
482.7434	7.00	-3.01	94770.850	.5	115480.000	.5
482.7434	7.00	-4.40	94770.850	.5	115480.000	1.5
482.7446	23.00	-1.43	323.420	3.5	21034.520	3.5
482.7497	28.01	-2.64	100609.010	2.5	121317.890	3.5
482.7521	27.00	-3.33	34196.210	1.5	54904.990	2.5
482.7574	24.00	-4.05	35501.260	3.0	56209.810	3.0
482.7587	10.00	-2.50	149824.221	2.0	170532.717	2.0
482.7616	22.00	-1.52	18593.990	3.0	39302.360	4.0
482.7703	25.00	-4.75	45060.810	3.5	65768.810	4.5
482.7731	7.00	-4.80	95532.120	2.5	116240.000	1.5
482.7731	7.00	-2.28	95532.120	2.5	116240.000	2.5
482.7759	7.01	-4.29	202170.630	1.0	222878.390	2.0
482.7849	23.00	-4.05	24992.880	3.5	45700.250	2.5
482.7860	22.00	-2.86	25537.276	1.0	46244.600	2.0
482.8040	40.00	-1.25	5000.766	0.0	25713.105	0.0
482.8069	10.01	-2.22	302816.980	1.5	323523.410	2.5
482.8125	29.01	-4.07	116371.410	4.0	137077.600	3.0
482.8246	23.01	-2.64	44098.460	3.0	64804.130	2.0
482.8467	28.01	-1.99	100475.820	3.5	121180.540	4.5
482.8603	7.00	-3.38	94830.860	2.5	115535.000	2.5
482.8603	7.00	-3.21	94830.860	2.5	115535.000	3.5
482.8605	21.00	-2.97	17012.980	2.5	37717.110	3.5
482.8668	24.00	-3.23	20520.920	3.0	41224.780	4.0
482.8680	22.00	-4.16	27355.042	1.0	48058.850	1.0
482.8729	27.00	-1.80	23207.760	1.5	43911.360	1.5
482.8729	12.02	-2.02	562136.100	2.0	582839.700	3.0
482.8729	12.02	-2.02	562136.100	2.0	582839.700	3.0
482.8769	7.01	-1.65	223688.450	2.0	244391.880	2.0
482.8824	28.01	-1.09	100490.950	1.5	121194.140	2.5
482.8831	23.00	-1.25	20789.130	2.5	41492.290	3.5
482.8929	28.01	-1.41	100475.820	3.5	121176.560	3.5
482.8951	14.02	1.09	209599.700	4.0	230302.350	5.0
482.8997	23.00	-3.60	8715.720	3.5	29418.170	3.5
482.9016	28.00	-.17	28569.210	2.0	49271.578	3.0
482.9030	14.02	-.56	209599.700	4.0	230302.010	4.0
482.9032	23.03	-2.99	234121.800	0.0	254824.100	1.0
482.9111	14.02	-.46	209599.700	4.0	230301.660	4.0
482.9160	23.00	-3.57	25111.500	4.5	45813.250	4.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
482.9214	14.02	-2.00	209599.700	4.0	230301.220	3.0
482.9242	19.01	-.23	162507.000	2.0	183208.400	1.0
482.9258	24.00	-2.20	27176.220	1.0	47877.550	1.0
482.9266	17.01	-.74	161671.000	0.0	182372.300	1.0
482.9289	10.00	-3.49	150772.112	1.0	171473.313	2.0
482.9300	41.00	-.24	17825.312	0.0	38532.247	0.0
482.9300	63.00	-.29	15566.901	0.0	36273.836	0.0
482.9314	24.00	-1.83	20523.690	4.0	41224.780	4.0
482.9321	29.01	-1.06	115569.200	5.0	136270.260	4.0
482.9372	24.00	-.91	20523.940	5.0	41224.780	4.0
482.9419	25.02	-3.47	195462.260	.5	216162.900	1.5
482.9461	26.00	-2.86	36940.600	2.0	57641.060	3.0
482.9498	28.01	-.82	114970.190	.5	135670.490	.5
482.9536	23.01	-4.05	16340.970	3.0	37041.110	2.0
482.9538	25.00	-1.86	41932.640	3.5	62632.770	3.5
482.9570	62.01	-1.83	2984.328	0.0	23690.105	0.0
482.9582	24.00	-3.16	31364.330	3.0	52064.270	4.0
482.9652	25.00	-2.53	42053.730	2.5	62753.370	2.5
482.9686	26.00	-3.75	33412.706	3.0	54112.203	2.0
482.9769	7.00	-4.15	94830.860	2.5	115530.000	1.5
482.9874	24.00	-3.20	36577.730	4.0	57276.420	3.0
482.9900	28.01	-4.00	115592.250	1.5	136290.830	.5
482.9917	22.00	-4.32	16961.420	3.0	37659.927	3.0
482.9970	29.01	-4.63	116375.470	3.0	137073.750	2.0
482.9988	15.01	-3.95	110252.000	1.0	130950.200	2.0
483.0008	14.00	-2.91	39683.163	0.0	60381.278	1.0
483.0112	23.00	-3.20	17054.870	2.5	37752.540	2.5
483.0138	25.01	-2.03	49820.160	2.0	70517.720	3.0
483.0271	24.01	-3.71	68477.110	4.5	89174.100	3.5
483.0330	63.00	.11	17260.709	0.0	37963.228	0.0
483.0378	9.02	-1.95	443625.310	2.5	464321.840	2.5
483.0401	26.01	-4.72	54904.500	3.5	75600.930	3.5
483.0510	42.00	.19	21051.613	0.0	41753.361	0.0
483.0541	26.00	-2.69	27543.000	1.0	48238.832	2.0
483.0639	27.00	-4.88	23152.570	3.5	43847.980	3.5
483.0646	28.01	-3.69	79923.880	4.5	100619.260	4.5
483.0663	26.01	-4.74	62158.190	4.5	82853.500	5.5
483.0700	23.00	-1.66	19189.280	1.5	39884.430	1.5
483.0763	24.00	-2.17	27223.050	2.0	47917.930	2.0
483.0784	25.00	-4.32	48021.430	5.5	68716.220	4.5
483.0840	24.00	-4.12	23386.350	3.0	44080.900	2.0
483.1078	28.00	-2.23	28578.046	3.0	49271.578	3.0
483.1109	26.01	-5.10	26932.740	.5	47626.140	.5
483.1120	90.00	-1.68	3629.588	0.0	24328.722	0.0
483.1146	25.02	.36	173063.550	5.5	193756.790	4.5
483.1169	28.00	-.30	29084.478	4.0	49777.619	3.0
483.1169	7.00	-2.25	94830.860	2.5	115524.000	3.5
483.1190	26.00	-4.65	28604.610	2.0	49297.660	1.0
483.1214	25.01	-4.32	47073.560	3.0	67766.510	2.0
483.1347	8.02	-3.95	306584.800	2.0	327277.180	2.0
483.1354	25.02	-1.67	194971.150	2.5	215663.500	3.5
483.1536	24.00	-3.57	33113.270	4.0	53804.840	3.0
483.1599	27.00	-2.88	33466.870	3.5	54158.170	4.5
483.1634	24.00	-1.48	27597.220	3.0	48288.370	4.0
483.1641	25.00	-3.49	38669.600	3.5	59360.720	2.5
483.1646	23.00	-1.33	137.380	2.5	20828.480	2.5
483.1685	24.00	-3.38	21847.880	2.0	42538.810	3.0
483.1697	9.02	-.93	443630.960	3.5	464321.840	2.5
483.1706	28.01	.00	99559.330	2.5	120250.170	3.5
483.1730	26.02	-2.02	185003.350	2.0	205694.090	1.0
483.1777	23.00	-3.27	15770.720	4.5	36461.260	3.5
483.1868	24.00	-3.56	24056.110	5.0	44746.260	6.0
483.1903	25.00	-2.25	37420.240	5.5	58110.240	4.5
483.2005	25.00	-1.81	41789.480	4.5	62479.040	4.5
483.2010	7.00	-3.28	94793.460	1.5	115483.000	.5
483.2010	7.00	-2.77	94793.460	1.5	115483.000	1.5
483.2010	7.00	-3.84	94793.460	1.5	115483.000	2.5
483.2014	26.00	-2.90	33801.555	2.0	54491.080	3.0
483.2042	22.00	-3.80	27418.015	2.0	48107.420	2.0
483.2064	22.00	-1.72	18525.070	2.0	39214.380	3.0
483.2080	38.00	-.11	14437.696	0.0	35132.718	0.0
483.2089	27.00	-4.36	32027.500	3.5	52716.700	3.5
483.2180	73.00	-1.90	9920.875	0.0	30615.468	0.0
483.2190	27.00	-2.54	32654.500	2.5	53343.270	1.5
483.2202	7.00	-2.64	95475.280	.5	116164.000	.5
483.2202	7.00	-2.60	95475.280	.5	116164.000	1.5
483.2248	24.00	-2.17	28682.180	2.0	49370.700	3.0
483.2290	23.00	-1.65	19189.280	1.5	39877.620	.5
483.2428	23.00	-1.46	0.000	1.5	20687.750	1.5
483.2454	24.01	-3.39	69903.460	3.5	90591.100	2.5
483.2468	25.02	-2.95	172547.850	2.5	193235.430	2.5
483.2671	26.00	-3.75	34692.130	1.0	55378.842	2.0
483.2686	28.00	-1.28	30619.440	2.0	51306.085	3.0
483.2711	7.00	-3.01	94793.460	1.5	115480.000	.5
483.2711	7.00	-3.59	94793.460	1.5	115480.000	1.5
483.2727	26.00	-1.98	29356.780	2.0	50043.250	1.0
483.2765	24.00	-2.33	31377.960	4.0	52064.270	4.0
483.2780	18.00	-4.53	104102.144	1.0	124788.390	1.0
483.2781	25.01	-2.41	81993.850	4.0	102680.090	5.0
483.2811	24.01	-4.80	66727.160	2.5	87413.270	2.5
483.2816	25.02	-4.21	194894.780	1.5	215580.870	.5
483.2920	42.00	-.96	20003.065	0.0	40694.490	0.0
483.2933	24.01	-3.79	45669.540	1.5	66355.130	1.5
483.3008	23.00	-1.49	13801.530	1.5	34486.800	2.5
483.3211	26.01	-4.82	21430.390	5.5	42114.790	4.5
483.3273	10.01	-2.87	302839.280	2.5	323523.410	2.5
483.3307	26.00	-3.37	34692.130	1.0	55376.117	1.0
483.3320	62.01	-1.73	7985.094	0.0	28674.806	0.0
483.3370	41.00	-2.33	80.658	0.0	20770.156	0.0
483.3428	9.02	-1.40	444238.270	4.5	464921.740	3.5
483.3433	23.01	-4.56	52153.550	5.0	72837.000	6.0
483.3514	17.01	-.69	161654.800	1.0	182337.900	0.0
483.3529	25.00	-2.66	41031.480	4.5	61714.520	4.5
483.3564	27.00	-4.24	26063.110	1.5	46746.000	2.5
483.3599	28.01	-1.06	114970.190	.5	135652.930	1.5
483.3619	9.01	-.57	267399.940	1.0	288082.590	1.0
483.3620	21.00	-.15	17918.850	.5	38601.500	1.5
483.3664	26.01	-4.79	59663.450	1.5	80345.910	.5
483.3685	24.00	-4.12	23386.350	3.0	44068.720	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
483.3746	29.01	-3.35	117231.690	1.0	137913.800	1.0
483.3802	24.00	-3.69	21856.940	3.0	42538.810	3.0
483.3858	26.01	-4.59	22939.350	2.5	43620.980	1.5
483.3931	27.01	-3.72	64914.710	2.0	85596.030	2.0
483.3960	42.00	-1.11	20245.038	0.0	40932.011	0.0
483.4093	18.00	-3.19	104102.144	1.0	124782.770	1.0
483.4146	30.02	-2.41	217655.800	3.0	238336.200	2.0
483.4190	72.00	-1.34	14357.039	0.0	35043.028	0.0
483.4230	64.01	-1.11	9275.615	0.0	29961.433	0.0
483.4304	7.00	-3.54	95475.280	.5	116155.000	.5
483.4304	7.00	-3.11	95475.280	.5	116155.000	1.5
483.4308	22.00	-2.66	25388.334	4.0	46068.040	4.0
483.4356	25.00	-1.24	41031.480	4.5	61710.980	3.5
483.4368	27.00	-4.45	16195.680	.5	36875.130	1.5
483.4511	26.00	-3.40	19552.474	1.0	40231.312	2.0
483.4618	16.01	-.83	110508.480	3.5	131186.860	2.5
483.4620	62.01	-1.94	3871.561	0.0	24555.710	0.0
483.4711	26.01	-2.15	83305.370	3.5	103983.350	3.5
483.4737	28.01	-3.98	113172.960	4.5	133850.830	3.5
483.4810	28.00	-1.54	29668.918	3.0	50346.477	2.0
483.4826	28.01	-4.52	114942.420	1.5	135619.910	1.5
483.4828	7.00	-2.42	93581.520	.5	114259.000	1.5
483.4976	28.01	-4.49	115870.280	2.5	136547.130	3.5
483.5020	74.00	-1.08	20325.695	0.0	41008.133	0.0
483.5055	24.00	-3.03	31355.210	2.0	52031.720	3.0
483.5107	28.01	-1.55	114836.630	3.5	135512.920	2.5
483.5123	25.02	-4.43	174436.590	2.5	195112.810	3.5
483.5125	23.00	-5.54	14548.830	2.5	35225.040	2.5
483.5128	29.01	-4.87	118142.970	3.0	138819.170	3.0
483.5137	26.02	-.75	185061.350	1.0	205737.510	2.0
483.5200	10.01	-2.66	302839.280	2.5	323515.170	3.5
483.5205	23.00	-5.23	13801.530	1.5	34477.400	.5
483.5240	28.01	-4.13	111120.540	1.5	131796.260	2.5
483.5254	28.01	-4.87	114942.420	1.5	135618.080	2.5
483.5260	64.00	-1.17	967.890	0.0	21649.301	0.0
483.5509	26.01	-4.86	79243.730	1.5	99918.300	1.5
483.5591	10.01	-2.94	302839.280	2.5	323513.500	3.5
483.5630	58.01	-1.24	7662.464	0.0	28342.293	0.0
483.5660	60.00	-1.04	2339.068	0.0	23018.768	0.0
483.5671	22.00	-1.44	26772.965	5.0	47446.840	6.0
483.5675	24.00	-1.50	28637.000	3.0	49310.860	3.0
483.5853	26.00	-1.91	33095.922	4.0	53769.020	4.0
483.5865	16.01	-.98	129858.070	1.5	150531.120	1.5
483.5980	60.01	-2.36	0.000	0.0	20678.332	0.0
483.5993	30.02	-.61	217663.700	1.0	238336.200	2.0
483.6110	28.01	-4.57	115870.280	2.5	136542.280	3.5
483.6122	15.00	-4.13	56090.450	1.5	76762.400	.5
483.6124	22.00	.00	18287.560	4.0	38959.499	4.0
483.6199	24.01	-2.22	31117.590	2.5	51789.210	3.5
483.6206	25.00	-2.89	48021.430	5.5	68693.020	5.5
483.6275	28.00	-3.41	30163.140	2.0	50834.435	2.0
483.6307	28.01	-4.14	100475.820	3.5	121146.980	2.5
483.6316	25.02	-3.82	194849.100	1.5	215520.220	2.5
483.6374	24.00	-1.80	31393.400	5.0	52064.270	4.0
483.6377	28.01	-.56	100490.950	1.5	121161.810	1.5
483.6435	23.02	-2.49	141714.500	2.5	162385.110	3.5
483.6499	7.00	-4.66	95493.660	1.5	116164.000	.5
483.6499	7.00	-3.37	95493.660	1.5	116164.000	1.5
483.6499	7.00	-2.71	95493.660	1.5	116164.000	2.5
483.6543	25.00	-4.71	44978.980	1.5	65649.130	2.5
483.6559	9.00	-3.90	115917.909	2.5	136587.990	1.5
483.6590	25.00	-4.50	38669.600	3.5	59339.550	3.5
483.6615	27.00	-1.88	32841.990	4.5	53511.830	5.5
483.6670	62.01	-2.68	806.575	0.0	21481.957	0.0
483.6689	18.00	-2.47	104102.144	1.0	124771.670	2.0
483.6695	24.00	-2.90	33113.270	4.0	53782.770	4.0
483.6718	24.02	-4.96	138362.400	2.0	159031.800	2.0
483.6753	17.00	-1.78	74865.667	.5	95534.923	.5
483.6763	6.00	-2.61	68856.330	1.0	89525.540	1.0
483.6789	17.01	-.34	126456.600	4.0	147125.700	3.0
483.6795	20.00	-2.33	21849.634	2.0	42518.708	1.0
483.6810	23.00	-4.87	20767.570	3.5	41436.580	3.5
483.6817	29.01	-1.79	116375.470	3.0	137044.450	4.0
483.6836	28.00	-3.78	30163.140	2.0	50832.039	3.0
483.6870	24.00	-.32	25038.610	5.0	45707.360	6.0
483.6920	24.00	-2.73	36552.130	3.0	57220.670	2.0
483.6936	24.00	-4.05	24897.550	4.0	45566.020	3.0
483.6950	70.01	-.71	32908.268	0.0	53582.453	0.0
483.6999	26.01	-2.55	65931.460	3.5	86599.660	2.5
483.7189	24.00	-2.17	31364.330	3.0	52031.720	3.0
483.7230	72.00	-2.12	5565.369	0.0	26238.357	0.0
483.7312	10.00	-2.02	148257.790	1.0	168924.651	2.0
483.7387	9.00	-2.73	115917.909	2.5	136584.450	2.5
483.7397	23.00	-4.20	13810.900	.5	34477.400	.5
483.7420	27.01	-7.40	27484.300	3.0	48150.700	3.0
483.7420	22.00	-1.95	18482.860	1.0	39149.260	2.0
483.7432	25.01	-3.05	52718.800	0.0	73385.150	1.0
483.7470	70.00	-.59	24358.571	0.0	45030.534	0.0
483.7477	25.02	-2.50	172569.270	1.5	193235.430	2.5
483.7547	25.01	-4.84	44899.820	3.0	65565.680	4.0
483.7619	28.00	-4.26	22102.349	4.0	42767.900	3.0
483.7620	41.00	-.48	18309.257	0.0	38980.579	0.0
483.7650	26.00	-2.68	36975.640	3.0	57641.060	3.0
483.7650	62.01	-1.47	10162.848	0.0	30834.042	0.0
483.7668	7.00	-2.89	95493.660	1.5	116159.000	2.5
483.7781	7.01	-2.59	223688.450	2.0	244353.310	3.0
483.7818	28.01	-3.33	115081.360	4.5	135746.060	3.5
483.7861	24.00	-3.27	23386.350	3.0	44050.870	4.0
483.7891	25.01	-4.95	86302.550	3.0	106966.940	2.0
483.7944	26.00	-4.57	26224.961	3.0	46889.126	4.0
483.7959	27.00	-5.58	5075.830	1.5	25739.930	2.5
483.7990	41.00	-1.58	9436.930	0.0	30106.671	0.0
483.8013	25.01	-3.47	49882.150	4.0	70546.020	4.0
483.8041	27.00	-4.75	23184.230	2.5	43847.980	3.5
483.8073	22.00	-4.45	16875.190	2.0	37538.804	2.0
483.8085	28.01	-1.55	99559.330	2.5	120222.890	1.5
483.8092	26.00	-2.65	26224.961	3.0	46888.494	2.0
483.8110	42.00	-.88	23955.283	0.0	44624.511	0.0
483.8223	25.00	-3.80	31124.950	.5	51787.920	.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
483.8287	19.02	-.46	242165.300	1.5	262828.000	1.5
483.8336	23.01	-3.84	52245.680	2.0	72906.170	3.0
483.8423	24.00	-1.84	36558.550	2.0	57220.670	2.0
483.8455	28.01	-1.44	93390.060	2.5	114052.040	3.5
483.8508	26.00	-2.12	27559.568	2.0	48221.323	1.0
483.8601	23.00	-3.56	20767.570	3.5	41428.930	2.5
483.8605	7.00	-2.84	95493.660	1.5	116155.000	.5
483.8605	7.00	-3.54	95493.660	1.5	116155.000	1.5
483.8639	28.00	-.32	33590.159	4.0	54251.353	3.0
483.8652	28.01	-3.21	100389.520	2.5	121050.660	2.5
483.8682	28.01	-4.66	116275.810	3.5	136936.820	3.5
483.8755	28.01	-1.86	115085.360	3.5	135746.060	3.5
483.8780	40.00	-.59	12421.258	0.0	33087.624	0.0
483.8851	7.01	-1.45	223731.590	3.0	244391.880	2.0
483.8914	24.00	-3.15	31352.420	1.0	52012.440	2.0
483.8945	25.00	-4.06	25281.040	2.5	45940.930	2.5
483.8980	40.00	-.81	12663.231	0.0	33328.743	0.0
483.9010	44.00	.40	26133.037	0.0	46798.421	0.0
483.9027	18.01	-2.34	181594.050	2.5	202253.590	1.5
483.9036	29.01	-4.30	116375.470	3.0	137034.970	3.0
483.9090	23.01	-2.78	32040.760	2.0	52700.030	2.0
483.9150	39.00	-.60	15405.586	0.0	36070.372	0.0
483.9275	22.00	-.73	17995.750	0.0	38654.230	1.0
483.9347	23.00	-2.42	19189.280	1.5	39847.240	1.5
483.9402	21.00	-4.93	15672.550	1.5	36330.490	2.5
483.9462	21.00	.17	18000.250	2.5	38657.930	2.5
483.9491	24.00	-4.87	23933.900	4.0	44591.460	5.0
483.9520	57.00	-.64	6936.547	0.0	27599.753	0.0
483.9540	59.01	-2.09	4032.876	0.0	24695.997	0.0
483.9551	26.00	-2.05	26351.049	5.0	47008.351	5.0
483.9568	24.00	-2.35	31355.210	2.0	52012.440	2.0
483.9620	71.01	-2.51	11695.340	0.0	32358.119	0.0
483.9692	21.01	-1.00	39344.900	2.0	60001.600	3.0
483.9757	26.00	-.82	37157.546	2.0	57813.970	3.0
483.9770	44.00	-2.15	8711.012	0.0	29373.151	0.0
483.9800	28.01	-3.11	57080.550	3.5	77736.790	4.5
483.9819	25.01	-2.06	49889.860	3.0	70546.020	4.0
483.9842	28.01	-3.34	109675.720	.5	130331.780	1.5
483.9849	28.01	.01	100490.950	1.5	121146.980	2.5
483.9870	39.00	.03	11453.368	0.0	32115.080	0.0
483.9919	27.00	-3.55	25269.250	3.5	45924.980	3.5
483.9994	26.01	-4.99	21581.640	4.5	42237.050	3.5
484.0010	57.01	-2.69	2581.041	0.0	23242.155	0.0
484.0114	23.02	-2.34	140933.140	3.5	161588.040	3.5
484.0133	25.00	-1.35	37420.240	5.5	58075.060	5.5
484.0163	24.00	-3.69	27597.220	3.0	48251.910	3.0
484.0208	24.00	-3.42	27223.050	2.0	47877.550	1.0
484.0247	27.00	.19	25568.680	5.5	46223.010	4.5
484.0302	6.00	-4.55	68856.330	1.0	89510.430	2.0
484.0306	26.00	-1.51	33507.102	3.0	54161.182	3.0
484.0381	24.00	-2.18	31377.960	4.0	52031.720	3.0
484.0437	21.00	-.56	17947.980	1.5	38601.500	1.5
484.0465	28.01	-4.93	114970.190	.5	135623.590	1.5
484.0465	27.01	-8.09	27902.500	4.0	48555.900	5.0
484.0470	63.00	-.09	17260.709	0.0	37919.860	0.0
484.0510	7.00	-4.43	94881.790	3.5	115535.000	2.5
484.0510	7.00	-3.33	94881.790	3.5	115535.000	3.5
484.0515	25.00	-3.08	25287.740	3.5	45940.930	2.5
484.0547	28.01	-4.25	100389.520	2.5	121042.570	1.5
484.0559	28.01	-3.96	100389.520	2.5	121042.520	1.5
484.0587	23.02	-4.25	141270.400	3.5	161923.280	2.5
484.0646	26.01	-6.50	18360.650	1.5	39013.280	1.5
484.0760	7.00	-2.48	94830.860	2.5	115483.000	1.5
484.0760	7.00	-2.89	94830.860	2.5	115483.000	2.5
484.0770	77.00	-2.57	9759.560	0.0	30417.431	0.0
484.0800	3.01	-.53	561245.000	0.0	581902.743	0.0
484.0840	90.00	-1.73	2823.013	0.0	23480.585	0.0
484.0843	21.00	-.91	17918.850	.5	38570.640	.5
484.0874	22.00	-.30	7255.369	2.0	27907.026	2.0
484.0881	26.00	-1.84	33095.922	4.0	53747.547	3.0
484.0908	26.01	-4.57	63876.380	5.5	84527.890	4.5
484.0939	25.02	-2.28	195752.480	2.5	216603.860	2.5
484.0971	26.00	-3.20	37162.729	3.0	57813.970	3.0
484.1103	7.00	-3.63	93581.520	.5	114232.200	1.5
484.1112	24.00	-2.58	31352.420	1.0	52003.060	1.0
484.1185	18.01	-1.43	189934.550	.5	210584.880	1.5
484.1262	23.03	.15	237638.800	2.0	258288.800	1.0
484.1358	28.01	-.72	100475.820	3.5	121125.410	4.5
484.1370	26.02	-2.13	205732.370	3.0	226381.910	3.0
484.1385	26.00	-4.87	38175.332	3.0	58824.810	2.0
484.1406	22.00	-3.05	15108.121	3.0	35757.510	4.0
484.1450	40.00	-2.23	5162.081	0.0	25817.050	0.0
484.1464	7.00	-3.30	94830.860	2.5	115480.000	1.5
484.1489	18.02	-3.39	188517.320	1.0	209166.350	0.0
484.1558	25.02	-3.86	174464.070	4.5	195112.810	3.5
484.1562	7.00	-4.29	95475.280	.5	116124.000	.5
484.1562	7.00	-3.19	95475.280	.5	116124.000	1.5
484.1572	23.00	-5.05	10892.500	3.5	31541.180	3.5
484.1667	26.00	-3.33	26623.726	2.0	47271.999	1.0
484.1676	28.00	-2.48	29888.505	2.0	50536.742	1.0
484.1700	62.00	.55	3952.218	0.0	24606.121	0.0
484.1706	24.00	-2.36	31364.330	3.0	52012.440	2.0
484.1766	24.00	-2.60	31355.210	2.0	52003.060	1.0
484.1784	26.00	-2.64	33801.555	2.0	54449.330	1.0
484.1797	24.01	-4.98	67353.600	4.5	88001.320	5.5
484.1804	25.01	-4.42	86302.550	3.0	106950.240	3.0
484.1816	24.00	-1.81	39158.630	4.0	59806.270	5.0
484.1860	23.00	-4.07	20789.130	2.5	41436.580	3.5
484.1888	18.01	-2.82	188766.150	2.5	209413.480	1.5
484.1919	24.00	-2.78	31352.420	1.0	51999.620	0.0
484.1971	28.00	-1.42	33590.159	4.0	54237.136	4.0
484.2150	41.00	-.93	12259.943	0.0	32911.926	0.0
484.2172	25.01	-3.11	84268.060	1.0	104914.180	0.0
484.2199	26.00	-4.38	24574.655	4.0	45220.662	3.0
484.2289	18.02	-3.06	231627.300	1.0	252272.920	1.0
484.2290	29.00	-1.76	42264.541	0.0	62915.927	0.0
484.2341	24.00	-2.29	42025.600	3.0	62671.000	4.0
484.2395	25.01	-2.08	49882.150	4.0	70527.320	5.0
484.2430	45.00	-2.19	9114.300	0.0	29765.089	0.0
484.2480	92.00	-1.61	564.603	0.0	21215.179	0.0
484.2482	17.01	-1.77	141010.000	2.0	161654.800	1.0
484.2505	23.01	-2.00	44159.430	2.0	64804.130	2.0
484.2571	22.00	-2.24	18462.830	0.0	39107.250	1.0
484.2576	26.02	-2.70	205737.510	2.0	226381.910	3.0
484.2623	26.01	-3.46	64040.960	3.5	84685.160	3.5
484.2632	28.01	.07	99559.330	2.5	120203.490	2.5
484.2674	18.02	-4.17	225402.590	3.0	246046.570	4.0
484.2693	8.01	-4.26	255465.200	3.5	276109.100	4.5
484.2694	26.00	-2.56	34039.495	4.0	54683.390	4.0
484.2771	26.00	-1.86	33095.922	4.0	53739.488	5.0
484.2871	8.02	-3.54	306584.800	2.0	327227.940	1.0
484.2892	25.02	-2.78	172855.020	4.5	193498.070	3.5
484.2925	22.00	-4.03	22081.198	2.0	42724.110	2.0
484.3035	23.00	-3.94	21603.170	4.5	42245.610	3.5
484.3090	7.00	-4.47	94881.790	3.5	115524.000	2.5
484.3090	7.00	-2.27	94881.790	3.5	115524.000	3.5
484.3092	24.00	-1.56	33762.740	6.0	54404.940	7.0
484.3141	26.00	-1.95	27394.676	3.0	48036.667	2.0
484.3152	28.00	-3.15	13521.352	2.0	34163.294	2.0
484.3186	25.00	-3.65	31076.420	1.5	51718.220	1.5
484.3217	28.00	-.67	33112.368	3.0	53754.036	2.0
484.3256	8.01	-.16	255622.400	.5	276263.900	.5
484.3256	8.01	.14	255622.400	.5	276263.900	1.5
484.3296	25.01	-3.81	65567.070	2.0	86208.400	1.0
484.3310	26.01	-3.66	44915.070	3.5	65556.340	4.5
484.3394	26.00	-3.92	28819.966	5.0	49460.876	5.0
484.3412	22.00	-4.56	27418.015	2.0	48058.850	1.0
484.3455	56.01	-.71	50011.220	0.0	70657.639	0.0
484.3460	27.00	-.90	26450.020	2.5	47090.650	2.5
484.3505	28.00	-1.05	33610.916	2.0	54251.353	3.0
484.3597	18.01	-1.58	183090.810	1.5	203730.860	1.5
484.3643	28.01	-.26	99559.330	2.5	120199.180	1.5
484.3655	23.00	-2.02	20789.130	2.5	41428.930	2.5
484.3830	74.00	-1.67	3306.958	0.0	23951.778	0.0
484.3870	76.00	-2.44	8630.355	0.0	29275.005	0.0
484.3925	25.00	-3.54	45130.160	4.5	65768.810	4.5
484.3990	45.00	.34	26939.612	0.0	47583.750	0.0
484.4016	26.00	-1.84	28604.610	2.0	49242.872	3.0
484.4024	22.00	-.52	18061.540	1.0	38699.767	2.0
484.4056	9.00	-1.89	117164.006	2.5	137802.100	2.5
484.4061	26.00	-3.08	28604.610	2.0	49242.680	2.0
484.4068	28.01	-.34	114874.880	2.5	135512.920	2.5
484.4170	90.01	-1.64	11050.080	0.0	31693.451	0.0
484.4179	22.00	-2.80	21469.494	3.0	42107.060	4.0
484.4210	62.01	-1.54	2177.753	0.0	22820.954	0.0
484.4303	23.01	-6.60	14556.090	4.0	35193.130	5.0
484.4307	25.00	-2.63	31001.150	2.5	51638.170	2.5
484.4312	25.00	-1.75	41789.480	4.5	62426.480	3.5
484.4336	24.01	-4.19	69954.200	2.5	90591.100	2.5
484.4343	24.00	-3.89	35572.940	2.0	56209.810	3.0
484.4462	24.00	-1.97	42025.600	3.0	62661.960	3.0
484.4474	23.01	-3.23	52657.510	4.0	73293.820	5.0
484.4483	26.02	-4.75	114339.950	4.0	134976.220	3.0
484.4560	44.00	-1.32	8952.985	0.0	29594.694	0.0
484.4573	29.01	-4.32	116576.810	0.0	137212.700	1.0
484.4636	23.00	-2.98	17116.920	3.5	37752.540	2.5
484.4645	25.00	-3.69	45013.550	2.5	65649.130	2.5
484.4695	28.00	-4.60	35639.148	3.0	56274.516	2.0
484.4725	27.00	-4.26	25739.930	2.5	46375.170	1.5
484.4781	14.01	-1.34	103861.000	.5	124496.000	1.5
484.4824	23.01	-2.75	52391.940	3.0	73026.760	2.0
484.4841	22.00	-1.23	20209.444	2.0	40844.190	3.0
484.4841	22.00	-4.48	20209.444	2.0	40844.190	1.0
484.4899	18.02	-4.31	188517.320	1.0	209151.820	2.0
484.5004	18.02	-4.38	225402.590	3.0	246036.640	3.0
484.5087	23.03	-4.41	263593.000	2.0	284226.700	3.0
484.5126	10.01	-1.84	292546.700	.5	313180.230	1.5
484.5137	22.00	-4.45	18037.225	4.0	38670.710	4.0
484.5166	28.00	-1.62	29832.810	3.0	50466.172	4.0
484.5170	41.00	-.91	12421.258	0.0	33060.369	0.0
484.5170	42.00	-.33	27584.872	0.0	48223.983	0.0
484.5204	23.03	-.42	236148.600	1.0	256781.800	1.0
484.5279	9.00	-1.72	117308.558	1.5	137941.440	2.5
484.5289	10.01	-2.81	302890.570	2.5	323523.410	2.5
484.5312	26.02	-.84	185061.350	1.0	205694.090	1.0
484.5369	26.01	-2.73	66078.340	2.5	86710.840	1.5
484.5380	77.00	-2.13	11775.998	0.0	32414.214	0.0
484.5399	22.00	-4.34	7255.369	2.0	27887.740	3.0
484.5458	23.00	-4.08	25111.500	4.5	45743.620	3.5
484.5488	24.01	-3.66	67369.330	5.5	88001.320	5.5
484.5512	28.01	-3.18	100609.010	2.5	121240.900	3.5
484.5514	7.00	-3.83	95532.120	2.5	116164.000	1.5
484.5514	7.00	-2.77	95532.120	2.5	116164.000	2.5
484.5514	7.00	-2.16	95532.120	2.5	116164.000	3.5
484.5552	7.00	-4.07	95475.280	.5	116107.000	.5
484.5552	7.00	-4.17	95475.280	.5	116107.000	1.5
484.5580	28.02	-3.95	121802.800	3.0	142434.400	2.0
484.5587	24.01	-3.89	68843.510	3.5	89475.080	2.5
484.5648	26.00	-2.15	29320.050	1.0	49951.360	0.0
484.5662	26.00	-3.19	26351.049	5.0	46982.302	6.0
484.5726	10.00	-4.11	150858.508	2.0	171489.485	1.0
484.5773	26.01	-4.51	64832.000	4.5	85462.780	3.5
484.5838	18.01	-3.24	185624.730	3.5	206255.230	2.5
484.5871	25.00	-.36	35725.850	2.5	56356.210	3.5
484.5876	7.00	-3.59	95493.660	1.5	116124.000	.5
484.5876	7.00	-3.68	95493.660	1.5	116124.000	1.5
484.5876	7.00	-3.36	95493.660	1.5	116124.000	2.5
484.6235	28.01	-4.72	114970.190	.5	135599.000	.5
484.6258	9.00	-2.51	117164.006	2.5	137792.720	2.5
484.6266	24.00	-1.26	28682.180	2.0	49310.860	3.0
484.6315	24.00	-1.40	27816.880	5.0	48445.350	6.0
484.6350	40.00	-2.25	5000.766	0.0	25634.851	0.0
484.6360	26.02	-3.94	179876.710	4.0	200504.990	3.0
484.6372	28.01	-1.96	114836.630	3.5	135464.860	3.5
484.6412	24.00	-2.11	34190.490	2.0	54818.550	2.0
484.6430	24.00	-1.44	21810.840	1.0	42438.820	2.0
484.6430	24.00	-1.44	25106.340	3.0	45734.320	2.0
484.6450	73.00	.02	24842.516	0.0	45476.176	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
484.6459	25.01	-3.24	49889.860	3.0	70517.720	3.0
484.6463	26.01	-5.12	21812.040	1.5	42439.880	.5
484.6548	7.00	-2.36	93581.520	.5	114209.000	.5
484.6553	24.01	-4.84	66727.160	2.5	87354.620	1.5
484.6570	58.01	-1.15	7662.464	0.0	28295.613	0.0
484.6573	22.00	-4.57	27480.047	3.0	48107.420	2.0
484.6607	23.00	-2.35	13801.530	1.5	34428.760	1.5
484.6804	18.02	-2.59	231627.300	1.0	252253.690	2.0
484.6816	28.01	-2.13	99418.610	3.5	120044.950	4.5
484.7027	25.02	-1.95	194894.780	1.5	215520.220	2.5
484.7034	24.00	-3.37	24940.610	2.0	45566.020	3.0
484.7039	25.01	-4.21	54938.100	1.0	75563.490	0.0
484.7109	25.02	-3.17	173920.690	1.5	194545.780	.5
484.7116	9.00	-1.20	117164.006	2.5	137789.070	3.5
484.7149	28.01	-1.00	114836.630	3.5	135461.550	2.5
484.7154	17.01	-1.35	141010.000	2.0	161634.900	2.0
484.7208	24.00	-1.23	25038.610	5.0	45663.280	5.0
484.7208	56.01	-1.54	49390.050	0.0	70020.483	0.0
484.7225	10.01	-2.40	302890.570	2.5	323515.170	3.5
484.7274	22.00	-2.24	18482.860	1.0	39107.250	1.0
484.7274	24.01	-4.12	45730.740	2.5	66355.130	1.5
484.7295	26.02	-4.59	114351.920	3.0	134976.220	3.0
484.7300	23.00	-4.16	8578.520	2.5	29202.800	1.5
484.7311	20.00	-1.93	23652.304	1.0	44276.538	0.0
484.7321	22.00	-2.09	18525.070	2.0	39149.260	2.0
484.7323	28.01	-5.00	95332.530	2.5	115956.710	2.5
484.7328	29.01	-3.33	114511.440	1.0	135135.600	1.0
484.7342	25.02	-4.84	194849.100	1.5	215473.200	1.5
484.7419	28.00	-3.32	35639.148	3.0	56262.920	3.0
484.7438	9.00	-3.33	117164.006	2.5	137787.700	1.5
484.7535	22.00	-1.29	26657.409	4.0	47280.690	5.0
484.7563	26.01	-4.91	64087.500	2.5	84710.660	3.5
484.7575	25.01	-4.05	65567.070	2.0	86190.180	2.0
484.7577	26.01	-3.90	64425.460	2.5	85048.560	1.5
484.7608	26.01	-5.53	21711.890	3.5	42334.860	2.5
484.7618	10.01	-3.34	302890.570	2.5	323513.500	3.5
484.7660	92.01	-2.12	2258.411	0.0	22886.920	0.0
484.7669	25.01	-2.07	43850.420	2.0	64473.130	3.0
484.7681	21.00	-.22	17947.980	1.5	38570.640	.5
484.7706	26.00	-1.03	28604.610	2.0	49227.160	3.0
484.7730	18.02	-2.22	211004.850	2.0	231627.300	1.0
484.7760	62.01	-1.53	5242.739	0.0	25870.823	0.0
484.7803	28.01	-1.42	91800.050	4.5	112422.190	5.5
484.7805	23.02	-2.82	161027.320	4.5	181649.450	3.5
484.7813	18.01	-.22	135085.920	1.5	155708.020	.5
484.7902	7.01	-1.75	223731.590	3.0	244353.310	3.0
484.7939	25.02	-1.96	172613.870	2.5	193235.430	2.5
484.7974	23.01	-4.09	52657.510	4.0	73278.920	4.0
484.7982	23.02	-.87	141714.500	2.5	162335.880	3.5
484.8003	18.01	-1.77	174409.830	1.5	195031.120	2.5
484.8052	23.00	-4.40	11100.650	4.5	31721.730	4.5
484.8071	24.00	-.95	42025.600	3.0	62646.600	2.0
484.8073	14.00	-2.74	39760.285	1.0	60381.278	1.0
484.8109	18.01	-1.75	185624.730	3.5	206245.570	3.5
484.8158	25.00	-3.47	38669.600	3.5	59290.230	3.5
484.8163	24.00	-3.97	27597.220	3.0	48217.830	2.0
484.8205	24.01	-1.40	31168.780	3.5	51789.210	3.5
484.8206	26.00	-4.78	27543.000	1.0	48163.427	2.0
484.8214	22.00	-2.07	18593.990	3.0	39214.380	3.0
484.8320	62.00	-.22	2258.411	0.0	22884.112	0.0
484.8360	90.00	-1.83	3629.588	0.0	24255.119	0.0
484.8370	41.00	-.98	9436.930	0.0	30062.419	0.0
484.8409	26.02	-4.17	179904.560	6.0	200524.120	5.0
484.8422	22.00	-1.51	17540.205	3.0	38159.710	3.0
484.8440	22.00	-.34	18145.400	2.0	38764.832	3.0
484.8474	22.00	-4.95	25388.334	4.0	46007.620	4.0
484.8591	28.01	-2.77	100609.010	2.5	121227.800	2.5
484.8682	23.03	-1.36	263608.300	3.0	284226.700	3.0
484.8687	28.01	-.95	114874.880	2.5	135493.260	1.5
484.8809	23.00	-1.61	13810.900	.5	34428.760	1.5
484.8854	24.01	-3.34	70107.830	4.5	90725.500	3.5
484.8877	23.01	-5.47	16533.000	5.0	37150.570	4.0
484.8887	26.00	-3.27	18378.187	2.0	38995.717	1.0
484.8901	24.01	-2.29	68305.730	1.5	88923.200	2.5
484.9176	22.01	-2.98	9118.150	4.5	29734.450	3.5
484.9261	23.00	-1.58	20812.990	1.5	41428.930	2.5
484.9383	27.00	-2.94	33173.360	3.5	53788.780	4.5
484.9414	25.01	-3.90	49882.150	4.0	70497.440	4.0
484.9528	10.00	-2.60	150858.508	2.0	171473.313	2.0
484.9600	24.01	-4.86	67334.200	3.5	87948.700	4.5
484.9640	63.00	-.06	15808.874	0.0	36428.961	0.0
484.9670	24.00	-2.07	34190.490	2.0	54804.690	1.0
484.9676	26.00	-3.35	28819.966	5.0	49434.142	6.0
484.9865	19.00	-2.92	12985.170	.5	33598.540	.5
484.9872	7.00	-3.37	95493.660	1.5	116107.000	.5
484.9872	7.00	-4.66	95493.660	1.5	116107.000	1.5
485.0202	25.00	-4.13	34845.260	.5	55457.200	.5
485.0221	24.00	-2.57	27176.220	1.0	47788.080	0.0
485.0305	30.02	-1.16	216895.300	1.0	237506.800	1.0
485.0310	7.00	-2.14	93581.520	.5	114193.000	1.5
485.0376	12.02	.11	562136.100	2.0	582747.300	2.0
485.0376	12.02	.11	562136.100	2.0	582747.300	2.0
485.0388	24.00	-1.89	42079.810	4.0	62690.960	5.0
485.0418	18.01	-2.83	188766.150	2.5	209377.170	2.5
485.0444	28.01	-4.18	100845.410	.5	121456.320	1.5
485.0543	14.01	-1.09	103885.510	1.5	124496.000	2.5
485.0543	14.01	-2.04	103885.510	1.5	124496.000	1.5
485.0580	57.01	-2.24	6129.972	0.0	26746.063	0.0
485.0610	72.00	-2.10	10404.820	0.0	31020.784	0.0
485.0687	24.00	-3.62	27176.220	1.0	47786.100	2.0
485.0706	25.00	-2.64	42143.570	1.5	62753.370	2.5
485.0725	18.02	-3.25	188517.320	1.0	209127.040	1.0
485.0742	28.00	-2.34	34163.294	2.0	54772.940	3.0
485.0820	57.00	-1.37	1048.548	0.0	21663.619	0.0
485.0821	22.00	-4.22	17215.440	5.0	37824.748	4.0
485.0851	56.01	-1.69	50011.220	0.0	70626.160	0.0
485.0870	24.00	-3.13	27163.200	0.0	47772.300	1.0
485.0908	25.02	-1.73	195948.440	3.5	216557.380	3.5
485.0927	22.00	-3.70	25635.740	1.0	46244.600	2.0
485.0953	16.01	-.58	143623.030	1.5	164231.780	2.5
485.0957	25.02	-4.01	195308.790	4.5	215917.520	4.5
485.1024	22.00	-3.93	27498.975	3.0	48107.420	2.0
485.1035	17.01	-3.49	140740.000	1.0	161348.400	1.0
485.1047	27.00	-3.08	33674.380	2.5	54282.730	2.5
485.1087	12.01	-2.22	93799.700	3.5	114407.880	3.5
485.1087	12.01	-.68	93799.700	3.5	114407.880	4.5
485.1087	12.01	-.79	93799.700	2.5	114407.880	3.5
485.1129	15.04	-1.25	455573.000	.5	476181.000	1.5
485.1129	15.04	-1.55	455573.000	.5	476181.000	.5
485.1160	70.01	-1.78	24197.256	0.0	44810.882	0.0
485.1167	28.01	-.60	114836.630	3.5	135444.470	3.5
485.1219	22.00	-1.96	20062.980	1.0	40670.600	2.0
485.1228	25.01	-3.30	49889.860	3.0	70497.440	4.0
485.1249	29.01	-1.32	115662.770	4.0	136270.260	4.0
485.1287	27.00	-3.63	25269.250	3.5	45876.580	2.5
485.1320	28.01	-4.29	99559.330	2.5	120166.520	1.5
485.1320	22.00	-2.56	17369.590	1.0	37976.780	2.0
485.1334	22.00	-2.20	18695.230	4.0	39302.360	4.0
485.1360	40.00	-1.20	5000.766	0.0	25613.543	0.0
485.1468	28.01	-3.89	114052.040	3.5	134658.600	4.5
485.1471	24.00	-1.42	27703.840	4.0	48310.390	5.0
485.1499	23.00	-1.09	0.000	1.5	20606.430	.5
485.1621	25.01	-2.87	43850.420	2.0	64456.330	2.0
485.1675	28.01	-2.31	106133.140	1.5	126738.820	1.5
485.1706	25.01	-4.16	82099.820	4.0	102705.370	3.0
485.1864	24.00	-2.87	31987.060	4.0	52591.940	5.0
485.1894	28.01	-4.10	116275.810	3.5	136880.560	4.5
485.1933	20.02	-0.00	340748.720	2.0	361353.310	1.0
485.2022	21.00	-3.99	15672.550	1.5	36276.760	1.5
485.2113	25.00	-4.25	45013.550	2.5	65617.370	3.5
485.2120	25.01	-4.07	55115.800	2.0	75719.590	1.0
485.2158	22.00	-3.30	25926.820	4.0	46530.450	4.0
485.2170	78.00	-2.00	10888.765	0.0	31498.101	0.0
485.2184	25.01	-4.20	82099.820	4.0	102703.340	4.0
485.2269	23.01	-2.64	44200.970	1.0	64804.130	2.0
485.2339	20.02	-1.09	323655.060	2.0	344257.920	1.0
485.2396	28.01	-4.13	71770.830	2.5	92373.450	2.5
485.2547	28.00	-1.05	28569.210	2.0	49171.187	1.0
485.2613	18.00	-4.68	105462.804	3.0	126064.500	2.0
485.2690	39.00	-.31	10969.423	0.0	31576.550	0.0
485.2706	17.00	-2.19	74225.846	1.5	94827.150	2.5
485.2719	21.00	-.35	18000.250	2.5	38601.500	1.5
485.2728	7.00	-2.24	94881.790	3.5	115483.000	2.5
485.2740	28.01	-1.73	100592.980	3.5	121194.140	2.5
485.2754	8.01	-3.39	255465.200	3.5	276066.300	2.5
485.2800	22.00	-1.65	25643.695	3.0	46244.600	2.0
485.2843	22.00	-3.66	15156.787	4.0	35757.510	4.0
485.2862	24.00	-4.76	33040.100	2.0	53640.740	3.0
485.2928	23.00	-3.06	20789.130	2.5	41389.490	1.5
485.3070	28.01	-.99	100490.950	1.5	121090.710	.5
485.3169	28.01	-2.08	100592.980	3.5	121192.320	3.5
485.3272	28.00	-2.45	31441.665	2.0	52040.568	2.0
485.3275	18.01	-3.84	192333.430	.5	212932.320	1.5
485.3330	60.00	-.75	1048.548	0.0	21652.958	0.0
485.3336	28.01	.82	114836.630	3.5	135435.260	4.5
485.3336	27.00	-3.29	30443.630	1.5	51042.260	2.5
485.3338	9.02	-1.07	443625.310	2.5	464223.930	1.5
485.3564	26.01	-4.50	64087.500	2.5	84685.160	3.5
485.3645	23.01	-4.84	52082.880	4.0	72680.200	5.0
485.3775	28.00	-1.47	28578.046	3.0	49174.811	4.0
485.3917	22.00	-1.43	21588.496	4.0	42184.660	4.0
485.3937	24.00	-3.30	27176.220	1.0	47772.300	1.0
485.3967	25.02	-1.07	195315.780	2.5	215911.730	1.5
485.4090	74.00	-1.75	13227.833	0.0	33829.017	0.0
485.4111	25.00	-3.45	30419.610	2.5	51014.950	3.5
485.4168	24.01	-4.59	67353.600	4.5	87948.700	4.5
485.4177	26.00	-3.58	37046.000	4.0	57641.060	3.0
485.4250	39.00	-.33	15082.956	0.0	35683.461	0.0
485.4360	62.01	-1.87	2984.328	0.0	23584.366	0.0
485.4367	18.00	-3.56	105617.315	2.0	126211.570	1.0
485.4379	22.00	-3.90	27614.667	4.0	48208.870	3.0
485.4560	44.00	.10	26133.037	0.0	46732.226	0.0
485.4599	25.00	-3.17	31124.950	.5	51718.220	1.5
485.4675	25.00	-3.06	38934.940	2.5	59527.890	1.5
485.4736	22.00	-.75	18061.540	1.0	38654.230	1.0
485.4870	39.01	-.91	7904.437	0.0	28502.311	0.0
485.4872	26.00	-3.26	33412.706	3.0	54004.820	3.0
485.4927	7.00	-3.15	95532.120	2.5	116124.000	1.5
485.4927	7.00	-2.98	95532.120	2.5	116124.000	2.5
485.4936	28.01	-4.60	115956.710	2.5	136548.550	2.5
485.4950	57.00	-.85	9114.300	0.0	29711.834	0.0
485.4962	29.01	.20	115569.200	5.0	136160.930	5.0
485.5040	38.00	-.53	18067.285	0.0	38664.438	0.0
485.5052	24.00	-4.56	27223.050	2.0	47814.400	3.0
485.5064	23.03	-.32	236148.600	1.0	256739.900	0.0
485.5090	24.00	-1.41	42079.810	4.0	62671.000	4.0
485.5135	28.00	-1.74	30163.140	2.0	50754.137	2.0
485.5149	24.00	-2.52	21847.880	2.0	42438.820	2.0
485.5215	24.01	-4.97	68583.440	2.5	89174.100	3.5
485.5224	27.00	-5.03	4142.660	3.5	24733.280	2.5
485.5271	28.01	-4.70	115956.710	2.5	136547.130	3.5
485.5310	60.00	-1.12	1048.548	0.0	21644.555	0.0
485.5342	23.00	-4.51	21963.500	3.5	42553.620	4.5
485.5358	28.01	-3.60	114052.040	3.5	134662.090	3.5
485.5375	28.01	-2.17	114874.880	2.5	135464.860	3.5
485.5400	18.00	-4.97	104102.144	1.0	124692.020	2.0
485.5406	28.00	-.44	28569.210	2.0	49159.060	2.0
485.5446	26.01	-5.22	23031.300	1.5	43620.980	1.5
485.5538	26.01	-4.33	21812.040	1.5	42401.330	1.5
485.5618	27.00	-1.75	31871.150	3.5	52460.100	2.5
485.5681	26.00	-1.92	27166.804	4.0	47755.485	3.0
485.5689	24.00	-4.31	24286.540	1.0	44875.190	2.0
485.5766	25.00	-4.14	45060.810	3.5	65649.130	2.5
485.5880	25.00	-1.93	38669.600	3.5	59257.440	4.5
485.5934	24.01	-3.57	68737.990	5.5	89325.600	4.5
485.5946	28.01	-.68	100592.980	3.5	121180.540	4.5
485.5946	22.01	-1.49	24961.340	1.5	45548.900	1.5
485.6012	22.00	.65	18192.577	6.0	38779.856	7.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
485.6023	24.01	-3.60	45669.540	1.5	66256.770	.5
485.6091	19.00	-2.67	12985.170	.5	33572.110	1.5
485.6156	28.01	.02	114874.880	2.5	135461.550	2.5
485.6158	18.01	-2.71	174409.830	1.5	194996.490	1.5
485.6163	24.01	-2.29	31083.110	1.5	51669.750	2.5
485.6257	25.00	-.66	35769.970	3.5	56356.210	3.5
485.6266	23.03	-1.65	264113.100	4.0	284699.300	5.0
485.6271	25.01	-4.84	82117.160	5.0	102703.340	4.0
485.6332	26.02	-4.94	114351.920	3.0	134937.840	2.0
485.6356	23.02	-1.94	161240.020	5.5	181825.840	4.5
485.6362	22.00	-4.93	25227.217	3.0	45813.010	2.0
485.6413	28.01	-.73	100592.980	3.5	121178.560	3.5
485.6415	28.01	-3.84	115956.710	2.5	136542.280	3.5
485.6643	26.00	-1.99	33801.555	2.0	54386.160	1.0
485.6660	24.00	-4.87	27703.840	4.0	48288.370	4.0
485.6691	26.01	-3.56	64286.440	3.5	84870.840	2.5
485.6698	27.00	-2.08	33674.380	2.5	54258.750	2.5
485.6700	39.00	-.70	15405.586	0.0	35995.699	0.0
485.6719	21.01	-1.78	39344.900	2.0	59929.180	2.0
485.6726	28.01	-2.18	99418.610	3.5	120002.860	3.5
485.6968	22.00	-1.57	21469.494	3.0	42052.720	3.0
485.7043	23.00	-1.63	17181.980	4.5	37764.890	5.5
485.7092	17.01	-.41	149952.400	1.0	170535.100	2.0
485.7146	22.00	-2.63	25107.417	2.0	45689.890	3.0
485.7215	24.00	-4.45	35572.940	2.0	56155.120	2.0
485.7215	22.00	-3.09	18525.070	2.0	39107.250	1.0
485.7222	24.00	-1.87	42079.810	4.0	62661.960	3.0
485.7269	25.00	-2.43	41932.640	3.5	62514.590	2.5
485.7286	24.00	-2.35	21856.940	3.0	42438.820	2.0
485.7380	7.00	-2.71	93581.520	.5	114163.000	1.5
485.7387	28.00	-.80	30163.140	2.0	50744.593	1.0
485.7490	28.00	-2.53	28578.046	3.0	49159.060	2.0
485.7508	24.01	-2.90	53923.570	4.5	74504.510	4.5
485.7562	23.00	-3.74	8715.720	3.5	29296.430	2.5
485.7607	24.00	-2.88	32097.360	6.0	52677.880	7.0
485.7628	18.01	-2.39	194861.270	2.5	215441.700	3.5
485.7656	26.01	-4.53	79243.730	1.5	99824.040	2.5
485.7663	23.01	-7.34	26839.820	3.0	47420.100	4.0
485.7666	25.01	-2.55	82099.820	4.0	102680.090	5.0
485.7729	24.00	-4.79	33060.740	3.0	53640.740	3.0
485.7918	27.01	-4.65	65016.830	2.0	85596.030	2.0
485.7949	27.00	-4.94	4690.180	2.5	25269.250	3.5
485.7956	25.00	-1.49	42053.730	2.5	62632.770	3.5
485.7961	29.01	-4.49	110365.980	2.0	130945.000	1.0
485.8040	22.00	-4.22	27750.124	5.0	48328.810	4.0
485.8070	9.02	-.82	443913.330	4.5	464491.890	3.5
485.8080	92.01	-1.78	4516.821	0.0	25101.085	0.0
485.8088	7.00	-2.60	93581.520	.5	114160.000	1.5
485.8100	18.01	-4.32	189934.550	.5	210512.980	1.5
485.8102	25.02	-3.16	194894.780	1.5	215473.200	1.5
485.8103	9.02	-3.25	469561.580	1.5	490140.000	1.5
485.8103	9.02	-2.26	469561.580	1.5	490140.000	2.5
485.8131	8.01	-2.58	255301.300	2.5	275879.600	2.5
485.8131	8.01	-4.00	255301.300	2.5	275879.600	3.5
485.8140	23.01	-8.47	16340.970	3.0	36919.230	3.0
485.8220	42.01	.05	28068.817	0.0	48652.488	0.0
485.8229	26.00	-3.03	33801.555	2.0	54379.440	3.0
485.8253	26.00	-3.15	34547.192	2.0	55124.974	3.0
485.8294	23.00	-5.24	14514.750	1.5	35092.360	1.5
485.8374	26.02	-4.68	166421.330	4.0	186998.600	4.0
485.8410	72.00	-2.31	6533.259	0.0	27116.125	0.0
485.8556	23.00	-1.33	20812.990	1.5	41389.490	1.5
485.8610	24.00	-3.84	25038.610	5.0	45614.880	4.0
485.8676	9.02	-2.52	469564.010	.5	490140.000	1.5
485.8720	58.01	-1.11	9275.615	0.0	29857.167	0.0
485.8798	22.00	-1.31	26564.385	3.0	47139.860	4.0
485.8875	6.00	-4.05	68856.330	1.0	89431.480	2.0
485.8939	7.00	-4.13	95532.120	2.5	116107.000	1.5
485.8948	28.01	-3.02	100475.820	3.5	121050.660	2.5
485.9020	60.01	-1.45	2500.383	0.0	23080.665	0.0
485.9028	30.02	-.80	214878.000	3.0	235452.500	2.0
485.9040	59.01	-2.33	3387.616	0.0	23967.813	0.0
485.9107	26.00	-1.36	33801.555	2.0	54375.719	2.0
485.9137	24.00	-4.07	36558.550	2.0	57132.590	1.0
485.9151	21.00	-3.99	15756.510	2.5	36330.490	2.5
485.9165	20.02	.28	340580.150	3.0	361154.070	2.0
485.9215	26.02	-3.56	202200.510	3.0	222774.220	2.0
485.9217	25.00	-1.64	37586.030	1.5	58159.730	2.5
485.9220	64.00	-.20	10808.108	0.0	31387.543	0.0
485.9240	72.00	-.81	14437.696	0.0	35017.046	0.0
485.9245	24.00	-3.62	24093.160	2.0	44666.740	1.0
485.9258	7.01	-1.37	202170.630	1.0	222744.160	1.0
485.9320	2.01	.01	411477.918	0.0	432056.929	0.0
485.9368	28.01	-2.96	100619.260	4.5	121192.320	3.5
485.9387	25.00	-3.63	27201.540	2.5	47774.520	3.5
485.9409	9.01	-.16	215069.590	2.0	235642.480	1.0
485.9501	17.02	-2.17	196137.900	2.5	216710.400	3.5
485.9547	12.03	-4.82	582571.000	2.5	603143.300	3.5
485.9550	62.01	-2.04	2661.698	0.0	23239.735	0.0
485.9595	30.02	-2.68	282254.900	1.0	302827.000	2.0
485.9605	10.00	-3.27	150917.431	0.0	171489.485	1.0
485.9680	92.01	-2.41	0.000	0.0	20577.487	0.0
485.9748	26.00	-.93	23192.486	2.0	43763.938	1.0
485.9796	24.00	-3.24	24303.940	3.0	44875.190	2.0
485.9840	39.00	-.41	10888.765	0.0	31465.574	0.0
485.9900	25.02	-2.73	195592.090	1.5	216162.900	1.5
485.9973	28.01	-.40	114942.420	1.5	135512.920	2.5
486.0119	24.00	-3.47	23498.840	4.0	44068.720	3.0
486.0157	24.01	-2.33	31219.490	4.5	51789.210	3.5
486.0166	7.01	-1.82	166521.690	1.0	187091.370	2.0
486.0188	28.01	.09	114874.880	2.5	135444.470	3.5
486.0296	28.00	-2.44	34163.294	2.0	54732.425	2.0
486.0351	30.02	-1.82	217073.800	2.0	237642.700	3.0
486.0360	24.00	-3.27	20517.400	2.0	41086.260	3.0
486.0379	9.02	-3.20	443753.060	2.5	464321.840	2.5
486.0382	27.00	-3.48	33945.900	2.5	54514.670	3.5
486.0516	13.01	-3.95	125706.200	1.0	146274.400	2.0
486.0611	26.01	-4.88	65556.340	4.5	86124.140	4.5
486.0611	7.01	-1.16	223785.510	4.0	244353.310	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
486.0710	27.01	-4.29	65028.650	1.0	85596.030	2.0
486.0910	57.01	-1.92	1935.780	0.0	22508.060	0.0
486.0966	26.00	-2.47	27394.676	3.0	47960.973	4.0
486.0968	24.01	-2.47	67859.910	.5	88426.200	.5
486.1020	92.01	-1.62	5323.396	0.0	25895.210	0.0
486.1032	28.01	-3.34	113407.310	2.5	133973.330	2.5
486.1131	24.01	-4.64	68760.000	3.5	89325.600	4.5
486.1147	26.02	-4.17	202200.510	3.0	222766.040	3.0
486.1157	23.00	-3.57	23353.090	3.5	43918.580	2.5
486.1159	18.01	-3.05	198594.920	3.5	219160.400	2.5
486.1164	26.02	-3.02	202200.510	3.0	222765.970	4.0
486.1192	24.00	-1.85	20520.920	3.0	41086.260	3.0
486.1223	23.01	-3.89	52657.510	4.0	73222.720	4.0
486.1344	24.00	-3.39	35884.400	5.0	56449.100	6.0
486.1360	26.00	-1.25	37409.530	1.0	57974.160	2.0
486.1363	28.01	-4.64	113408.710	1.5	133973.330	2.5
486.1396	9.02	-3.92	443927.410	3.5	464491.890	3.5
486.1500	28.01	.06	114836.630	3.5	135400.670	3.5
486.1542	29.01	-1.15	115569.200	5.0	136133.060	4.0
486.1663	23.01	-3.40	32040.760	2.0	52604.110	1.0
486.1686	24.00	-4.77	32097.360	6.0	52660.610	6.0
486.1734	24.00	-3.43	27223.050	2.0	47786.100	2.0
486.1762	25.01	-2.50	82117.160	5.0	102680.090	5.0
486.1780	64.00	-.15	11211.395	0.0	31779.993	0.0
486.1847	24.00	-1.09	20523.690	4.0	41086.260	3.0
486.1870	44.00	-1.29	10566.135	0.0	31134.353	0.0
486.1902	10.01	-2.99	302961.070	1.5	323523.410	2.5
486.1911	17.01	-.81	149952.400	1.0	170514.700	1.0
486.2013	25.02	-4.10	174332.910	1.5	194894.780	1.5
486.2041	25.00	-3.02	31076.420	1.5	51638.170	2.5
486.2086	27.00	-.85	32781.710	2.5	53343.270	1.5
486.2152	28.01	-1.35	100619.260	4.5	121180.540	4.5
486.2467	25.02	-3.09	195315.780	2.5	215875.730	2.5
486.2521	26.00	-2.14	33507.102	3.0	54066.821	2.0
486.2521	23.00	-4.25	25253.530	5.5	45813.250	4.5
486.2524	28.01	-3.40	100490.950	1.5	121050.660	2.5
486.2581	26.00	-2.46	33507.102	3.0	54066.570	4.0
486.2590	64.00	-.08	10485.478	0.0	31050.650	0.0
486.2621	28.01	-2.34	100619.260	4.5	121178.560	3.5
486.2623	23.00	-.98	20830.200	.5	41389.490	1.5
486.2677	23.01	-3.59	52391.940	3.0	72951.000	4.0
486.2706	18.01	-2.28	194883.000	3.5	215441.940	4.5
486.2718	20.02	-.55	343784.960	1.0	364343.850	1.0
486.2763	18.01	-3.82	194883.000	3.5	215441.700	3.5
486.2857	24.01	-4.73	69954.200	2.5	90512.500	1.5
486.3080	74.00	-.83	22342.133	0.0	42905.233	0.0
486.3089	18.01	-2.45	186074.350	2.5	206631.670	2.5
486.3170	90.01	-1.39	6613.917	0.0	27176.636	0.0
486.3188	27.00	-5.88	13795.520	2.5	34352.420	1.5
486.3264	18.01	-2.82	189040.870	1.5	209597.450	1.5
486.3269	25.00	-3.96	45060.810	3.5	65617.370	3.5
486.3270	72.00	-1.05	14357.039	0.0	34919.336	0.0
486.3444	27.00	-2.89	15774.040	1.5	36329.860	2.5
486.3472	24.01	-2.37	67870.500	1.5	88426.200	.5
486.3481	19.00	-2.62	13042.880	1.5	33598.540	.5
486.3486	25.00	-2.23	41230.300	3.5	61785.940	3.5
486.3548	24.00	-3.18	44246.700	4.0	64802.080	5.0
486.3560	28.01	-3.53	114052.040	3.5	134607.370	4.5
486.3574	22.00	-3.09	18593.990	3.0	39149.260	2.0
486.3623	18.01	-4.13	181594.050	2.5	202149.110	2.5
486.3633	28.01	-4.17	71770.830	2.5	92325.850	3.5
486.3640	26.00	-1.82	27666.334	1.0	48221.323	1.0
486.3652	29.01	-3.54	108014.660	3.0	128569.600	2.0
486.3659	27.00	-2.36	28470.510	1.5	49025.420	1.5
486.3661	24.01	-4.87	67393.800	3.5	87948.700	4.5
486.3732	17.02	-.75	196155.800	3.5	216710.400	3.5
486.3783	26.00	-3.63	24506.902	2.0	45061.287	3.0
486.3788	22.00	-.78	18145.400	2.0	38699.767	2.0
486.3832	28.01	-3.86	101246.160	.5	121800.340	1.5
486.3853	24.00	-1.78	33762.740	6.0	54316.830	6.0
486.3874	28.01	-3.77	100592.980	3.5	121146.980	2.5
486.3925	28.00	-4.64	30163.140	2.0	50716.927	1.0
486.3997	26.00	-3.71	26623.726	2.0	47177.210	1.0
486.4002	27.00	-1.42	33150.680	1.5	53704.140	2.5
486.4085	14.00	-4.51	59110.892	2.0	79664.000	1.0
486.4118	28.01	-2.52	101247.370	2.5	121800.340	1.5
486.4128	22.00	-1.54	17423.853	2.0	37976.780	2.0
486.4161	25.02	-3.07	172682.640	3.5	193235.430	2.5
486.4213	27.00	-3.01	34352.420	1.5	54904.990	2.5
486.4229	24.01	-4.20	67448.820	4.5	88001.320	5.5
486.4241	25.00	-4.06	27201.540	2.5	47753.990	2.5
486.4271	28.00	-3.17	30192.268	0.0	50744.593	1.0
486.4310	24.01	-1.66	31117.590	2.5	51669.750	2.5
486.4341	24.00	-2.74	23498.840	4.0	44050.870	4.0
486.4370	10.00	-2.99	150772.112	1.0	171324.017	1.0
486.4438	28.01	-3.82	100490.950	1.5	121042.570	1.5
486.4445	15.01	-.64	103340.010	2.0	123891.600	2.0
486.4450	28.01	-.47	100490.950	1.5	121042.520	1.5
486.4580	21.00	-4.04	16021.780	1.5	36572.800	2.5
486.4588	26.00	-3.76	34328.733	3.0	54879.720	2.0
486.4598	9.02	-3.58	443770.900	3.5	464321.840	2.5
486.4622	28.01	-.05	114942.420	1.5	135493.260	1.5
486.4658	25.02	-4.19	195112.810	3.5	215663.500	3.5
486.4734	23.00	-.91	137.380	2.5	20687.750	1.5
486.4743	28.01	-2.14	111120.540	1.5	131670.870	2.5
486.4802	21.00	-3.04	16022.720	2.5	36572.800	2.5
486.4826	23.00	-1.29	9544.540	.5	30094.520	1.5
486.4887	26.02	-2.92	202200.510	3.0	222750.230	3.0
486.4892	15.01	-4.81	110252.000	1.0	130801.700	1.0
486.4951	18.01	-1.24	186074.350	2.5	206623.800	3.5
486.4999	24.00	-3.26	27223.050	2.0	47772.300	1.0
486.5020	64.01	-.81	9275.615	0.0	29830.515	0.0
486.5181	7.00	-3.01	93581.520	.5	114130.000	.5
486.5233	24.01	-4.67	53566.220	3.5	74114.480	3.5
486.5240	59.01	-1.66	6371.944	0.0	26925.915	0.0
486.5245	25.00	-3.88	48168.010	4.5	68716.220	4.5
486.5278	24.00	-4.44	27703.840	4.0	48251.910	3.0
486.5360	71.01	-.49	38392.980	0.0	58946.444	0.0
486.5480	90.00	-.52	13227.833	0.0	33780.790	0.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
486.5489	24.00	-4.06	44393.100	6.0	64940.280	7.0
486.5506	9.00	-3.03	116040.883	1.5	136587.990	1.5
486.5555	11.02	-3.53	442710.500	1.5	463257.400	2.5
486.5572	28.01	-3.25	118294.170	3.5	138841.000	3.5
486.5600	76.00	.79	30407.885	0.0	50960.335	0.0
486.5607	22.01	-2.72	8997.690	3.5	29544.370	2.5
486.5674	25.00	-.67	41932.640	3.5	62479.040	4.5
486.5719	23.00	-3.13	23519.840	4.5	44066.050	3.5
486.5761	24.00	-3.82	24200.230	6.0	44746.260	6.0
486.5779	22.00	-2.52	20795.599	5.0	41341.553	5.0
486.5801	25.00	-1.82	38934.940	2.5	59480.800	2.5
486.5908	18.01	-.42	161048.640	1.5	181594.050	2.5
486.6060	40.00	-1.21	5807.341	0.0	26357.848	0.0
486.6088	22.00	-3.82	25699.950	2.0	46244.600	2.0
486.6100	29.00	-.49	46620.047	0.0	67170.385	0.0
486.6136	28.00	-3.02	30912.838	1.0	51457.285	0.0
486.6156	28.00	-2.66	35639.148	3.0	56183.510	4.0
486.6185	29.01	-3.86	108014.660	3.0	128558.900	3.0
486.6204	26.00	-4.90	33946.920	2.0	54491.080	3.0
486.6230	26.01	-4.70	65580.090	5.5	86124.140	4.5
486.6262	28.00	-.32	28542.113	5.0	49086.030	4.0
486.6270	29.01	-1.97	116375.470	3.0	136919.350	3.0
486.6345	9.00	-1.69	116040.883	1.5	136584.450	2.5
486.6353	23.00	-7.94	14548.830	2.5	35092.360	1.5
486.6408	17.01	-3.45	165362.100	0.0	185905.400	1.0
486.6474	20.02	-2.01	365363.880	1.0	385906.900	2.0
486.6600	28.01	-2.63	115785.060	1.5	136327.550	1.5
486.6638	28.01	-3.56	101258.010	1.5	121800.340	1.5
486.6740	60.00	-.53	0.000	0.0	20547.636	0.0
486.6758	26.00	-4.54	33695.378	5.0	54237.200	4.0
486.6763	30.02	-.07	217663.700	1.0	238205.500	1.0
486.6881	14.00	-2.03	39955.053	2.0	60496.358	2.0
486.7011	10.00	-2.75	150772.112	1.0	171312.870	0.0
486.7097	28.01	-3.35	100845.410	.5	121385.800	1.5
486.7104	21.00	-2.94	17012.980	2.5	37553.340	2.5
486.7189	8.01	-2.04	255301.300	2.5	275841.300	3.5
486.7211	28.01	-4.52	77736.790	4.5	98276.700	4.5
486.7533	26.00	-4.73	12968.552	2.0	33507.102	3.0
486.7554	18.01	-1.32	159393.310	1.5	179931.770	1.5
486.7620	63.00	-.09	13711.778	0.0	34255.699	0.0
486.7723	28.01	-3.90	95332.530	2.5	115870.280	2.5
486.7730	26.01	-5.96	21430.390	5.5	41968.110	5.5
486.7782	23.01	-4.18	14655.630	5.0	35193.130	5.0
486.7782	23.03	-.87	264161.800	5.0	284699.300	5.0
486.7836	22.00	-3.58	26657.409	4.0	47194.680	4.0
486.7840	60.01	-2.34	1613.150	0.0	22156.142	0.0
486.7848	24.00	-.98	42153.740	5.0	62690.960	5.0
486.7860	9.00	-3.10	115917.909	2.5	136455.080	1.5
486.7872	27.00	.27	25138.880	6.5	45676.000	5.5
486.7872	22.00	-3.38	15220.390	5.0	35757.510	4.0
486.7915	25.02	-2.97	174575.870	3.5	195112.810	3.5
486.7993	24.00	-4.41	35618.510	1.0	56155.120	2.0
486.8000	42.00	.10	20809.640	0.0	41351.957	0.0
486.8106	22.00	-.29	26910.705	6.0	47446.840	6.0
486.8148	22.00	-1.49	26494.322	2.0	47030.280	3.0
486.8240	24.00	-4.00	36552.130	3.0	57087.700	2.0
486.8264	22.00	.46	18037.225	4.0	38572.692	5.0
486.8306	28.01	-3.97	111120.540	1.5	131655.830	.5
486.8327	25.00	-4.06	38934.940	2.5	59470.140	3.5
486.8377	26.00	-4.64	12560.933	3.0	33095.922	4.0
486.8408	26.00	-4.95	37162.729	3.0	57697.590	4.0
486.8432	26.00	-3.53	38175.332	3.0	58710.090	3.0
486.8479	25.02	-3.35	174436.590	2.5	194971.150	2.5
486.8515	10.01	-4.61	307240.700	3.5	327775.110	3.5
486.8655	26.02	-3.36	202200.510	3.0	222734.330	4.0
486.8664	10.01	-3.08	307240.700	3.5	327774.480	4.5
486.8700	38.00	-.44	18067.285	0.0	38606.649	0.0
486.8711	9.00	-1.94	115917.909	2.5	136451.490	2.5
486.8717	28.00	-4.07	35639.148	3.0	56172.704	3.0
486.8813	26.01	-5.38	21581.640	4.5	42114.790	4.5
486.8839	12.01	-2.61	93799.700	2.5	114332.740	1.5
486.8854	12.01	-2.46	93799.700	3.5	114332.680	2.5
486.8854	12.01	-3.76	93799.700	2.5	114332.680	2.5
486.8860	92.00	-1.35	3710.246	0.0	24248.935	0.0
486.8984	20.01	-.22	100592.980	3.5	121125.410	4.5
486.8990	41.00	.04	18793.202	0.0	39331.342	0.0
486.9074	14.00	-2.09	39955.053	2.0	60487.103	1.0
486.9150	44.00	-.86	7420.492	0.0	27957.957	0.0
486.9200	42.00	-1.99	10646.793	0.0	31184.048	0.0
486.9270	60.00	-.68	3629.588	0.0	24166.547	0.0
486.9283	27.00	-3.05	33945.900	2.5	54477.070	3.5
486.9300	25.02	-2.21	195752.480	2.5	216283.580	3.5
486.9375	27.00	-.39	33173.360	3.5	53704.140	2.5
486.9467	26.00	-2.25	28604.610	2.0	49135.003	3.0
486.9587	21.01	-3.01	39344.900	2.0	59874.790	1.0
486.9684	22.00	-4.12	18141.229	5.0	38670.710	4.0
486.9743	19.00	-3.35	13042.880	1.5	33572.110	1.5
486.9755	19.00	-2.39	13042.880	1.5	33572.060	2.5
486.9762	24.00	-4.80	36558.550	2.0	57087.700	2.0
486.9819	10.01	-1.46	292651.320	1.5	313180.230	1.5
486.9852	27.00	-2.89	33173.360	3.5	53702.130	3.5
486.9954	24.00	-3.36	44307.960	5.0	64836.300	6.0
486.9980	62.01	-1.27	9356.272	0.0	29890.237	0.0
487.0038	26.00	-2.09	31686.342	2.0	52214.330	1.0
487.0040	21.00	-3.18	17025.360	1.5	37553.340	2.5
487.0129	22.00	.57	18141.229	5.0	38668.832	6.0
487.0156	23.00	-1.66	17116.920	3.5	37644.410	4.5
487.0161	24.00	-2.54	33113.270	4.0	53640.740	3.0
487.0201	23.03	-3.39	265271.600	3.0	285798.900	2.0
487.0301	21.01	-4.64	55715.520	1.0	76242.400	0.0
487.0467	28.01	-4.28	118314.820	2.5	138841.000	3.5
487.0521	24.00	-4.19	20517.400	2.0	41043.350	3.0
487.0559	28.01	.44	114874.880	2.5	135400.670	3.5
487.0560	57.00	-.85	8388.382	0.0	28919.902	0.0
487.0576	9.02	-.69	444202.700	5.5	464728.420	4.5
487.0709	26.01	-5.71	21711.890	3.5	42237.050	3.5
487.0744	25.00	-4.60	48168.010	4.5	68693.020	5.5
487.0801	24.00	-.18	24833.860	3.0	45358.630	4.0
487.0828	28.00	-.28	30192.268	0.0	50716.927	1.0
487.0934	18.01	-2.06	185624.730	3.5	206148.940	3.5
487.1079	28.01	-1.56	93528.440	3.5	114052.040	3.5
487.1126	25.00	-4.82	34845.260	.5	55368.660	1.5
487.1205	28.01	.17	114970.190	.5	135493.260	1.5
487.1221	28.01	-4.37	112686.300	2.5	133209.300	2.5
487.1259	23.00	-1.05	17242.050	5.5	37764.890	5.5
487.1264	26.01	-4.14	21812.040	1.5	42334.860	2.5
487.1324	26.00	-.54	23110.925	3.0	43633.491	2.0
487.1357	24.00	-3.96	20520.920	3.0	41043.350	3.0
487.1409	26.02	-3.73	179178.620	3.0	199700.830	4.0
487.1454	25.01	-1.98	87580.230	4.0	108102.250	3.0
487.1500	64.00	-.07	10243.505	0.0	30771.063	0.0
487.1516	29.01	-4.12	118071.340	1.0	138593.100	1.0
487.1620	26.01	-4.72	66078.340	2.5	86599.660	2.5
487.1646	27.00	-1.33	33173.360	3.5	53694.570	3.5
487.1684	24.01	-3.65	47354.630	2.5	67875.680	3.5
487.1700	73.00	-2.83	5968.656	0.0	26495.372	0.0
487.1874	21.00	-4.81	15756.510	2.5	36276.760	1.5
487.1891	24.00	-2.09	42153.740	5.0	62673.920	6.0
487.1930	26.00	-1.92	26224.961	3.0	46744.975	3.0
487.2014	24.00	-3.33	20523.690	4.0	41043.350	3.0
487.2081	25.00	-2.52	42053.730	2.5	62573.110	1.5
487.2135	22.00	-3.38	18695.230	4.0	39214.380	3.0
487.2140	28.01	.28	114942.420	1.5	135461.550	2.5
487.2144	26.00	-.75	23244.826	1.0	43763.938	1.0
487.2157	29.01	-2.86	117883.140	4.0	138402.200	3.0
487.2196	22.00	-2.00	21469.494	3.0	41988.390	3.0
487.2242	28.00	-4.59	22102.349	4.0	42621.048	3.0
487.2275	22.00	-1.89	21588.496	4.0	42107.060	4.0
487.2380	18.02	-3.48	231754.800	0.0	252272.920	1.0
487.2439	29.01	-3.16	108335.430	2.0	128853.300	2.0
487.2480	23.03	-1.45	263822.400	4.0	284340.100	4.0
487.2490	38.00	-.20	14437.696	0.0	34961.083	0.0
487.2584	24.00	-1.79	42153.740	5.0	62671.000	4.0
487.2660	9.00	-3.21	115917.909	2.5	136434.850	2.5
487.2829	23.01	-4.24	52391.940	3.0	72908.170	3.0
487.2838	25.02	-3.91	174332.910	1.5	194849.100	1.5
487.2853	24.01	-3.67	63802.410	.5	84318.540	1.5
487.2864	24.01	-4.50	68992.550	4.5	89508.630	5.5
487.2894	26.00	-2.81	34039.495	4.0	54555.450	4.0
487.2910	90.00	-1.43	6291.287	0.0	26812.905	0.0
487.2914	24.01	-4.26	47354.630	2.5	67870.500	1.5
487.2940	72.00	-.83	20809.640	0.0	41331.132	0.0
487.3062	28.01	-4.54	101754.800	2.5	122270.050	3.5
487.3083	28.01	-3.34	97799.660	1.5	118314.820	2.5
487.3102	24.00	-4.19	35934.020	6.0	56449.100	6.0
487.3188	7.00	-4.35	95475.280	.5	115990.000	.5
487.3188	7.00	-2.99	95475.280	.5	115990.000	1.5
487.3198	26.00	-4.06	31322.603	3.0	51837.279	3.0
487.3249	28.00	-1.55	30163.140	2.0	50677.599	3.0
487.3259	26.01	-4.58	59663.450	1.5	80177.870	1.5
487.3268	29.01	-.14	117747.450	3.0	138261.830	3.0
487.3340	64.01	-1.53	9356.272	0.0	29876.080	0.0
487.3370	27.00	-3.97	26232.050	3.5	46746.000	2.5
487.3435	28.01	-4.14	100389.520	2.5	120903.200	3.5
487.3438	28.00	-.46	29832.810	3.0	50346.477	2.0
487.3496	24.01	-4.34	47354.630	2.5	67868.050	2.5
487.3653	27.00	-4.59	22475.360	4.5	42988.120	3.5
487.3755	25.01	-3.57	82193.040	2.0	102705.370	3.0
487.3755	26.00	-3.72	26623.726	2.0	47136.058	2.0
487.3938	23.01	-4.25	52767.360	3.0	73278.920	4.0
487.3941	22.01	-.99	24961.340	1.5	45472.890	.5
487.4010	58.01	-.93	8872.327	0.0	29389.314	0.0
487.4019	9.00	-1.87	115917.909	2.5	136429.130	3.5
487.4036	25.00	-1.54	41789.480	4.5	62300.630	4.5
487.4072	12.02	-3.86	562939.500	2.0	583450.500	1.0
487.4072	12.02	-3.86	562939.500	2.0	583450.500	1.0
487.4185	24.00	-2.24	36577.730	4.0	57088.250	5.0
487.4288	10.01	.01	318183.690	4.5	338693.780	4.5
487.4298	10.01	1.04	318183.730	5.5	338693.780	4.5
487.4312	10.01	-3.39	318183.690	4.5	338693.680	3.5
487.4333	30.02	-.80	214357.000	1.0	234866.900	1.0
487.4357	26.00	-3.39	24772.019	1.0	45281.816	2.0
487.4424	10.01	-1.58	318184.260	3.5	338693.780	4.5
487.4426	10.01	-.71	318184.270	4.5	338693.780	4.5
487.4447	10.01	-.11	318184.260	3.5	338693.680	3.5
487.4450	10.01	.95	318184.270	4.5	338693.680	3.5
487.4566	7.01	-1.65	166582.450	2.0	187091.370	2.0
487.4573	9.00	-1.70	115917.909	2.5	136426.800	1.5
487.4587	22.00	-1.82	18145.400	2.0	38654.230	1.0
487.4656	24.00	-.66	25106.340	3.0	45614.880	4.0
487.4760	23.03	-2.15	263593.000	2.0	284101.100	3.0
487.4782	23.01	-3.04	30267.460	2.0	50775.470	2.0
487.4788	28.00	-1.61	28578.046	3.0	49086.030	4.0
487.4801	18.01	-.63	185624.730	3.5	206132.660	4.5
487.4850	22.00	-.43	26772.965	5.0	47280.690	5.0
487.4868	28.01	-2.85	114874.880	2.5	135382.530	1.5
487.4903	28.02	-2.77	98238.200	4.0	118745.700	3.0
487.5122	28.01	-4.29	100609.010	2.5	121115.590	1.5
487.5196	25.01	-3.54	62564.700	1.0	83070.970	2.0
487.5224	28.01	-2.34	100619.260	4.5	121125.410	4.5
487.5243	25.00	-2.18	37630.620	4.5	58136.690	3.5
487.5248	21.00	-4.09	16009.710	.5	36515.760	1.5
487.5262	25.00	-4.02	27248.000	1.5	47753.990	2.5
487.5288	25.00	-.20	41789.480	4.5	62295.360	5.5
487.5303	26.00	-3.14	33765.291	2.0	54271.110	1.0
487.5314	28.01	-2.99	115785.060	1.5	136290.830	.5
487.5329	25.00	-3.62	30425.710	1.5	50931.420	2.5
487.5357	23.00	-3.66	10892.500	3.5	31398.090	2.5
487.5410	28.01	-4.72	101357.200	4.5	121862.570	3.5
487.5430	46.00	-.12	33876.158	0.0	54387.169	0.0
487.5455	25.00	-.43	41789.480	4.5	62294.660	3.5
487.5481	23.01	-1.65	44098.460	3.0	64603.530	3.0
487.5483	23.00	-.74	323.420	3.5	20828.480	2.5
487.5564	24.00	-1.13	44246.700	4.0	64751.420	4.0
487.5614	23.01	-3.53	32299.240	1.0	52803.750	1.0
487.5884	26.00	-2.06	26874.534	5.0	47377.909	4.0
487.6060	38.00	-.90	14437.696	0.0	34946.057	0.0
487.6113	26.00	-4.15	33946.920	2.0	54449.330	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
487.6120	60.01	-2.30	4436.164	0.0	24944.273	0.0
487.6173	18.01	-2.18	188766.150	2.5	209268.310	1.5
487.6189	26.00	-2.80	26224.961	3.0	46727.055	2.0
487.6199	25.02	-4.47	194971.150	2.5	215473.200	1.5
487.6251	10.01	-1.00	318191.950	3.5	338693.780	4.5
487.6255	18.00	-2.14	104102.144	1.0	124603.957	2.0
487.6260	59.01	-2.05	5081.424	0.0	25588.944	0.0
487.6273	10.01	-1.11	318191.940	2.5	338693.680	3.5
487.6275	10.01	-2.55	318191.950	3.5	338693.680	3.5
487.6301	28.01	-.61	100619.260	4.5	121120.880	5.5
487.6320	38.00	-.33	14760.326	0.0	35267.594	0.0
487.6370	24.01	-1.70	31083.110	1.5	51584.440	1.5
487.6413	24.00	-3.79	33040.100	2.0	53541.250	2.0
487.6418	23.00	-1.84	17054.870	2.5	37556.000	3.5
487.6456	24.01	-2.23	31168.780	3.5	51669.750	2.5
487.6622	24.01	-3.39	53923.570	4.5	74423.840	3.5
487.6677	23.01	-5.65	19112.930	4.0	39612.970	5.0
487.6708	28.01	-2.41	111120.540	1.5	131620.450	1.5
487.6715	24.01	-4.40	67448.820	4.5	87948.700	4.5
487.6915	24.00	-3.84	35862.820	4.0	56361.860	5.0
487.6979	25.01	-3.58	62572.200	2.0	83070.970	2.0
487.7089	26.01	-6.66	18360.650	1.5	38858.960	2.5
487.7115	18.01	-2.47	172213.800	1.5	192712.000	1.5
487.7124	29.01	-1.83	115662.770	4.0	136160.930	5.0
487.7124	23.00	-4.05	14514.750	1.5	35012.910	.5
487.7222	24.01	-4.72	47372.750	1.5	67870.500	1.5
487.7229	23.01	-4.63	16421.510	4.0	36919.230	3.0
487.7229	7.00	-4.29	95475.280	.5	115973.000	1.5
487.7320	7.00	-3.36	95493.660	1.5	115991.000	2.5
487.7362	25.00	-1.85	41230.300	3.5	61727.460	2.5
487.7386	25.02	-.49	172451.230	1.5	192948.290	1.5
487.7394	10.01	-3.03	318196.750	5.5	338693.780	4.5
487.7558	7.00	-2.85	95493.660	1.5	115990.000	.5
487.7558	7.00	-2.76	95493.660	1.5	115990.000	1.5
487.7558	7.00	-3.76	95493.660	1.5	115990.000	2.5
487.7580	72.00	-.46	19196.490	0.0	39698.460	0.0
487.7611	26.00	-3.11	24180.848	3.0	44676.963	4.0
487.7627	29.01	-4.59	118532.150	2.0	139028.200	2.0
487.7671	26.00	-3.26	26224.961	3.0	46720.824	4.0
487.7710	17.01	-.75	150019.000	0.0	170514.700	1.0
487.7729	18.01	-3.39	185624.730	3.5	206120.350	2.5
487.7801	26.00	-3.25	26406.490	1.0	46901.808	1.0
487.7805	24.01	-3.99	47372.750	1.5	67868.050	2.5
487.7820	59.01	-1.83	3387.616	0.0	23888.577	0.0
487.7824	26.02	-4.38	105895.350	1.0	126390.570	1.0
487.7830	22.00	-4.52	25317.813	1.0	45813.010	2.0
487.7834	25.01	-4.40	85673.720	4.0	106168.900	5.0
487.7905	10.01	.67	318183.690	4.5	338678.570	3.5
487.7936	20.02	-.91	323655.060	2.0	344149.810	2.0
487.7943	28.01	-3.11	99418.610	3.5	119913.330	4.5
487.7953	25.01	-2.69	65567.070	2.0	86061.750	3.0
487.7957	22.00	-1.69	25227.217	3.0	45721.878	4.0
487.7974	28.01	-2.84	95332.530	2.5	115827.120	3.5
487.7976	24.00	-2.62	32097.360	6.0	52591.940	5.0
487.8041	10.01	-.74	318184.260	3.5	338678.570	3.5
487.8043	10.01	-3.35	318184.270	4.5	338678.570	3.5
487.8086	24.00	-1.00	44307.960	5.0	64802.080	5.0
487.8119	21.00	-3.38	16021.780	1.5	36515.760	1.5
487.8126	20.00	-.96	21849.634	2.0	42343.587	3.0
487.8153	25.00	.01	41932.640	3.5	62426.480	3.5
487.8155	26.00	-3.85	29356.780	2.0	49850.610	3.0
487.8218	26.00	-1.07	23270.374	0.0	43763.938	1.0
487.8224	9.00	-1.85	117308.558	1.5	137802.100	2.5
487.8280	74.00	-1.38	17986.627	0.0	38485.655	0.0
487.8291	26.02	-2.68	179207.570	5.0	199700.830	4.0
487.8330	68.00	-1.81	7097.862	0.0	27596.680	0.0
487.8331	22.00	-2.21	20062.980	1.0	40556.070	1.0
487.8343	21.00	-3.08	16022.720	2.5	36515.760	1.5
487.8350	27.00	-1.80	26597.640	1.5	47090.650	2.5
487.8370	42.00	-1.17	20245.038	0.0	40743.688	0.0
487.8400	23.03	-1.29	263608.300	3.0	284101.100	3.0
487.8693	26.02	-4.41	202782.650	2.0	222774.220	2.0
487.8730	90.00	-2.08	2500.383	0.0	22997.521	0.0
487.8733	12.02	-.26	561798.700	3.0	582290.100	3.0
487.8733	12.02	-.26	561798.700	3.0	582290.100	3.0
487.8750	24.00	-3.99	35870.530	4.0	56361.860	5.0
487.8759	10.01	-4.65	318202.390	2.5	338693.680	3.5
487.8860	57.00	-.60	7985.094	0.0	28481.685	0.0
487.8952	25.01	-4.86	85673.720	4.0	106164.200	4.0
487.8969	24.00	-4.41	33934.880	3.0	54425.290	4.0
487.9012	25.00	-4.34	48225.990	3.5	68716.220	4.5
487.9031	9.02	-2.57	444238.270	4.5	464728.420	4.5
487.9120	59.01	-2.53	5000.766	0.0	25496.265	0.0
487.9140	73.00	-.82	23793.968	0.0	44289.383	0.0
487.9154	7.00	-3.35	93581.520	.5	114071.153	1.5
487.9174	28.01	-4.35	112719.750	3.5	133209.300	2.5
487.9210	30.02	.34	217846.800	2.0	238336.200	2.0
487.9301	22.00	-1.19	21469.494	3.0	41958.510	2.0
487.9419	28.01	-3.98	115565.980	2.5	136054.500	1.5
487.9503	23.01	-4.75	52657.510	4.0	73145.680	3.0
487.9530	78.00	.17	36134.569	0.0	56628.346	0.0
487.9588	28.01	-4.00	113321.950	4.5	133809.760	3.5
487.9598	23.01	-3.08	44098.460	3.0	64586.230	2.0
487.9650	39.00	-.72	15244.271	0.0	35737.544	0.0
487.9703	28.01	-3.22	114052.040	3.5	134539.370	2.5
487.9731	25.00	-2.78	45130.160	4.5	65617.370	3.5
487.9743	24.01	-4.43	47372.750	1.5	67859.910	.5
487.9798	26.01	-4.30	64040.960	3.5	84527.890	4.5
487.9819	23.01	-3.82	34228.790	3.0	54715.630	2.0
487.9862	18.01	.31	138243.550	1.5	158730.210	2.5
487.9869	10.01	-1.17	318191.940	2.5	338678.570	3.5
487.9872	10.01	.28	318191.950	3.5	338678.570	3.5
488.0046	24.00	-.67	25177.390	4.0	45663.280	5.0
488.0137	28.00	-2.59	31786.210	3.0	52271.716	2.0
488.0227	27.00	-4.80	4142.660	3.5	24627.790	4.5
488.0300	22.00	-3.85	7255.369	2.0	27740.190	2.0
488.0301	23.01	-6.57	14461.730	3.0	34946.550	4.0
488.0315	26.01	-4.61	65931.460	3.5	86416.220	3.5
488.0365	28.01	-4.22	115565.980	2.5	136050.530	2.5
488.0377	13.01	-2.07	125700.500	0.0	146185.000	1.0
488.0415	26.02	-3.93	105906.230	2.0	126390.570	1.0
488.0444	25.00	-2.02	41230.300	3.5	61714.520	4.5
488.0457	9.00	-1.47	117308.558	1.5	137792.720	2.5
488.0481	22.00	-3.18	25227.217	3.0	45711.280	4.0
488.0520	13.01	-4.44	125706.200	1.0	146190.100	0.0
488.0539	23.00	-1.26	9636.960	1.5	30120.780	2.5
488.0582	23.02	-.47	161165.810	2.5	181649.450	3.5
488.0586	28.01	-3.52	112686.300	2.5	133169.920	3.5
488.0622	25.01	-3.05	62587.500	3.0	83070.970	2.0
488.0641	26.02	-4.44	202282.650	2.0	222766.040	3.0
488.0652	22.00	-4.88	27750.124	5.0	48233.470	6.0
488.0708	21.00	-3.28	16009.710	.5	36492.820	.5
488.0865	22.00	-.57	26657.409	4.0	47139.860	4.0
488.0870	22.00	-1.78	17369.599	1.0	37852.021	1.0
488.0932	10.01	-3.04	301855.710	2.5	322337.880	2.5
488.0944	24.00	-1.86	21810.840	1.0	42292.960	1.0
488.0972	26.00	-4.63	26406.490	1.0	46888.494	2.0
488.1051	10.01	-1.74	301855.710	2.5	322337.380	3.5
488.1068	23.01	-2.89	30641.710	3.0	51123.310	2.0
488.1080	64.00	-.09	11211.395	0.0	31698.664	0.0
488.1099	24.00	-2.78	36552.130	3.0	57033.600	4.0
488.1113	24.00	-2.89	34190.490	2.0	54671.900	1.0
488.1240	40.00	-1.49	5162.081	0.0	25648.679	0.0
488.1273	27.00	-2.49	33945.900	2.5	54426.640	1.5
488.1287	25.00	-2.57	41230.300	3.5	61710.980	3.5
488.1300	3.01	-.12	559501.000	0.0	579987.360	0.0
488.1306	28.01	-2.93	94729.250	2.5	115209.850	3.5
488.1328	24.00	-4.30	33060.740	3.0	53541.250	2.0
488.1360	64.00	-.07	12421.258	0.0	32907.352	0.0
488.1540	25.00	-1.42	37630.620	4.5	58110.240	4.5
488.1568	23.00	-.59	553.020	4.5	21032.520	3.5
488.1573	25.02	-.22	172755.950	3.5	193235.430	2.5
488.1607	7.00	-3.00	95493.660	1.5	115973.000	1.5
488.1654	9.00	-2.10	117308.558	1.5	137787.700	1.5
488.1723	26.00	-1.99	26627.612	4.0	47106.463	4.0
488.1727	26.00	-2.28	33412.706	3.0	53891.540	3.0
488.1736	13.01	-2.19	125706.200	1.0	146185.000	1.0
488.1736	13.01	-1.72	125706.200	1.0	146185.000	2.0
488.1747	26.00	-4.07	29371.860	3.0	49850.610	3.0
488.1843	24.00	-3.61	24056.110	5.0	44534.460	4.0
488.1855	17.01	-2.96	131754.800	1.0	152233.100	2.0
488.1920	64.01	-.54	18067.285	0.0	38551.029	0.0
488.1940	73.00	-2.49	10888.765	0.0	31372.425	0.0
488.1974	27.00	-3.69	24627.790	4.5	45105.590	3.5
488.2100	22.00	-4.47	18287.560	4.0	38764.832	3.0
488.2141	26.00	-1.76	27559.568	2.0	48036.667	2.0
488.2157	23.00	-2.02	9544.540	.5	30021.570	.5
488.2207	25.00	-2.35	38008.700	5.5	58485.520	4.5
488.2240	18.01	-1.56	174820.930	.5	195297.610	1.5
488.2342	22.00	-.92	18192.577	6.0	38668.832	6.0
488.2359	10.01	-.97	318202.390	2.5	338678.570	3.5
488.2417	21.00	-4.88	16096.860	1.5	36572.800	2.5
488.2594	28.01	-3.50	114052.040	3.5	134527.240	3.5
488.2694	27.00	-.92	26232.050	3.5	46706.830	3.5
488.2916	27.00	-2.86	33462.830	2.5	53936.680	2.5
488.2933	22.00	-3.34	26564.385	3.0	47038.160	3.0
488.2999	21.00	-1.76	17012.980	2.5	37486.480	1.5
488.3085	29.01	-2.40	116326.160	3.0	136799.300	2.0
488.3135	14.00	-4.20	59191.072	2.0	79664.000	1.0
488.3190	64.00	-.22	10162.848	0.0	30641.265	0.0
488.3199	24.01	-4.02	68583.440	2.5	89056.100	2.5
488.3209	29.01	-1.63	117747.450	3.0	138220.070	4.0
488.3213	15.04	.15	435100.400	1.5	455573.000	.5
488.3298	18.00	-2.66	105617.315	2.0	126089.560	3.0
488.3404	23.01	-.93	30613.970	4.0	51085.770	3.0
488.3478	24.00	-4.38	27816.880	5.0	48286.370	4.0
488.3509	23.01	-3.78	30267.460	2.0	50738.820	1.0
488.3557	25.01	-4.87	82232.180	5.0	102703.340	4.0
488.3586	21.00	-3.32	16021.780	1.5	36492.820	.5
488.3600	40.00	-1.45	5484.711	0.0	25961.409	0.0
488.3614	18.01	-.58	189654.780	2.5	210125.700	2.5
488.3690	39.01	-.50	8630.355	0.0	29106.675	0.0
488.3717	16.01	-1.17	129787.710	.5	150258.200	.5
488.3765	29.01	.12	115662.770	4.0	136133.060	4.0
488.3770	62.00	-.57	241.973	0.0	20717.958	0.0
488.3824	25.02	-2.32	195592.090	1.5	216062.130	2.5
488.3879	27.00	-2.88	33466.870	3.5	53936.680	2.5
488.3950	73.00	-1.85	9194.957	0.0	29670.187	0.0
488.3970	62.00	.31	3064.986	0.0	23540.132	0.0
488.4010	9.02	-4.92	444470.240	1.5	464939.500	2.5
488.4050	63.00	-.26	15970.189	0.0	36445.000	0.0
488.4056	23.01	-2.60	30306.400	3.0	50775.470	2.0
488.4056	23.00	-8.18	14910.040	3.5	35379.110	3.5
488.4080	26.00	-4.16	26623.726	2.0	47092.693	3.0
488.4106	24.00	-1.81	37233.500	5.0	57702.360	5.0
488.4111	25.00	-3.00	25285.430	4.5	45754.270	3.5
488.4149	22.00	-4.50	27740.190	2.0	48208.870	3.0
488.4162	9.00	-2.32	116987.394	3.5	137456.020	3.5
488.4243	9.00	-1.20	116987.394	3.5	137455.680	4.5
488.4311	11.05	-1.21	950367.000	1.0	970835.000	1.0
488.4411	26.02	-4.68	202282.650	2.0	222750.230	3.0
488.4586	24.01	-2.44	31117.590	2.5	51584.440	1.5
488.4640	26.02	-4.35	179194.220	4.0	199660.840	5.0
488.4662	25.00	-3.98	25287.740	3.5	45754.270	3.5
488.4789	13.01	-3.37	125719.000	2.0	146185.000	1.0
488.4789	13.01	-2.19	125719.000	2.0	146185.000	2.0
488.4789	13.01	-1.44	125719.000	2.0	146185.000	3.0
488.4814	22.00	-.70	26564.385	3.0	47030.280	3.0
488.4829	24.00	-3.56	35813.730	3.0	56279.560	4.0
488.4891	24.00	-4.33	20517.400	2.0	40982.970	2.0
488.4906	10.00	-2.24	150858.508	2.0	171324.017	1.0
488.4920	28.01	-3.67	115565.980	2.5	136031.430	2.5
488.4946	24.00	.09	44246.700	4.0	64712.040	3.0
488.5004	17.01	-2.40	131768.000	2.0	152233.100	2.0
488.5008	26.00	-3.93	26627.612	4.0	47092.693	3.0
488.5082	22.00	.51	15220.390	5.0	35685.160	6.0
488.5150	92.00	-1.76	0.000	0.0	20470.201	0.0
488.5212	22.00	-1.22	21588.496	4.0	42052.720	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
488.5226	16.01	-1.56	110176.830	1.5	130641.000	1.5
488.5279	9.00	-2.67	116987.394	3.5	137451.340	2.5
488.5423	26.00	-1.12	31307.235	4.0	51770.577	3.0
488.5583	22.00	-1.73	25227.217	3.0	45689.890	3.0
488.5627	16.01	-.54	112937.330	.5	133399.820	1.5
488.5641	23.00	-1.23	17181.980	4.5	37644.410	4.5
488.5665	27.00	-2.13	31699.690	4.5	52162.020	3.5
488.5684	28.01	-4.88	115592.250	1.5	136054.500	1.5
488.5686	28.01	-3.52	58493.210	2.5	78955.450	1.5
488.5731	24.00	-4.57	20520.920	3.0	40982.970	2.0
488.5851	23.00	-1.45	18805.050	.5	39266.600	1.5
488.5945	22.00	-4.12	20209.444	2.0	40670.600	2.0
488.5953	21.00	-2.80	17025.360	1.5	37486.480	1.5
488.5963	24.00	-1.20	24897.550	4.0	45358.630	4.0
488.6016	25.00	-.29	42053.730	2.5	62514.590	2.5
488.6050	59.01	-2.13	5081.424	0.0	25547.854	0.0
488.6113	18.01	-3.94	174820.930	.5	195281.380	.5
488.6118	25.01	-3.11	49882.150	4.0	70342.580	3.0
488.6190	26.00	-4.45	25091.620	0.0	45551.748	1.0
488.6209	26.00	-4.21	23783.617	5.0	44243.668	5.0
488.6268	22.00	-3.17	20795.599	5.0	41255.400	4.0
488.6276	28.01	-3.16	98467.250	3.5	118927.020	4.5
488.6280	39.00	-.62	16050.847	0.0	36516.314	0.0
488.6297	24.00	-2.76	25106.340	3.0	45566.020	3.0
488.6312	26.00	-.88	33507.102	3.0	53966.720	2.0
488.6330	92.01	-2.11	5484.711	0.0	25949.968	0.0
488.6364	23.03	0.00	236322.400	2.0	256781.800	1.0
488.6470	42.01	-.74	23390.681	0.0	43855.352	0.0
488.6488	7.00	-4.02	95532.120	2.5	115991.000	2.5
488.6543	28.01	-2.57	110573.360	2.5	131032.010	2.5
488.6600	18.01	-4.95	183675.570	3.5	204133.980	2.5
488.6650	39.00	-.70	15889.531	0.0	36353.448	0.0
488.6653	24.00	-2.59	37244.170	4.0	57702.360	5.0
488.6705	28.00	-1.24	29888.505	2.0	50346.477	2.0
488.6711	27.00	-3.72	30742.650	.5	51200.600	1.5
488.6727	7.00	-2.56	95532.120	2.5	115990.000	1.5
488.6727	7.00	-2.17	95532.120	2.5	115990.000	2.5
488.6775	28.01	-4.90	100592.980	3.5	121050.660	2.5
488.6804	23.00	-1.76	9636.960	1.5	30094.520	1.5
488.6910	74.00	-1.65	6129.972	0.0	26592.800	0.0
488.6918	26.01	-5.37	26932.740	.5	47389.820	1.5
488.6976	28.00	-2.12	29320.782	3.0	49777.619	3.0
488.6992	27.00	-1.19	31699.690	4.5	52156.460	4.5
488.7026	24.00	-.07	24897.550	4.0	45354.180	5.0
488.7047	24.01	-3.55	70394.460	4.5	90851.000	4.5
488.7050	9.02	-4.46	443865.310	1.5	464321.840	2.5
488.7185	26.00	-1.17	33801.555	2.0	54257.520	2.0
488.7188	28.01	-3.13	98467.250	3.5	118923.200	3.5
488.7207	24.00	-3.24	36577.730	4.0	57033.600	4.0
488.7261	9.00	-2.63	116987.394	3.5	137443.040	2.5
488.7315	25.02	-3.28	195948.440	3.5	216403.860	2.5
488.7568	22.00	-3.30	25438.898	2.0	45893.260	3.0
488.7604	22.00	-3.98	22404.690	3.0	42858.900	3.0
488.7610	57.00	-1.00	7965.094	0.0	28444.992	0.0
488.7638	28.01	-4.57	116824.150	2.5	137278.220	1.5
488.7657	26.02	-4.98	181828.660	2.0	202282.650	2.0
488.7681	24.00	-2.03	20517.400	2.0	40971.290	2.0
488.7688	25.00	-1.63	41031.480	4.5	61485.340	4.5
488.7829	26.02	-3.71	179207.570	5.0	199660.840	5.0
488.7843	26.01	-3.51	63273.030	2.5	83726.240	3.5
488.7855	9.02	-2.94	443868.680	2.5	464321.840	2.5
488.7877	27.00	-4.93	36092.440	2.5	56545.510	2.5
488.7889	26.00	-4.06	37521.144	2.0	57974.160	2.0
488.7934	25.01	-2.19	87717.620	3.0	108170.450	2.0
488.7942	18.00	-2.17	104102.144	1.0	124554.939	1.0
488.7982	26.02	-4.45	181830.020	3.0	202282.650	2.0
488.8080	24.00	-4.75	24833.860	3.0	45286.080	4.0
488.8142	24.01	-2.08	70399.040	5.5	90851.000	4.5
488.8204	10.01	-3.46	292451.780	1.5	312903.480	2.5
488.8231	26.00	-4.15	34039.495	4.0	54491.080	3.0
488.8235	10.01	-2.77	303071.840	2.5	323523.410	2.5
488.8266	18.01	-1.81	174409.830	1.5	194861.270	2.5
488.8297	25.00	-3.97	30411.740	.5	50863.050	1.5
488.8353	9.00	-1.66	116987.394	3.5	137438.470	3.5
488.8364	10.00	-3.88	151038.452	1.0	171489.485	1.0
488.8390	74.00	-2.10	13711.778	0.0	34168.411	0.0
488.8522	24.00	-1.27	20520.920	3.0	40971.290	2.0
488.8570	23.01	-3.79	30673.140	2.0	51123.310	2.0
488.8570	28.01	-2.43	112719.750	3.5	133169.920	3.5
488.8620	26.00	-1.05	33095.922	4.0	53545.882	3.0
488.8687	25.01	-3.34	81051.620	3.0	101501.300	3.0
488.8709	22.00	-.79	26494.322	2.0	46943.910	2.0
488.8727	25.00	-3.30	38934.940	2.5	59384.450	1.5
488.8737	25.02	-4.63	195462.260	.5	215911.730	1.5
488.8821	25.00	-.68	41031.480	4.5	61480.600	3.5
488.8831	6.00	-3.37	60333.430	0.0	80782.510	1.0
488.8924	28.01	-3.68	116512.060	3.5	136960.750	2.5
488.8936	6.00	-2.91	60352.630	1.0	80801.270	2.0
488.9006	26.00	-2.56	17726.985	2.0	38175.332	3.0
488.9036	25.01	-4.56	81051.620	3.0	101499.840	2.0
488.9039	18.01	-.87	139258.250	.5	159706.460	.5
488.9065	12.02	-1.45	564289.800	1.0	584737.900	2.0
488.9065	12.02	-1.45	564289.800	1.0	584737.900	2.0
488.9069	17.00	-1.34	74865.667	.5	95313.749	1.5
488.9095	26.00	-1.29	31322.603	3.0	51770.577	3.0
488.9110	25.01	-3.70	82232.180	5.0	102680.090	5.0
488.9140	75.00	-1.89	0.000	0.0	20453.495	0.0
488.9195	22.00	.03	21469.494	3.0	41917.050	4.0
488.9220	42.00	-1.15	20809.640	0.0	41262.800	0.0
488.9230	25.01	-3.10	81051.620	3.0	101499.030	4.0
488.9284	18.00	-3.43	105617.315	2.0	126064.500	2.0
488.9306	28.01	.46	98467.250	3.5	118914.340	4.5
488.9328	22.00	-2.54	25797.600	3.0	46244.600	2.0
488.9340	25.01	-2.97	81054.350	2.0	101501.300	3.0
488.9344	23.02	-.52	161588.040	3.5	182034.970	4.5
488.9352	22.00	-4.59	25317.813	1.0	45764.710	1.0
488.9650	23.01	-4.09	52700.030	2.0	73145.680	3.0
488.9689	25.01	-2.74	81054.350	2.0	101499.840	2.0
488.9715	26.01	-4.65	64425.460	2.5	84870.840	2.5
488.9773	7.00	-3.33	93581.520	.5	114026.654	.5
488.9787	24.00	-3.53	21847.880	2.0	42292.960	1.0
488.9819	22.00	-1.08	21739.713	5.0	42184.660	4.0
488.9822	20.02	-.25	343784.960	1.0	364229.890	0.0
488.9832	20.02	-.01	341349.190	1.0	361794.080	1.0
488.9940	25.00	-3.45	37630.620	4.5	58075.060	5.5
488.9946	9.00	-2.37	116143.579	.5	136587.990	1.5
488.9957	26.02	-3.39	179216.470	6.0	199660.840	5.0
489.0005	22.00	-.15	25388.334	4.0	45832.500	5.0
489.0021	23.01	-2.69	44159.430	2.0	64603.530	3.0
489.0031	23.01	-2.01	30641.710	3.0	51085.770	3.0
489.0071	23.00	-1.79	17054.870	2.5	37498.760	2.5
489.0076	23.02	-1.23	141144.170	4.5	161588.040	3.5
489.0081	23.00	-1.09	18805.050	.5	39248.900	1.5
489.0174	24.00	.18	44307.960	5.0	64751.420	4.0
489.0179	25.00	-4.85	30419.610	2.5	50863.050	1.5
489.0205	10.01	-2.44	303071.840	2.5	323515.170	3.5
489.0236	24.00	-1.04	44393.100	6.0	64836.300	6.0
489.0290	74.00	-1.77	16292.819	0.0	36741.504	0.0
489.0432	28.00	-1.60	30392.052	1.0	50834.435	2.0
489.0605	10.01	-3.06	303071.840	2.5	323513.500	3.5
489.0650	6.00	-2.59	60393.140	2.0	80834.610	3.0
489.0746	22.00	-4.03	27887.740	3.0	48328.810	4.0
489.0750	41.00	-.86	10969.423	0.0	31416.185	0.0
489.0762	26.00	-.59	23192.486	2.0	43633.491	2.0
489.0791	7.00	-3.32	95532.120	2.5	115973.000	1.5
489.0875	23.00	-3.93	11100.650	4.5	31541.180	3.5
489.0890	74.00	-1.29	20325.695	0.0	40771.871	0.0
489.0976	28.01	-3.08	114942.420	1.5	135382.530	1.5
489.1024	22.00	-1.54	18825.890	1.0	39265.800	2.0
489.1136	24.00	-4.10	23933.900	4.0	44373.340	3.0
489.1184	26.00	-3.84	33946.920	2.0	54386.160	1.0
489.1198	28.01	-4.40	115592.250	1.5	136031.430	2.5
489.1222	23.00	-1.44	17116.920	3.5	37556.000	3.5
489.1292	24.00	-1.82	42252.170	6.0	62690.960	5.0
489.1466	24.01	-2.93	31351.150	2.5	51789.210	3.5
489.1499	26.00	-.29	22996.661	4.0	43434.585	3.0
489.1523	17.00	-1.90	74225.846	1.5	94663.670	1.5
489.1529	23.03	-1.64	263902.300	3.0	284340.100	4.0
489.1536	18.02	-3.40	188714.050	3.0	209151.820	2.0
489.1545	25.00	-1.17	41031.480	4.5	61469.210	5.5
489.1603	24.00	-2.27	25177.390	4.0	45614.880	4.0
489.1720	17.01	-.88	126032.000	2.0	146469.000	3.0
489.1801	25.01	-4.55	86449.240	4.0	106885.900	4.0
489.1822	22.00	-2.61	17540.205	3.0	37976.780	2.0
489.1868	23.01	-3.41	52245.680	2.0	72682.060	2.0
489.1900	58.01	-1.08	10727.450	0.0	31169.405	0.0
489.1980	38.00	-.21	18228.600	0.0	38670.221	0.0
489.1985	18.00	-3.94	105617.315	2.0	126053.210	2.0
489.2089	10.00	-2.63	150121.592	1.0	170557.050	1.0
489.2232	10.00	-3.17	151038.452	1.0	171473.313	2.0
489.2283	25.00	-3.85	34845.260	.5	55279.910	1.5
489.2290	26.01	-3.07	54063.530	.5	74498.150	1.5
489.2369	25.02	-2.81	174874.500	4.5	195308.790	4.5
489.2390	28.01	-4.00	101366.140	2.5	121800.340	1.5
489.2440	74.00	-.76	22342.133	0.0	42781.832	0.0
489.2481	27.00	-1.27	32430.590	5.5	52864.410	4.5
489.2500	41.00	-.98	11937.313	0.0	32376.761	0.0
489.2548	24.00	-2.35	36552.130	3.0	56985.670	3.0
489.2678	30.02	-3.71	217073.800	2.0	237506.800	1.0
489.2773	27.00	-.98	32027.500	3.5	52460.100	2.5
489.2793	26.00	-4.67	33946.920	2.0	54379.440	3.0
489.2803	18.01	-1.99	188766.150	2.5	209198.630	2.5
489.2809	23.00	-4.57	22121.170	4.5	42553.620	4.5
489.2826	24.01	-3.65	64061.820	1.5	84494.200	2.5
489.2858	26.00	-1.10	34017.084	1.0	54449.330	1.0
489.2905	23.00	-4.94	18805.050	.5	39237.100	.5
489.2975	21.00	-3.77	16141.040	2.5	36572.800	2.5
489.3046	22.00	-.94	18141.229	5.0	38572.692	5.0
489.3120	40.00	-.92	12663.231	0.0	33100.089	0.0
489.3230	60.00	-1.00	1048.548	0.0	21484.947	0.0
489.3231	28.01	-4.16	98467.250	3.5	118897.940	2.5
489.3350	62.01	-1.90	4355.506	0.0	24791.404	0.0
489.3425	6.00	-3.88	60352.630	1.0	80782.510	1.0
489.3440	39.00	-.95	10969.423	0.0	31404.945	0.0
489.3442	23.00	-5.73	14949.300	4.5	35379.110	3.5
489.3446	29.01	-4.61	116643.960	3.0	137073.750	2.0
489.3451	29.01	-1.45	117747.450	3.0	138177.220	2.0
489.3506	25.00	-1.20	42143.570	1.5	62573.110	1.5
489.3513	22.00	.13	21588.496	4.0	42018.010	5.0
489.3684	26.00	-2.98	33946.920	2.0	54375.719	2.0
489.3731	23.01	-4.21	52245.680	2.0	72674.280	2.0
489.3808	26.01	-3.77	22810.330	3.5	43238.610	2.5
489.3835	22.00	-3.64	17423.853	2.0	37852.021	1.0
489.3868	26.01	-3.16	65696.110	4.5	86124.140	4.5
489.3914	24.00	-4.17	35934.020	6.0	56361.860	5.0
489.3944	18.02	-3.27	204727.470	1.0	225155.180	1.0
489.3970	58.01	-.59	10646.793	0.0	31080.102	0.0
489.4024	28.01	-4.03	100475.820	3.5	120903.200	3.5
489.4031	26.02	-4.62	179207.570	5.0	199634.920	6.0
489.4086	24.00	-3.95	36558.550	2.0	56985.670	3.0
489.4163	23.01	-2.53	44159.430	2.0	64586.230	2.0
489.4300	14.00	-3.50	39955.053	2.0	60381.278	1.0
489.4300	62.01	-2.55	1935.780	0.0	22367.711	0.0
489.4300	64.01	-1.11	9356.272	0.0	29788.203	0.0
489.4393	24.00	-1.26	44514.440	7.0	64940.280	7.0
489.4407	25.00	-2.12	38934.940	2.5	59360.720	2.5
489.4594	23.00	-4.37	10892.500	3.5	31317.500	4.5
489.4680	63.00	.12	15970.189	0.0	36400.534	0.0
489.4688	18.00	-2.58	104102.144	1.0	124526.750	0.0
489.4751	22.00	-3.18	25643.695	3.0	46068.040	4.0
489.4834	8.03	-.78	616325.500	1.5	636749.500	.5
489.4886	24.01	-4.15	70427.220	3.5	90851.000	4.5
489.4950	90.00	-2.15	0.000	0.0	20429.218	0.0
489.5006	10.01	-4.12	307894.840	2.5	328318.120	3.5
489.5047	10.01	-4.00	307894.840	2.5	328317.950	2.5
489.5157	23.01	-3.43	52604.110	1.0	73026.760	2.0
489.5191	25.00	-2.68	37737.220	3.5	58159.730	2.5
489.5301	25.01	-3.74	65567.070	2.0	85989.120	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
489.5320	44.00	-1.68	7985.094	0.0	28412.768	0.0
489.5373	24.00	-.59	42252.170	6.0	62673.920	6.0
489.5381	22.00	-4.26	26772.965	5.0	47194.680	4.0
489.5397	24.00	-3.37	24833.860	3.0	45255.510	3.0
489.5428	27.00	-2.49	31699.690	4.5	52121.210	4.5
489.5440	23.01	-4.17	19191.500	6.0	39612.970	5.0
489.5580	41.00	-2.03	5887.999	0.0	26314.588	0.0
489.5600	44.00	-1.06	10566.135	0.0	30992.640	0.0
489.5644	28.01	-3.90	101754.800	2.5	122175.420	2.5
489.5682	18.02	-2.64	204727.470	1.0	225147.930	2.0
489.5742	23.00	-3.36	17054.870	2.5	37475.080	3.5
489.5773	28.01	-3.77	115565.980	2.5	135986.060	3.5
489.5781	28.01	-4.78	88128.560	2.5	108548.610	1.5
489.5838	21.00	-4.44	21085.840	3.5	41505.650	2.5
489.5917	25.00	-.05	35769.970	3.5	56189.450	4.5
489.6056	21.00	-3.33	16096.860	1.5	36515.760	1.5
489.6083	24.01	-2.74	52298.120	3.5	72716.910	4.5
489.6128	25.00	-3.13	38008.700	5.5	58427.300	5.5
489.6164	26.02	-3.82	179216.470	6.0	199634.920	6.0
489.6210	24.00	-4.50	21856.940	3.0	42275.200	4.0
489.6330	23.00	-2.73	21603.170	4.5	42020.930	3.5
489.6414	29.01	-3.42	117231.690	1.0	137649.100	2.0
489.6425	26.00	-1.64	31322.603	3.0	51739.964	2.0
489.6454	28.01	-4.53	115565.980	2.5	135983.220	1.5
489.6467	10.01	-2.93	318183.690	4.5	338600.880	4.5
489.6469	24.00	-3.92	27597.220	3.0	48014.400	4.0
489.6471	10.01	-1.54	318183.690	4.5	338600.860	5.5
489.6476	10.01	-1.88	318183.730	5.5	338600.880	4.5
489.6481	10.01	.08	318183.730	5.5	338600.860	5.5
489.6574	24.00	-2.60	35862.820	4.0	56279.560	4.0
489.6589	26.02	-4.71	179178.620	3.0	199595.300	3.0
489.6603	10.01	-1.67	318184.260	3.5	338600.880	4.5
489.6606	10.01	-0.00	318184.270	4.5	338600.880	4.5
489.6611	10.01	-1.74	318184.270	4.5	338600.860	5.5
489.6752	14.01	-1.88	103861.000	.5	124277.000	.5
489.6848	17.01	.52	126782.800	3.0	147198.400	4.0
489.6852	23.02	-.70	141507.700	3.5	161923.280	2.5
489.6930	60.00	-.22	1048.548	0.0	21469.506	0.0
489.6994	23.02	-1.90	140750.820	2.5	161165.810	2.5
489.7136	8.01	-3.89	255465.200	3.5	275879.600	2.5
489.7136	8.01	-2.41	255465.200	3.5	275879.600	3.5
489.7179	27.00	-.83	31699.690	4.5	52113.910	5.5
489.7185	9.00	-3.86	116040.883	1.5	136455.080	1.5
489.7208	24.01	-3.66	68760.000	3.5	89174.100	3.5
489.7260	42.00	-.60	25326.461	0.0	45746.043	0.0
489.7298	7.00	-3.35	95475.280	.5	115889.000	.5
489.7298	7.00	-4.61	95475.280	.5	115889.000	1.5
489.7359	26.02	-2.80	179221.450	7.0	199634.920	6.0
489.7536	7.01	-3.60	166678.640	3.0	187091.370	2.0
489.7560	23.01	-3.49	30673.140	2.0	51085.770	3.0
489.7589	25.02	-3.86	174436.590	2.5	194849.100	1.5
489.7630	28.01	-3.98	114970.190	.5	135382.530	1.5
489.7697	24.00	-1.80	44299.980	2.0	64712.040	3.0
489.7778	7.00	-2.76	95475.280	.5	115887.000	.5
489.7778	7.00	-2.51	95475.280	.5	115887.000	1.5
489.7868	28.00	-3.61	34163.294	2.0	54574.640	1.0
489.7879	29.01	-2.29	116388.000	2.0	136799.300	2.0
489.7886	28.00	-2.79	31786.210	3.0	52197.482	3.0
489.7908	24.01	-2.65	66256.770	.5	86667.950	1.5
489.7921	10.00	-3.34	150121.592	1.0	170532.717	2.0
489.7953	18.01	-1.64	183090.810	1.5	203501.800	2.5
489.8006	10.01	-3.85	308738.030	1.5	329148.600	1.5
489.8037	10.01	-4.86	308738.030	1.5	329148.670	2.5
489.8045	9.00	-1.63	116040.883	1.5	136451.490	2.5
489.8090	25.02	-1.77	195752.480	2.5	216162.900	1.5
489.8143	22.00	-5.28	7255.369	2.0	27665.570	1.0
489.8239	27.01	-7.19	27585.300	1.0	47995.100	0.0
489.8338	26.02	-3.69	179194.220	4.0	199603.610	4.0
489.8436	24.00	.25	44393.100	6.0	64802.080	5.0
489.8455	24.00	-3.10	24897.550	4.0	45306.450	5.0
489.8561	24.01	-4.09	70317.040	2.5	90725.500	3.5
489.8590	7.00	-2.46	95493.660	1.5	115902.000	2.5
489.8599	13.01	-2.41	125700.500	0.0	146108.800	1.0
489.8621	28.01	-4.25	79923.880	4.5	100332.090	4.5
489.8640	6.00	-4.11	60393.140	2.0	80801.270	2.0
489.8686	24.00	-3.89	36577.730	4.0	56985.670	3.0
489.8743	13.01	-1.43	125866.700	1.0	146274.400	2.0
489.8784	24.00	-2.63	21810.840	1.0	42218.370	0.0
489.8813	25.02	-4.86	195112.810	3.5	215520.220	2.5
489.8911	17.01	-.97	137770.100	0.0	158177.100	1.0
489.8935	25.00	-4.56	30411.740	.5	50818.640	.5
489.8945	28.01	.58	98467.250	3.5	118874.110	3.5
489.9011	10.00	-2.98	150917.431	0.0	171324.017	1.0
489.9183	24.01	-3.50	63802.410	.5	84208.280	.5
489.9220	76.00	.21	28149.475	0.0	48560.887	0.0
489.9250	44.00	-1.27	11372.710	0.0	31783.997	0.0
489.9290	92.01	-2.18	887.233	0.0	21298.354	0.0
489.9308	20.02	-.40	340748.720	2.0	361154.070	2.0
489.9317	26.02	-4.48	202200.510	3.0	222605.820	4.0
489.9485	25.00	-3.88	38934.940	2.5	59339.550	3.5
489.9504	27.00	-1.77	16470.600	1.5	36875.130	1.5
489.9560	23.03	-.42	263822.400	4.0	284226.700	3.0
489.9601	10.01	1.15	318196.750	5.5	338600.880	4.5
489.9605	10.01	-.68	318196.750	5.5	338600.860	5.5
489.9610	10.01	1.22	318196.770	6.5	338600.860	5.5
489.9632	22.00	-1.95	20062.980	1.0	40466.979	2.0
489.9778	26.01	-3.33	66012.830	4.5	86416.220	3.5
489.9896	26.01	-9.07	21711.890	3.5	42114.790	4.5
489.9910	22.00	.41	15156.787	4.0	35559.627	5.0
489.9920	57.01	-1.81	0.000	0.0	20408.496	0.0
489.9929	56.01	-.08	21952.422	0.0	42360.881	0.0
489.9956	27.00	-3.62	23152.570	3.5	43555.220	3.5
489.9961	23.00	-2.63	17054.870	2.5	37457.500	1.5
489.9968	13.01	-1.94	125706.200	1.0	146108.800	1.0
490.0022	22.00	-2.01	21469.494	3.0	41871.870	2.0
490.0026	23.00	-2.28	17242.050	5.5	37644.410	4.5
490.0120	39.01	-.78	8227.067	0.0	28634.730	0.0
490.0134	24.00	-3.58	35807.900	2.0	56209.810	3.0
490.0333	26.02	-3.78	179194.220	4.0	199595.300	3.0
490.0398	28.01	-4.54	116145.690	3.5	136546.500	4.5
490.0403	23.01	-2.55	32299.240	1.0	52700.030	2.0
490.0427	27.00	-5.12	13795.520	2.5	34196.210	1.5
490.0475	29.01	-2.10	116643.960	3.0	137044.450	4.0
490.0487	25.02	-3.07	172547.850	2.5	192948.290	1.5
490.0562	16.01	-.47	129858.070	1.5	150258.200	.5
490.0618	22.00	-1.59	21588.496	4.0	41988.390	3.0
490.0660	25.00	-1.95	38120.180	4.5	58519.900	3.5
490.0669	27.00	-1.53	32464.730	4.5	52864.410	4.5
490.0681	25.02	-1.22	195315.780	2.5	215715.410	1.5
490.0703	22.00	-4.03	25493.722	2.0	45893.260	3.0
490.0720	25.00	-1.51	37737.220	3.5	58136.690	3.5
490.0730	62.01	-1.75	7985.094	0.0	28390.217	0.0
490.0790	41.00	-.88	12017.970	0.0	32422.843	0.0
490.0811	26.02	-3.60	179178.620	3.0	199577.710	2.0
490.0837	22.00	-1.23	18145.400	2.0	38544.380	3.0
490.0860	63.00	-.31	13953.751	0.0	34358.333	0.0
490.0900	26.01	-3.54	64286.440	3.5	84685.160	3.5
490.0967	28.00	-1.80	28068.091	4.0	48466.530	5.0
490.1123	23.02	-.76	141987.320	3.5	162385.110	3.5
490.1243	23.01	-3.89	52391.940	3.0	72789.230	3.0
490.1303	16.01	-.45	130134.080	2.5	150531.120	1.5
490.1352	25.02	-3.88	195752.480	2.5	216149.320	3.5
490.1404	29.01	-.93	115639.020	2.0	136035.640	3.0
490.1477	23.00	-2.56	19026.340	2.5	39422.660	2.5
490.1480	59.01	-1.80	7743.122	0.0	28145.123	0.0
490.1534	24.00	-2.45	35813.730	3.0	56209.810	3.0
490.1544	26.02	-4.05	179207.570	5.0	199603.610	4.0
490.1563	21.00	-3.59	16096.860	1.5	36492.820	.5
490.1613	9.00	-2.36	117391.950	.5	137787.700	1.5
490.1647	24.01	-1.17	52321.300	4.5	72716.910	4.5
490.1712	7.00	-2.69	95493.660	1.5	115889.000	.5
490.1712	7.00	-4.43	95493.660	1.5	115889.000	1.5
490.1719	27.00	-3.00	31699.690	4.5	52095.000	3.5
490.1727	25.02	-3.50	174575.870	3.5	194971.150	2.5
490.1755	24.00	-3.75	35884.400	5.0	56279.560	4.0
490.1870	57.00	-1.46	1048.548	0.0	21448.926	0.0
490.1900	62.01	-1.79	9356.272	0.0	29756.525	0.0
490.2030	60.01	-2.14	483.945	0.0	20883.657	0.0
490.2042	9.00	-2.93	116040.883	1.5	136434.850	2.5
490.2075	18.01	-2.52	182951.150	.5	203344.980	1.5
490.2168	26.00	-3.48	26623.726	2.0	47017.170	3.0
490.2193	7.00	-3.95	95493.660	1.5	115887.000	1.5
490.2193	7.00	-2.47	95493.660	1.5	115887.000	2.5
490.2202	24.00	-4.53	33935.650	2.0	54328.950	3.0
490.2222	25.00	-2.69	33825.490	2.5	54218.710	1.5
490.2231	28.01	-3.11	113321.950	4.5	133715.130	4.5
490.2274	13.01	-2.74	124792.000	2.0	145185.000	1.0
490.2291	25.00	-4.69	30425.710	1.5	50818.640	.5
490.2320	74.00	-1.16	19115.832	0.0	39514.337	0.0
490.2489	23.02	-.70	141531.170	1.5	161923.280	2.5
490.2527	27.00	-4.04	32464.730	4.5	52856.680	3.5
490.2609	23.02	-1.38	141196.430	2.5	161588.040	3.5
490.2638	14.01	-1.58	103885.510	1.5	124277.000	.5
490.2674	24.00	-3.17	24833.860	3.0	45225.200	2.0
490.2700	24.00	-3.16	24200.230	6.0	44591.460	5.0
490.2753	29.01	-3.55	116643.960	3.0	137034.970	3.0
490.2763	28.01	-3.44	115592.250	1.5	135983.220	1.5
490.2816	28.01	-2.24	94729.250	2.5	115120.000	2.5
490.2856	24.00	-2.07	28637.000	3.0	49027.580	2.0
490.2885	23.01	-4.77	14556.090	4.0	34946.550	4.0
490.2900	56.00	-.82	13389.148	0.0	33785.240	0.0
490.2933	28.01	-3.63	109846.000	3.5	130236.260	2.5
490.2970	74.00	-1.43	19115.832	0.0	39511.633	0.0
490.3017	29.01	-3.13	116375.470	3.0	136765.380	4.0
490.3025	10.01	-1.99	301948.000	1.5	322337.880	2.5
490.3044	13.01	-1.71	125719.000	2.0	146108.800	1.0
490.3050	44.00	-.59	10566.135	0.0	30961.603	0.0
490.3054	22.00	-1.57	18061.540	1.0	38451.298	2.0
490.3073	24.00	-4.58	24277.060	0.0	44666.740	1.0
490.3102	26.00	-4.01	26627.612	4.0	47017.170	3.0
490.3222	24.00	-1.45	20517.400	2.0	40906.460	1.0
490.3317	26.00	-1.11	23244.826	1.0	43633.491	2.0
490.3325	24.00	-4.48	25177.390	4.0	45566.020	3.0
490.3349	24.00	-3.09	24897.550	4.0	45286.080	4.0
490.3535	21.00	-3.25	18571.400	2.5	38959.160	3.5
490.3549	7.01	-1.69	202714.120	1.0	223101.820	1.0
490.3617	9.02	-4.23	444552.080	3.5	464939.500	2.5
490.3790	17.02	-.88	196137.900	2.5	216524.600	2.5
490.3810	42.00	-1.51	10646.793	0.0	31039.100	0.0
490.3845	26.01	-6.55	21581.640	4.5	41968.110	5.5
490.3978	9.00	-1.69	116040.883	1.5	136426.800	1.5
490.4035	13.02	-1.30	188877.570	2.5	209263.250	2.5
490.4035	13.02	0.00	188877.570	2.5	209263.250	3.5
490.4055	22.00	-3.86	28638.832	2.0	49024.430	3.0
490.4100	28.01	-4.86	79923.880	4.5	100309.290	5.5
490.4136	23.01	-3.75	44200.970	1.0	64586.230	2.0
490.4162	23.00	-4.75	22121.170	4.5	42506.320	4.5
490.4192	13.02	-.15	188878.220	1.5	209263.250	2.5
490.4266	24.01	-4.62	53051.550	1.5	73436.270	2.5
490.4287	25.01	-3.11	87717.620	3.0	108102.250	3.0
490.4292	23.00	-1.32	9636.960	1.5	30021.570	.5
490.4407	28.00	-.05	28569.210	2.0	48953.344	1.0
490.4425	22.00	.26	21739.713	5.0	42123.770	6.0
490.4509	23.01	-4.01	32420.040	0.0	52803.750	1.0
490.4530	41.00	-2.36	0.000	0.0	20389.314	0.0
490.4644	22.00	-2.74	18287.560	4.0	38670.710	4.0
490.4754	18.01	-3.11	150147.620	2.5	170530.310	3.5
490.4812	26.00	-4.15	31322.603	3.0	51705.052	2.0
490.4824	17.01	.35	126743.300	2.0	147125.700	3.0
490.4880	71.00	-1.77	4113.534	0.0	24501.393	0.0
490.4959	23.00	-2.55	17116.920	3.5	37498.760	2.5
490.4970	62.00	-.60	806.575	0.0	21194.060	0.0
490.5020	44.00	-1.98	7985.094	0.0	28372.371	0.0
490.5045	24.00	-3.08	37205.880	3.0	57587.360	4.0
490.5080	40.00	-2.24	5162.081	0.0	25549.108	0.0
490.5130	57.00	-1.13	6936.547	0.0	27323.367	0.0
490.5135	26.00	-4.06	31686.342	2.0	52067.450	2.0
490.5142	27.00	-2.78	34133.590	3.5	54514.670	3.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
490.5209	26.01	-4.29	50142.930	2.5	70523.730	3.5
490.5212	28.01	-3.92	116167.760	1.5	136548.550	2.5
490.5221	22.00	-3.82	26657.409	4.0	47038.160	3.0
490.5224	26.00	-3.45	26627.612	4.0	47008.351	5.0
490.5374	22.00	-3.05	18192.577	6.0	38572.692	5.0
490.5469	7.00	-4.13	95475.280	.5	115855.000	.5
490.5469	7.00	-3.03	95475.280	.5	115855.000	1.5
490.5516	22.00	-1.48	26564.385	3.0	46943.910	2.0
490.5522	20.02	-.72	350741.190	3.0	371120.690	4.0
490.5600	9.00	-1.98	116040.883	1.5	136420.060	.5
490.5616	14.02	-1.19	234387.640	1.0	254766.750	2.0
490.5638	25.02	-3.81	172569.270	1.5	192948.290	1.5
490.5681	28.01	-4.32	94729.250	2.5	115108.090	2.5
490.5688	25.01	-2.73	53017.160	1.0	73395.970	2.0
490.5717	29.01	-1.61	117883.140	4.0	138261.830	3.0
490.5729	29.01	-2.43	116375.470	3.0	136754.110	2.0
490.5782	28.01	-3.97	115565.980	2.5	135944.400	3.5
490.5806	23.01	-4.31	52767.360	3.0	73145.680	3.0
490.5864	24.00	-1.70	44373.340	3.0	64751.420	4.0
490.6049	24.00	-3.45	27597.220	3.0	47974.530	3.0
490.6110	39.00	-.95	11453.368	0.0	31836.115	0.0
490.6292	23.03	.30	236766.900	3.0	257143.200	2.0
490.6341	8.01	-3.57	255465.200	3.5	275841.300	3.5
490.6341	8.01	-1.88	255465.200	3.5	275841.300	4.5
490.6449	23.00	-3.43	10892.500	3.5	31268.150	3.5
490.6548	29.01	-.36	115639.020	2.0	136014.260	2.0
490.6603	9.02	-2.29	469119.520	2.5	489494.530	3.5
490.6644	26.02	-2.70	181825.670	4.0	202200.510	3.0
490.6673	21.00	-3.26	16141.040	2.5	36515.760	1.5
490.6714	25.00	-.29	42198.560	.5	62573.110	1.5
490.6716	23.00	-4.71	21646.390	3.5	42020.930	3.5
490.6774	25.01	-3.99	62564.700	1.0	82939.000	1.0
490.6819	22.00	-3.75	25438.898	2.0	45813.010	2.0
490.6832	24.00	-3.71	23933.900	4.0	44307.960	5.0
490.6841	23.00	-2.29	17181.980	4.5	37556.000	3.5
490.6942	28.00	-3.54	30163.140	2.0	50536.742	1.0
490.7082	25.00	-4.19	37737.220	3.5	58110.240	4.5
490.7092	23.02	-.66	141196.430	2.5	161569.410	1.5
490.7118	29.01	-.93	115662.770	4.0	136035.640	3.0
490.7118	22.00	-1.30	26657.409	4.0	47030.280	3.0
490.7135	27.00	-4.04	3482.820	4.5	23855.620	4.5
490.7147	25.00	-.82	42053.730	2.5	62426.480	3.5
490.7160	17.01	-.47	137804.400	1.0	158177.100	1.0
490.7180	63.00	.09	13953.751	0.0	34332.054	0.0
490.7181	18.01	-3.52	189040.870	1.5	209413.480	1.5
490.7260	60.00	-1.06	2339.068	0.0	22717.039	0.0
490.7364	26.02	-4.29	181828.660	2.0	202200.510	3.0
490.7430	42.00	.05	31295.118	0.0	51672.383	0.0
490.7523	26.00	-4.54	33695.378	5.0	54066.570	4.0
490.7564	25.00	-.68	42143.570	1.5	62514.590	2.5
490.7571	27.00	-4.26	23184.230	2.5	43555.220	3.5
490.7692	26.02	-3.18	181830.020	3.0	202200.510	3.0
490.7730	26.00	-1.97	27666.334	1.0	48036.667	2.0
490.7730	73.00	-3.11	1935.780	0.0	22311.799	0.0
490.7780	60.00	-1.06	2339.068	0.0	22714.879	0.0
490.7813	22.00	-1.44	26910.705	6.0	47280.690	5.0
490.7839	7.00	-2.70	95532.120	2.5	115902.000	2.5
490.7858	25.00	-1.80	37789.930	2.5	58159.730	2.5
490.7890	44.00	-1.38	8952.985	0.0	29328.340	0.0
490.7892	9.02	-4.44	444552.080	3.5	464921.740	3.5
490.8032	26.00	-3.49	34017.084	1.0	54386.160	1.0
490.8051	28.01	-4.80	110573.360	2.5	130942.360	1.5
490.8065	28.01	-2.91	110573.360	2.5	130942.300	1.5
490.8099	17.02	-2.28	196155.800	3.5	216524.600	2.5
490.8264	22.00	-4.39	25388.334	4.0	45756.450	5.0
490.8294	25.01	-3.31	53017.160	1.0	73385.150	1.0
490.8294	25.00	.36	41932.640	3.5	62300.630	4.5
490.8309	14.02	-2.88	230268.620	3.0	250636.550	2.0
490.8400	23.00	-3.82	19023.470	4.5	39391.020	4.5
490.8427	9.01	-2.82	266338.700	0.0	286706.140	1.0
490.8449	22.00	-1.44	21739.713	5.0	42107.060	4.0
490.8477	22.00	-4.77	27740.190	2.0	48107.420	2.0
490.8482	27.00	-1.47	28470.510	1.5	48837.720	.5
490.8558	22.00	-1.28	26772.965	5.0	47139.860	4.0
490.8569	24.00	-4.10	24299.890	2.0	44666.740	1.0
490.8581	25.01	-3.52	62572.200	2.0	82939.000	1.0
490.8600	7.00	-3.92	95475.280	.5	115842.000	.5
490.8600	7.00	-4.03	95475.280	.5	115842.000	1.5
490.8611	26.00	-4.26	20037.815	0.0	40404.492	1.0
490.8699	23.00	-.96	13801.530	1.5	34167.840	2.5
490.8714	26.01	-4.43	64806.520	.5	85172.770	.5
490.8933	25.00	-3.41	38120.180	4.5	58485.520	4.5
490.8996	24.01	-4.76	67393.800	3.5	87758.880	3.5
490.9000	39.00	-.76	15970.189	0.0	36340.937	0.0
490.9027	29.01	-.77	115569.200	5.0	135934.150	5.0
490.9087	30.02	-1.88	260418.100	2.0	280782.800	3.0
490.9087	30.02	-3.03	260418.100	2.0	280782.800	2.0
490.9099	22.00	-1.32	6661.003	3.0	27025.652	4.0
490.9168	22.00	-3.25	19421.576	3.0	39785.940	4.0
490.9190	42.00	-.77	23955.283	0.0	44325.242	0.0
490.9191	23.00	-1.88	17242.050	5.5	37606.320	6.5
490.9219	9.02	-2.37	444575.350	2.5	464939.500	2.5
490.9232	27.01	-4.77	65512.400	0.0	85876.500	1.0
490.9274	22.00	-3.98	25643.695	3.0	46007.620	4.0
490.9302	25.01	-3.21	62572.200	2.0	82936.010	3.0
490.9311	25.00	-4.39	35041.370	3.5	55405.140	2.5
490.9376	28.01	-4.22	116167.760	1.5	136531.260	1.5
490.9382	26.00	-1.27	31686.342	2.0	52049.820	2.0
490.9718	28.00	-2.33	30392.052	1.0	50754.137	2.0
490.9721	29.01	1.01	115569.200	5.0	135931.270	6.0
490.9733	25.00	.45	41932.640	3.5	62294.660	3.5
490.9738	21.00	-2.46	16210.800	3.5	36572.800	2.5
490.9738	8.03	-.48	616325.500	1.5	636687.500	1.5
490.9738	17.01	-2.81	158177.100	1.0	178539.100	2.0
490.9743	28.01	-1.25	98561.220	2.5	118923.200	3.5
490.9837	29.01	-3.03	116080.460	3.0	136442.050	3.0
490.9892	28.01	.34	98467.250	3.5	118828.610	2.5
490.9897	7.00	-3.43	95493.660	1.5	115855.000	.5
490.9897	7.00	-3.53	95493.660	1.5	115855.000	1.5
490.9897	7.00	-3.22	95493.660	1.5	115855.000	2.5
491.0025	26.00	-1.55	27394.676	3.0	47755.485	3.0
491.0050	60.00	-1.05	0.000	0.0	20366.391	0.0
491.0120	64.00	-.69	6936.547	0.0	27302.648	0.0
491.0126	24.01	-3.75	53051.550	1.5	73411.940	1.5
491.0310	26.00	-.92	33801.555	2.0	54161.182	3.0
491.0350	92.00	-.94	6210.629	0.0	26575.776	0.0
491.0400	62.00	.13	2258.411	0.0	22623.351	0.0
491.0498	25.02	-4.10	195948.440	3.5	216307.290	4.5
491.0534	30.02	-.21	217846.800	2.0	238205.500	1.0
491.0550	26.00	-.84	34017.084	1.0	54375.719	2.0
491.0553	9.02	-4.12	443865.310	1.5	464223.930	1.5
491.0664	23.00	-2.58	17116.920	3.5	37475.080	3.5
491.0712	24.00	-3.00	24897.550	4.0	45255.510	3.0
491.0740	74.00	-1.24	19115.832	0.0	39479.362	0.0
491.0925	28.01	-4.74	116191.470	2.5	136548.550	2.5
491.0950	41.00	-.63	13389.148	0.0	33751.807	0.0
491.1065	29.01	-4.90	130386.400	2.0	150742.900	3.0
491.1219	22.01	-.77	25193.040	2.5	45548.900	1.5
491.1226	21.00	-4.83	18515.770	1.5	38871.600	2.5
491.1267	28.01	-4.66	116191.470	2.5	136547.130	3.5
491.1357	25.00	-2.44	38934.940	2.5	59290.230	3.5
491.1367	9.02	-3.72	443868.680	2.5	464223.930	1.5
491.1381	28.01	-2.54	109148.050	4.5	129503.240	4.5
491.1395	24.01	-3.64	53051.550	1.5	73406.680	.5
491.1400	63.00	.17	13953.751	0.0	34314.544	0.0
491.1401	26.00	-3.72	29371.860	3.0	49726.964	4.0
491.1456	7.00	-3.25	95532.120	2.5	115887.000	1.5
491.1456	7.00	-3.37	95532.120	2.5	115887.000	2.5
491.1456	7.00	-2.32	95532.120	2.5	115887.000	3.5
491.1509	26.00	-2.04	34328.733	3.0	54683.390	4.0
491.1571	22.00	-3.48	18911.399	2.0	39265.800	2.0
491.1598	26.00	-1.80	34636.820	2.0	54991.110	1.0
491.1651	22.01	-3.15	47466.800	3.5	67820.870	4.5
491.1702	24.00	-2.73	37233.500	5.0	57587.360	4.0
491.1741	22.00	-2.97	21469.494	3.0	41823.190	3.0
491.1765	26.00	-1.57	31686.342	2.0	52039.939	1.0
491.1793	27.00	-4.53	23184.230	2.5	43537.710	1.5
491.1890	25.01	-4.61	62564.700	1.0	82917.780	2.0
491.2020	28.00	-.58	30392.052	1.0	50744.593	1.0
491.2172	24.00	-2.86	31049.330	6.0	51401.240	5.0
491.2348	23.01	-2.72	32040.760	2.0	52391.940	3.0
491.2356	24.00	-2.51	37205.880	3.0	57557.030	3.0
491.2361	29.01	.36	115639.020	2.0	135990.150	3.0
491.2380	70.00	-1.39	19599.777	0.0	39956.508	0.0
491.2397	27.00	-4.96	4690.180	2.5	25041.160	1.5
491.2438	28.01	-4.58	116191.470	2.5	136542.280	3.5
491.2472	24.01	-1.28	52298.120	3.5	72648.790	3.5
491.2495	26.00	-1.07	33412.706	3.0	53763.280	3.0
491.2520	90.01	-2.59	4032.876	0.0	24389.027	0.0
491.2600	76.00	-1.49	12663.231	0.0	33019.051	0.0
491.2630	59.01	-1.52	7581.807	0.0	27937.502	0.0
491.2825	22.00	-4.44	21469.494	3.0	41818.700	4.0
491.2860	27.00	-3.61	33439.720	4.5	53788.780	4.5
491.2909	29.01	.24	115665.400	1.0	136014.260	2.0
491.2981	23.02	-2.46	141987.320	3.5	162335.880	3.5
491.2993	25.01	-2.51	62587.500	3.0	82936.010	3.0
491.3034	7.00	-3.22	95493.660	1.5	115842.000	.5
491.3034	7.00	-4.52	95493.660	1.5	115842.000	1.5
491.3041	23.00	-2.63	17181.980	4.5	37530.290	5.5
491.3080	24.00	-1.62	28679.430	1.0	49027.580	2.0
491.3082	10.01	.51	318202.370	1.5	338550.510	.5
491.3116	23.03	.03	263111.400	4.0	283459.400	3.0
491.3150	26.01	-4.10	63948.840	4.5	84296.700	5.5
491.3160	92.01	-2.14	2258.411	0.0	22611.911	0.0
491.3184	25.02	-4.00	195315.780	2.5	215663.500	3.5
491.3250	62.01	-1.13	5242.739	0.0	25595.866	0.0
491.3261	23.03	-1.41	263593.000	2.0	283940.400	2.0
491.3305	24.00	-2.41	35807.900	2.0	56155.120	2.0
491.3360	24.00	-3.96	35862.820	4.0	56209.810	3.0
491.3379	26.00	-3.10	33765.291	2.0	54112.203	2.0
491.3416	25.00	-4.65	37789.930	2.5	58136.690	3.5
491.3448	22.00	-4.05	20208.444	2.0	40556.070	1.0
491.3505	9.02	-3.68	444575.350	2.5	464921.740	3.5
491.3604	18.01	-1.05	198594.920	3.5	218940.900	4.5
491.3616	22.00	.31	15108.121	3.0	35454.051	4.0
491.3626	24.00	-3.20	31055.350	5.0	51401.240	5.0
491.3701	25.01	-3.63	62572.200	2.0	82917.780	2.0
491.3710	24.00	-4.87	33906.650	1.0	54252.190	2.0
491.3744	24.00	-1.94	28682.180	2.0	49027.580	2.0
491.3848	25.00	-.29	41789.480	4.5	62134.450	5.5
491.3877	26.00	-2.86	38175.332	3.0	58520.180	4.0
491.3959	23.00	-1.32	19078.150	3.5	39422.660	2.5
491.3968	28.00	-1.36	30192.268	0.0	50536.742	1.0
491.4208	27.00	-3.18	34133.590	3.5	54477.070	3.5
491.4268	9.02	-2.77	444578.510	4.5	464921.740	3.5
491.4278	24.00	-2.68	37244.170	4.0	57587.360	4.0
491.4300	62.01	-2.77	3468.273	0.0	23817.051	0.0
491.4314	18.01	-2.58	172213.800	1.5	192556.840	2.5
491.4348	17.01	-1.45	126782.800	3.0	147125.700	3.0
491.4370	60.01	-1.64	2984.328	0.0	23332.816	0.0
491.4713	24.00	-3.50	35813.730	3.0	56155.120	2.0
491.4754	20.02	-4.47	350779.470	3.0	371120.690	4.0
491.4756	25.01	-3.49	49889.860	3.0	70231.070	2.0
491.4933	7.00	-2.49	86137.320	.5	106477.800	.5
491.4940	58.01	-1.34	7017.204	0.0	27363.332	0.0
491.4960	73.00	-3.44	0.000	0.0	20346.046	0.0
491.5020	75.00	-2.04	12179.286	0.0	32525.083	0.0
491.5062	26.00	-4.92	34039.495	4.0	54379.440	3.0
491.5107	24.01	-4.02	68583.440	2.5	88923.200	2.5
491.5223	24.00	-3.92	35870.530	4.0	56209.810	3.0
491.5233	22.00	-.86	15220.390	5.0	35559.627	5.0
491.5260	72.00	-1.04	19680.435	0.0	40025.239	0.0
491.5363	24.00	-2.72	44373.340	3.0	64712.040	3.0
491.5363	12.02	.52	564289.800	1.0	584628.500	2.0
491.5363	12.02	.52	564289.800	1.0	584628.500	2.0
491.5375	26.01	-4.62	64834.120	1.5	85172.770	.5
491.5436	17.01	-1.95	141010.000	2.0	161348.400	1.0
491.5448	14.02	-.89	234428.400	1.0	254766.750	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
491.5515	27.00	-4.72	13795.520	2.5	34133.590	3.5
491.5525	24.01	-3.47	69170.600	5.5	89508.630	5.5
491.5532	27.01	-3.79	27469.200	5.0	47807.200	4.0
491.5776	24.00	-3.69	24056.110	5.0	44393.100	6.0
491.5786	18.02	-2.36	211004.850	2.0	231341.800	2.0
491.5791	29.01	-.03	117883.140	4.0	138220.070	4.0
491.5798	13.01	-1.22	124792.000	2.0	145128.900	3.0
491.5813	18.01	-2.69	198604.060	4.5	218940.900	4.5
491.5813	18.01	-.96	198604.060	4.5	218940.900	5.5
491.5815	27.00	-3.06	33945.900	2.5	54282.730	2.5
491.5827	23.00	-3.28	30864.340	5.5	51201.120	6.5
491.5830	64.00	-1.02	7178.519	0.0	27520.964	0.0
491.5841	28.01	-1.09	98561.220	2.5	118897.940	2.5
491.5861	24.01	-4.99	66355.130	1.5	86691.770	2.5
491.5866	18.01	-4.66	183797.360	2.5	204133.980	2.5
491.5880	7.01	-1.44	202765.260	2.0	223101.820	1.0
491.5899	23.00	-3.77	10892.500	3.5	31228.980	2.5
491.5943	18.01	-1.53	189040.870	1.5	209377.170	2.5
491.5992	12.02	.83	561798.700	3.0	582134.800	4.0
491.5992	12.02	.83	561798.700	3.0	582134.800	4.0
491.5996	27.00	-4.61	22475.360	4.5	42811.440	3.5
491.6020	28.01	-4.30	115565.980	2.5	135901.960	2.5
491.6180	74.00	-1.69	14840.984	0.0	35181.980	0.0
491.6223	25.02	-2.67	195948.440	3.5	216283.580	3.5
491.6317	15.00	-3.31	56090.450	1.5	76425.200	2.5
491.6397	25.02	-.26	172613.870	2.5	192948.290	1.5
491.6573	22.00	-2.99	28702.768	3.0	49036.460	4.0
491.6600	64.00	-.53	10162.848	0.0	30502.107	0.0
491.6609	22.00	-3.30	25388.334	4.0	45721.878	4.0
491.6653	26.00	-3.83	31686.342	2.0	52019.706	1.0
491.6707	25.02	-1.98	174975.650	5.5	195308.790	4.5
491.6729	24.01	-3.47	68992.550	4.5	89325.600	4.5
491.6852	23.01	-4.56	16340.970	3.0	36673.510	2.0
491.6855	26.00	-4.04	34547.192	2.0	54879.720	2.0
491.6908	25.02	-1.49	172547.850	2.5	192880.160	3.5
491.6958	23.03	-.25	263608.300	3.0	283940.400	2.0
491.7036	28.01	-4.76	101754.800	2.5	122086.580	3.5
491.7176	16.01	-.24	112937.330	.5	133268.530	.5
491.7215	24.01	-2.34	70394.460	4.5	90725.500	3.5
491.7232	24.01	-2.43	68305.730	1.5	88636.700	1.5
491.7243	26.00	-1.15	33801.555	2.0	54132.480	1.0
491.7324	24.01	-4.55	68843.510	3.5	89174.100	3.5
491.7333	20.02	-.79	370141.770	5.0	390472.320	5.0
491.7399	25.01	-3.89	62587.500	3.0	82917.780	2.0
491.7411	25.01	-3.85	49820.160	2.0	70150.390	1.0
491.7461	20.02	-2.52	370141.770	5.0	390471.790	4.0
491.7464	9.01	-3.30	236960.830	1.0	257290.840	2.0
491.7474	25.00	-1.33	38008.700	5.5	58338.670	6.5
491.7478	27.00	-1.68	23207.760	1.5	43537.710	1.5
491.7689	24.00	-2.87	39158.630	4.0	59487.710	4.0
491.7805	17.01	.23	126725.100	1.0	147053.700	2.0
491.7816	22.00	-2.83	21588.496	4.0	41917.050	4.0
491.7848	8.00	-4.16	102968.355	3.0	123296.777	2.0
491.7878	26.00	-3.17	24335.764	2.0	44664.061	2.0
491.7880	27.01	-4.53	65153.900	4.0	85482.190	4.0
491.7982	16.01	-.74	110313.130	2.5	130641.000	1.5
491.8021	26.00	-.95	34121.623	0.0	54449.330	1.0
491.8073	24.01	-2.65	52321.300	4.5	72648.790	3.5
491.8100	29.01	-2.23	115662.770	4.0	135990.150	3.0
491.8122	28.01	-4.28	110573.360	2.5	130900.650	2.5
491.8178	27.00	-3.82	20500.710	1.5	40827.770	1.5
491.8257	23.01	-3.25	52700.030	2.0	73026.760	2.0
491.8362	28.00	-.15	30979.789	4.0	51306.085	3.0
491.8381	28.01	-4.73	109148.050	4.5	129474.270	3.5
491.8381	29.01	.82	117747.450	3.0	138073.670	4.0
491.8480	22.00	-4.81	25438.898	2.0	45764.710	1.0
491.8567	28.01	-4.80	101754.800	2.5	122080.250	2.5
491.8605	26.00	-4.56	24338.766	3.0	44664.061	2.0
491.8706	28.00	-2.05	30392.052	1.0	50716.927	1.0
491.8821	23.03	-3.96	263902.300	3.0	284226.700	3.0
491.8952	26.00	-.94	33507.102	3.0	53830.960	3.0
491.8954	28.00	-3.83	34408.574	1.0	54732.425	2.0
491.8990	62.00	-.13	1451.835	0.0	21781.212	0.0
491.9000	26.00	-.55	23110.925	3.0	43434.585	3.0
491.9064	13.01	-1.91	125866.700	1.0	146190.100	0.0
491.9173	22.00	-2.03	25388.334	4.0	45711.280	4.0
491.9184	27.01	-5.58	27484.300	3.0	47807.200	4.0
491.9189	7.00	-3.00	95532.120	2.5	115855.000	1.5
491.9189	7.00	-2.85	95532.120	2.5	115855.000	2.5
491.9279	20.02	.29	339198.090	1.0	359520.600	2.0
491.9332	18.01	-2.76	182222.030	1.5	202544.320	2.5
491.9424	27.00	-2.87	33466.870	3.5	53788.780	4.5
491.9436	24.00	.33	44514.440	7.0	64836.300	6.0
491.9451	19.02	-.47	243448.200	1.5	263770.000	.5
491.9484	22.00	-2.48	28702.768	3.0	49024.430	3.0
491.9499	22.00	-2.33	20062.980	1.0	40384.580	1.0
491.9613	22.00	-4.56	27887.740	3.0	48208.870	3.0
491.9714	24.00	-4.57	27597.220	3.0	47917.930	2.0
491.9750	26.00	-4.60	26406.490	1.0	46727.055	2.0
491.9820	90.01	-1.53	6129.972	0.0	26455.919	0.0
491.9842	20.02	-2.89	350741.190	3.0	371061.370	4.0
491.9857	24.00	-3.63	27382.180	2.0	47702.300	3.0
491.9859	20.02	-1.41	350741.190	3.0	371061.300	3.0
491.9867	22.00	-.45	17423.853	2.0	37743.933	3.0
491.9881	26.00	-4.77	31937.308	1.0	52257.330	0.0
491.9881	24.00	-3.19	25038.610	5.0	45358.630	4.0
491.9973	25.02	-2.29	195592.090	1.5	215911.730	1.5
492.0022	29.01	-.98	115639.020	2.0	135958.460	1.0
492.0027	22.00	-3.88	22404.690	3.0	42724.110	2.0
492.0059	22.00	-4.36	25493.722	2.0	45813.010	2.0
492.0110	73.00	-1.31	12743.888	0.0	33068.637	0.0
492.0182	22.00	-3.59	28596.293	1.0	48915.070	2.0
492.0184	24.00	-3.42	27382.180	2.0	47700.950	2.0
492.0225	24.01	-2.38	31351.150	2.5	51669.750	2.5
492.0245	9.00	-3.31	117622.923	2.5	137941.440	2.5
492.0274	27.00	-3.65	15774.040	1.5	36092.440	2.5
492.0298	13.01	-4.25	125866.700	1.0	146185.000	2.0
492.0298	13.01	-4.72	125866.700	1.0	146185.000	1.0
492.0300	23.00	-4.48	19023.470	4.5	39341.760	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
492.0371	24.00	-3.47	27382.180	2.0	47700.180	1.0
492.0373	22.00	-3.29	19322.988	2.0	39640.980	3.0
492.0380	62.01	-1.38	8630.355	0.0	28953.989	0.0
492.0409	25.01	-2.69	82387.530	3.0	102705.370	3.0
492.0458	23.02	-2.69	141270.400	3.5	161588.040	3.5
492.0510	26.00	-.10	22845.856	5.0	43163.282	4.0
492.0523	25.01	-2.33	44138.960	1.0	64456.330	2.0
492.0680	60.01	-1.65	483.945	0.0	20806.339	0.0
492.0744	27.00	-5.27	8460.810	2.5	28777.270	3.5
492.0758	28.01	-.42	100845.410	.5	121161.810	1.5
492.0763	9.02	-3.18	444623.120	3.5	464939.500	2.5
492.0821	27.00	-4.04	14036.280	1.5	34352.420	1.5
492.0826	27.00	-1.38	32654.500	2.5	52970.620	2.5
492.0886	28.01	-1.23	98561.220	2.5	118877.090	1.5
492.0901	25.01	-2.91	82387.530	3.0	102703.340	4.0
492.0918	20.02	-.79	350805.320	4.0	371121.060	5.0
492.0959	24.00	-1.30	25038.610	5.0	45354.180	5.0
492.0980	57.01	-1.60	967.890	0.0	21289.046	0.0
492.0996	23.00	-4.28	19026.340	2.5	39341.760	3.5
492.1003	24.00	-2.90	33762.740	6.0	54078.130	5.0
492.1007	20.02	-2.11	350805.320	4.0	371120.690	4.0
492.1070	44.00	-1.10	8469.040	0.0	28789.824	0.0
492.1080	23.00	-2.57	21603.170	4.5	41918.240	5.5
492.1097	23.00	-6.24	14910.040	3.5	35225.040	2.5
492.1101	22.00	-3.72	21588.496	4.0	41903.480	5.0
492.1121	28.01	-3.82	101246.160	.5	121561.060	.5
492.1140	60.00	-.82	3629.588	0.0	23950.083	0.0
492.1190	28.00	-2.62	29013.228	2.0	49327.845	2.0
492.1270	73.00	-2.20	5968.656	0.0	26288.614	0.0
492.1289	24.00	-3.94	24200.230	6.0	44514.440	7.0
492.1296	25.01	-1.93	53597.130	2.0	73911.310	1.0
492.1332	25.01	-2.38	87858.510	2.0	108172.540	1.0
492.1419	6.00	-3.01	68856.330	1.0	89170.000	1.0
492.1453	29.01	-3.55	115639.020	2.0	135952.550	2.0
492.1533	15.04	-2.28	448216.800	3.5	468530.000	3.5
492.1533	15.04	-.73	448216.800	4.5	468530.000	3.5
492.1533	15.04	-.85	448216.800	3.5	468530.000	2.5
492.1608	28.01	-.02	98561.220	2.5	118874.110	3.5
492.1613	23.00	-3.45	19078.150	3.5	39391.020	4.5
492.1616	24.00	-3.00	37244.170	4.0	57557.030	3.0
492.1618	27.00	-1.38	33945.900	2.5	54258.750	2.5
492.1620	90.01	-1.74	9114.300	0.0	29432.813	0.0
492.1625	24.01	-2.33	66355.130	1.5	86667.950	1.5
492.1630	24.00	-3.16	23933.900	4.0	44246.700	4.0
492.1769	22.00	.03	17540.205	3.0	37852.434	4.0
492.1790	57.01	-1.48	1935.780	0.0	22253.591	0.0
492.1839	25.01	-3.14	87858.510	2.0	108170.450	2.0
492.1870	39.00	-.82	11292.053	0.0	31609.534	0.0
492.1930	2.00	-.44	171135.000	0.0	191452.233	0.0
492.1945	9.00	-2.31	116143.579	.5	136455.080	1.5
492.2006	28.01	-1.60	112719.750	3.5	133031.000	4.5
492.2115	26.01	-4.86	50212.930	2.5	70523.730	3.5
492.2129	27.00	-4.23	32464.730	4.5	52775.470	4.5
492.2163	26.00	-2.79	33946.920	2.0	54257.520	2.0
492.2173	24.00	-2.83	27703.840	4.0	48014.400	4.0
492.2212	17.01	-.84	126743.300	2.0	147053.700	2.0
492.2255	28.01	-3.32	100592.980	3.5	120903.200	3.5
492.2280	24.00	.30	25038.610	5.0	45348.730	6.0
492.2294	24.01	-4.97	67448.820	4.5	87758.880	3.5
492.2338	7.00	-3.99	95532.120	2.5	115842.000	1.5
492.2362	23.00	-.39	23608.800	1.5	43918.580	2.5
492.2379	28.01	-4.04	115592.250	1.5	135901.960	2.5
492.2394	25.02	-3.12	195752.480	2.5	216062.130	2.5
492.2420	7.00	-3.73	94793.460	1.5	115103.000	2.5
492.2522	24.00	-1.64	24282.340	4.0	44591.460	5.0
492.2600	30.02	-2.15	260418.100	2.0	280726.900	2.0
492.2600	30.02	-3.11	260418.100	2.0	280726.900	1.0
492.2694	6.00	-2.63	68856.330	1.0	89164.740	1.0
492.2849	21.00	-3.69	16022.720	2.5	36330.490	2.5
492.2864	26.01	-4.33	78137.530	3.5	98445.240	4.5
492.3007	25.00	-1.87	38120.180	4.5	58427.300	5.5
492.3089	22.00	-2.30	20062.980	1.0	40369.760	0.0
492.3124	7.00	-3.18	94793.460	1.5	115100.100	2.5
492.3165	9.01	-4.39	236960.830	1.0	257267.300	1.0
492.3303	22.00	-1.93	18145.400	2.0	38451.298	2.0
492.3315	28.01	-3.08	100010.170	.5	120316.020	.5
492.3470	73.00	-2.95	5565.369	0.0	25876.247	0.0
492.3552	23.01	-2.34	32299.240	1.0	52604.110	1.0
492.3580	64.01	-.22	17583.339	0.0	37893.764	0.0
492.3773	23.00	-3.76	21646.390	3.5	41950.350	2.5
492.3830	62.01	-2.03	4355.506	0.0	24664.899	0.0
492.3897	26.01	-4.41	83305.370	3.5	103608.820	4.5
492.3900	75.00	-1.16	14115.066	0.0	34424.171	0.0
492.3994	28.01	-4.15	101258.010	1.5	121561.060	.5
492.4040	62.00	-.43	3952.218	0.0	24260.745	0.0
492.4054	16.01	-.13	109831.280	1.5	130134.080	2.5
492.4234	28.01	-4.56	53601.190	1.5	73903.250	.5
492.4297	17.01	-1.78	126032.000	2.0	146333.800	2.0
492.4308	22.00	-2.68	26892.926	3.0	47194.680	4.0
492.4356	22.00	-2.70	25388.334	4.0	45689.890	3.0
492.4418	19.02	-1.47	242526.700	.5	262828.000	1.5
492.4420	90.01	-2.76	4032.876	0.0	24339.836	0.0
492.4530	60.00	-.15	0.000	0.0	20306.506	0.0
492.4582	28.00	-2.26	29013.228	2.0	49313.851	3.0
492.4640	92.01	-1.96	5565.369	0.0	25871.422	0.0
492.4661	19.02	-1.17	225082.000	1.5	245382.300	.5
492.4685	21.00	-4.52	18571.400	2.5	38871.600	2.5
492.4724	28.01	-3.39	99844.130	3.5	120144.170	2.5
492.4760	20.02	-2.52	370172.430	4.0	390472.320	5.0
492.4775	26.00	-2.10	18378.187	2.0	38678.015	2.0
492.4780	42.00	-.17	30327.228	0.0	50632.704	0.0
492.4855	17.01	-.19	137877.600	2.0	158177.100	1.0
492.4889	20.02	-.87	370172.430	4.0	390471.790	4.0
492.4913	26.01	-4.46	22939.350	2.5	43238.610	2.5
492.4960	73.00	-1.43	17099.394	0.0	37404.127	0.0
492.4988	27.00	-.23	32464.730	4.5	52763.680	3.5
492.5017	25.00	-4.21	23296.670	3.5	43595.500	2.5
492.5068	9.02	-2.29	444623.120	3.5	464921.740	3.5
492.5151	24.01	-2.80	70427.220	3.5	90725.500	3.5

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WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
492.5182	25.02	-4.46	174247.630	.5	194545.780	.5
492.5219	17.01	-2.22	126032.000	2.0	146330.000	1.0
492.5269	26.00	-1.21	33095.922	4.0	53393.715	4.0
492.5289	28.01	-4.66	95893.760	1.5	116191.470	2.5
492.5323	16.01	-.17	109560.500	.5	129858.070	1.5
492.5364	23.03	-2.03	264401.900	4.0	284699.300	5.0
492.5394	28.01	-2.78	96535.870	3.5	116833.150	4.5
492.5397	22.00	-.88	15156.787	4.0	35454.051	4.0
492.5483	26.00	-3.43	31307.235	4.0	51604.146	3.0
492.5559	28.00	-1.73	29481.020	4.0	49777.619	3.0
492.5630	59.01	-2.55	1693.808	0.0	21995.780	0.0
492.5645	26.00	-4.76	24118.815	4.0	44415.057	4.0
492.5653	28.01	-1.54	112686.300	2.5	132982.510	1.5
492.5656	23.00	-.89	9824.580	2.5	30120.780	2.5
492.5680	24.01	-2.49	68760.000	3.5	89056.100	2.5
492.5709	27.00	-4.61	26450.020	2.5	46746.000	2.5
492.5828	28.01	-2.64	115827.120	3.5	136122.610	2.5
492.6000	73.00	-2.14	5968.656	0.0	26269.103	0.0
492.6147	22.00	-1.08	6598.749	2.0	26892.926	3.0
492.6190	42.00	-.53	24358.571	0.0	44658.235	0.0
492.6313	23.01	-3.97	52657.510	4.0	72951.000	4.0
492.6418	29.01	.07	115665.400	1.0	135958.460	1.0
492.6430	42.00	-1.30	18147.942	0.0	38446.617	0.0
492.6475	26.00	-4.98	37521.144	2.0	57813.970	3.0
492.6481	17.01	-3.94	159574.200	2.0	179867.000	1.0
492.6556	28.01	-4.07	101754.800	2.5	122047.290	3.5
492.6639	25.00	-3.31	35165.050	1.5	55457.200	.5
492.6672	9.00	-1.38	117164.006	2.5	137456.020	3.5
492.6777	25.00	-4.56	45013.550	2.5	65305.130	3.5
492.6822	26.00	-2.11	29313.008	6.0	49604.402	5.0
492.6857	29.01	-4.24	113302.800	4.0	133594.050	3.0
492.6872	18.01	-1.17	186340.480	1.5	206631.670	2.5
492.6937	23.01	-4.14	14655.630	5.0	34946.550	4.0
492.6950	27.00	-2.06	31871.150	3.5	52162.020	3.5
492.6957	23.01	-4.25	19112.930	4.0	39403.770	4.0
492.7054	25.02	-3.37	172451.230	1.5	192741.670	.5
492.7122	25.00	-3.75	35114.980	2.5	55405.140	2.5
492.7132	23.01	-3.42	52391.940	3.0	72682.060	2.0
492.7178	15.01	-.73	103166.370	1.0	123456.300	1.0
492.7425	26.00	-1.44	28819.966	5.0	49108.876	4.0
492.7477	10.00	-3.68	152970.733	0.0	173259.430	1.0
492.7583	26.02	-4.84	93388.750	4.0	113677.010	5.0
492.7588	23.00	-2.98	17242.050	5.5	37530.290	5.5
492.7614	26.00	-3.24	27543.000	1.0	47831.132	2.0
492.7652	22.00	-3.62	21469.494	3.0	41757.470	3.0
492.7698	23.00	-2.51	17054.870	2.5	37342.660	2.5
492.7808	9.00	-3.89	117164.006	2.5	137451.340	2.5
492.7853	29.01	-4.42	115665.400	1.0	135952.550	2.0
492.7974	7.00	-4.11	94770.850	.5	115057.500	1.5
492.7987	24.00	-1.16	42387.320	7.0	62673.920	6.0
492.8052	6.00	-4.20	68856.330	1.0	89142.660	2.0
492.8090	58.01	-1.64	7017.204	0.0	27309.041	0.0
492.8143	9.00	-3.16	117164.006	2.5	137449.960	1.5
492.8159	25.01	-3.53	82419.480	3.0	102705.370	3.0
492.8238	10.00	-2.50	151038.452	1.0	171324.017	1.0
492.8254	10.01	-2.90	303237.910	1.5	323523.410	2.5
492.8273	27.00	-1.03	25937.590	4.5	46223.010	4.5
492.8300	27.00	-2.65	31871.150	3.5	52156.460	4.5
492.8332	22.00	-.23	17369.590	1.0	37654.770	2.0
492.8343	22.00	-.54	18287.560	4.0	38572.692	5.0
492.8399	17.01	-1.81	141350.000	3.0	161634.900	2.0
492.8440	92.00	-1.24	4194.191	0.0	24484.587	0.0
492.8475	24.00	-3.84	24940.610	2.0	45225.200	2.0
492.8621	23.01	-6.61	14461.730	3.0	34745.720	3.0
492.8633	28.01	-3.23	100619.260	4.5	120903.200	3.5
492.8652	25.01	-2.28	82419.480	3.0	102703.340	4.0
492.8706	25.02	-2.92	195592.090	1.5	215875.730	2.5
492.8764	30.02	-.56	215340.500	2.0	235623.900	3.0
492.8807	9.00	-2.55	116143.579	.5	136426.800	1.5
492.8810	27.00	-3.07	28470.510	1.5	48753.720	1.5
492.8887	22.00	-2.29	6742.757	4.0	27025.652	4.0
492.8980	41.00	-1.06	13066.518	0.0	33354.691	0.0
492.9022	23.01	-3.96	52391.940	3.0	72674.280	2.0
492.9124	24.00	-2.86	27703.840	4.0	47985.760	5.0
492.9129	20.02	-.54	350779.470	3.0	371061.370	4.0
492.9146	20.02	-1.95	350779.470	3.0	371061.300	3.0
492.9215	26.00	-3.21	31322.603	3.0	51604.146	3.0
492.9547	24.00	-4.26	24093.160	2.0	44373.340	3.0
492.9560	62.01	-2.22	5242.739	0.0	25528.525	0.0
492.9639	11.02	-2.63	444748.100	1.5	465027.900	1.5
492.9702	20.02	-2.42	370172.430	4.0	390451.970	3.0
492.9710	22.00	-3.34	21739.713	5.0	42019.220	6.0
492.9770	25.01	-3.89	81220.580	3.0	101499.840	2.0
492.9825	9.00	-1.92	117164.006	2.5	137443.040	2.5
492.9858	23.03	-1.78	265019.700	1.0	285298.600	1.0
492.9907	23.03	-.34	263822.400	4.0	284101.100	3.0
493.0004	22.00	-2.77	21739.713	5.0	42018.010	5.0
493.0057	26.00	-2.72	26623.726	2.0	46901.808	1.0
493.0193	24.00	-.87	31009.000	3.0	51286.520	2.0
493.0276	6.00	-3.48	69689.480	1.0	89966.660	2.0
493.0291	24.01	-3.96	64448.840	2.5	84725.960	3.5
493.0314	26.00	-1.35	31937.308	1.0	52214.330	1.0
493.0446	9.00	-2.59	116143.579	.5	136420.060	.5
493.0505	22.00	-2.25	28638.832	2.0	48915.070	2.0
493.0514	27.01	-6.76	28111.900	2.0	48388.100	2.0
493.0568	28.01	-2.13	109148.050	4.5	129424.030	5.5
493.0628	22.00	-4.50	25537.276	1.0	45813.010	2.0
493.0636	12.02	-.80	561798.700	3.0	582074.400	2.0
493.0636	12.02	-.80	561798.700	3.0	582074.400	2.0
493.0711	29.01	-2.20	116643.960	3.0	136919.350	3.0
493.0720	60.01	-1.87	6533.259	0.0	26814.273	0.0
493.0796	28.00	-1.96	31031.042	3.0	51306.085	3.0
493.0857	25.01	-4.30	62564.700	1.0	82839.490	0.0
493.0870	40.00	-.83	15082.956	0.0	35363.353	0.0
493.0930	39.00	-.84	16050.847	0.0	36330.997	0.0
493.0937	9.00	-1.99	117164.006	2.5	137438.470	3.5
493.0948	10.00	-2.81	151038.452	1.0	171312.870	0.0
493.1006	22.00	-4.20	11531.760	2.0	31805.940	2.0
493.1015	23.00	-4.33	19026.340	2.5	39300.480	2.5
493.1035	24.01	-2.90	70317.040	2.5	90591.100	2.5
493.1049	28.01	-4.46	95893.760	1.5	116167.760	1.5
493.1074	28.02	-2.94	97841.400	2.0	118115.300	2.0
493.1115	24.00	.39	44666.550	8.0	64940.280	7.0
493.1237	26.02	-1.69	206233.310	2.0	226506.540	1.0
493.1258	27.00	-2.73	23152.570	3.5	43425.710	2.5
493.1344	28.01	-4.27	113172.960	4.5	133445.750	4.5
493.1348	23.01	-4.85	44657.990	2.0	64930.760	1.0
493.1501	7.00	-2.77	94830.860	2.5	115103.000	2.5
493.1543	29.01	.26	115639.020	2.0	135910.990	2.0
493.1560	74.00	-1.51	15324.929	0.0	35602.488	0.0
493.1650	28.01	-1.98	109148.050	4.5	129419.580	4.5
493.1687	29.01	.91	115662.770	4.0	135934.150	5.0
493.1779	28.01	-4.71	94729.250	2.5	115000.250	3.5
493.1803	17.01	-4.25	126782.800	3.0	147053.700	2.0
493.1854	24.00	-3.82	27703.840	4.0	47974.530	3.0
493.1915	22.00	-3.78	25797.600	3.0	46068.040	4.0
493.1969	20.02	-1.44	370141.770	5.0	390411.990	5.0
493.2037	23.00	-1.29	9824.580	2.5	30094.520	1.5
493.2049	6.00	-1.60	61981.820	1.0	82251.710	0.0
493.2068	20.02	.37	370141.770	5.0	390411.580	6.0
493.2134	10.01	-4.91	301801.090	3.5	322070.630	2.5
493.2159	28.01	-4.70	115785.060	1.5	136054.500	1.5
493.2195	10.01	-2.38	301801.090	3.5	322070.380	3.5
493.2202	24.00	-3.26	27597.220	3.0	47866.480	4.0
493.2207	7.00	-3.35	94830.860	2.5	115100.100	2.5
493.2548	24.00	-2.88	25038.610	5.0	45306.450	5.0
493.2602	24.00	-1.62	44534.460	4.0	64802.080	5.0
493.2638	26.02	-2.31	206180.410	3.0	226447.880	2.0
493.2658	28.01	.38	98561.220	2.5	118828.610	2.5
493.2740	21.00	-4.97	16009.710	.5	36276.760	1.5
493.2869	27.00	-3.26	15184.040	2.5	35450.560	3.5
493.2925	25.02	-2.96	172613.870	2.5	192880.160	3.5
493.2988	26.00	-3.25	26406.490	1.0	46672.523	0.0
493.3000	7.04	.92	713289.000	0.0	733560.640	0.0
493.3060	92.00	-1.54	3710.246	0.0	23981.639	0.0
493.3069	29.01	-3.52	115569.200	5.0	135834.900	4.0
493.3100	42.00	-1.72	12259.943	0.0	32531.172	0.0
493.3125	28.01	-4.59	115785.060	1.5	136050.530	2.5
493.3175	26.00	-1.84	33801.555	2.0	54066.821	2.0
493.3210	25.00	-4.68	27201.540	2.5	47466.660	1.5
493.3213	18.01	-.67	135085.920	1.5	155351.030	1.5
493.3296	26.00	-2.24	26623.726	2.0	46888.494	2.0
493.3352	26.00	-2.04	34121.623	0.0	54386.160	1.0
493.3463	23.00	-2.11	13801.530	1.5	34065.610	2.5
493.3473	7.00	-3.32	94793.460	1.5	115057.500	1.5
493.3485	23.00	-4.12	22313.990	5.5	42577.980	5.5
493.3578	23.00	-4.26	19078.150	3.5	39341.760	3.5
493.3640	40.00	-.51	14679.669	0.0	34948.679	0.0
493.3660	92.01	-2.26	4355.506	0.0	24624.434	0.0
493.3673	22.00	-3.10	28596.293	1.0	48859.510	1.0
493.3677	27.01	-5.75	27585.300	1.0	47848.500	1.0
493.3697	25.01	-3.57	59537.400	4.0	79800.520	4.0
493.3726	8.03	-.31	616325.500	1.5	636588.500	2.5
493.3738	25.01	-2.50	81236.890	1.0	101499.840	2.0
493.3870	27.00	-4.64	33439.720	4.5	53702.130	3.5
493.3897	27.00	-4.00	33674.380	2.5	53936.680	2.5
493.3955	23.01	-5.26	26839.820	3.0	47101.880	2.0
493.3990	26.00	-1.07	33507.102	3.0	53769.020	4.0
493.4076	56.01	-.13	0.000	0.0	20267.219	0.0
493.4088	26.00	-3.01	26627.612	4.0	46889.126	4.0
493.4116	8.01	-3.29	255689.600	2.5	275951.000	1.5
493.4116	8.01	-4.04	255689.600	2.5	275951.000	2.5
493.4120	64.00	.47	11775.998	0.0	32043.036	0.0
493.4157	24.00	-3.77	24940.610	2.0	45201.840	1.0
493.4196	21.00	-.89	17918.850	.5	38179.920	1.5
493.4301	6.00	-4.93	69710.660	2.0	89971.300	3.0
493.4450	72.01	-2.00	12824.546	0.0	33090.229	0.0
493.4555	8.01	-4.53	255691.400	3.5	275951.000	2.5
493.4583	22.00	-3.34	18818.230	0.0	39077.713	1.0
493.4603	23.01	-3.58	52767.360	3.0	73026.760	2.0
493.4674	28.01	-4.94	53634.620	1.5	73893.730	1.5
493.4830	57.01	-1.35	10001.532	0.0	30265.655	0.0
493.4851	24.00	-2.64	39158.630	4.0	59417.010	3.0
493.4859	28.00	-3.86	29013.228	2.0	49271.578	3.0
493.4898	24.00	-1.60	31028.330	2.0	51286.520	2.0
493.5057	22.00	-2.56	20209.444	2.0	40466.979	2.0
493.5090	30.02	-3.77	260613.100	5.0	280870.500	4.0
493.5090	30.02	-2.08	260613.100	5.0	280870.500	5.0
493.5097	23.00	-2.33	21603.170	4.5	41860.540	4.5
493.5109	7.00	-2.16	86220.480	1.5	106477.800	.5
493.5231	22.00	-4.22	18287.560	4.0	38544.380	3.0
493.5234	27.00	-1.77	26450.020	2.5	46706.830	3.5
493.5256	24.01	-3.31	64061.820	1.5	84318.540	1.5
493.5336	17.00	-2.95	74225.846	1.5	94484.236	2.5
493.5397	6.00	-3.53	69710.660	2.0	89966.800	3.0
493.5419	20.02	-1.41	350805.320	4.0	371061.370	4.0
493.5431	26.00	-3.14	29371.860	3.0	49627.861	4.0
493.5431	6.00	-2.69	69710.660	2.0	89966.660	2.0
493.5436	20.02	-2.84	350805.320	4.0	371061.300	3.0
493.5492	29.01	-4.35	117747.450	3.0	138003.200	2.0
493.5510	70.00	.03	19599.777	0.0	39861.108	0.0
493.5589	10.01	-3.83	301801.090	3.5	322056.440	3.5
493.5620	57.01	-2.63	5646.026	0.0	25906.905	0.0
493.5626	15.01	-.16	111508.500	0.0	131763.700	1.0
493.5665	25.00	-2.28	41230.300	3.5	61485.340	4.5
493.5666	22.00	-2.70	27025.652	4.0	47280.690	5.0
493.5680	21.00	-4.47	16021.780	1.5	36276.760	1.5
493.5689	10.01	-1.43	301801.090	3.5	322056.030	4.5
493.5711	27.00	-1.25	33439.720	4.5	53694.570	3.5
493.5777	23.00	-3.62	30771.720	4.5	51026.300	5.5
493.5810	76.00	-1.27	17583.339	0.0	37843.438	0.0
493.5814	28.01	-4.14	116512.060	3.5	136766.490	2.5
493.5831	28.00	-.30	31786.210	3.0	52040.568	2.0
493.5877	18.01	-2.74	183090.810	1.5	203344.980	1.5
493.5909	21.00	-3.95	16022.720	2.5	36276.760	1.5
493.5984	28.01	-3.97	95573.390	3.5	115827.120	3.5
493.6011	9.02	-3.58	444238.270	4.5	464491.890	3.5
493.6030	62.01	-2.14	3468.273	0.0	23727.469	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
493.6084	18.01	-1.62	150147.620	2.5	170400.940	2.5
493.6118	28.00	-2.42	33500.854	3.0	53754.036	2.0
493.6126	25.02	-2.22	195462.260	.5	215715.410	1.5
493.6138	11.02	-4.45	442710.500	1.5	462963.600	1.5
493.6162	15.00	-3.95	55939.300	.5	76192.300	1.5
493.6243	27.01	-4.16	64914.710	2.0	85167.380	3.0
493.6326	28.01	-1.29	115870.280	2.5	136122.610	2.5
493.6330	64.00	-.16	10808.108	0.0	31066.073	0.0
493.6335	24.00	-.52	25106.340	3.0	45358.630	4.0
493.6367	10.01	-1.36	292651.320	1.5	312903.480	2.5
493.6377	24.00	-2.70	24282.340	4.0	44534.460	4.0
493.6382	25.03	-2.95	152700.500	4.0	172952.600	3.0
493.6420	73.00	-1.26	12179.286	0.0	32436.882	0.0
493.6426	28.01	-3.42	57080.550	3.5	77332.470	2.5
493.6443	24.00	-3.39	24056.110	5.0	44307.960	5.0
493.6449	22.00	-2.14	18825.890	1.0	39077.713	1.0
493.6652	22.00	-2.08	25438.898	2.0	45689.890	3.0
493.6681	9.02	-3.22	469243.660	4.5	489494.530	3.5
493.6733	23.01	-3.27	52657.510	4.0	72908.170	3.0
493.6770	90.00	-1.15	8711.012	0.0	28967.171	0.0
493.6811	10.01	-3.69	301801.090	3.5	322051.430	2.5
493.6820	25.00	-1.75	41230.300	3.5	61480.600	3.5
493.6879	27.00	-2.14	31871.150	3.5	52121.210	4.5
493.6894	17.01	-1.58	126219.000	3.0	146469.000	3.0
493.7000	22.00	-4.69	25643.695	3.0	45893.260	3.0
493.7019	28.01	-3.64	58705.950	1.5	78955.450	1.5
493.7020	18.01	-2.56	188766.150	2.5	209015.630	3.5
493.7201	29.01	.42	117928.480	1.0	138177.220	2.0
493.7230	70.01	-.67	37344.432	0.0	57598.704	0.0
493.7278	26.00	-2.18	33412.706	3.0	53661.130	3.0
493.7332	27.01	-4.30	27902.500	4.0	48150.700	3.0
493.7341	28.00	-1.22	29084.478	4.0	49332.643	4.0
493.7352	28.01	.49	98561.220	2.5	118809.340	1.5
493.7360	22.00	-1.76	28788.372	4.0	49036.460	4.0
493.7381	30.02	-3.25	260613.100	5.0	280861.100	5.0
493.7381	30.02	-1.60	260613.100	5.0	280861.100	6.0
493.7384	28.01	-2.08	109148.050	4.5	129396.040	5.5
493.7462	29.01	-1.31	117883.140	4.0	138130.810	3.0
493.7510	24.00	-2.97	25038.610	5.0	45286.080	4.0
493.7528	30.02	-2.15	260623.100	4.0	280870.500	4.0
493.7528	30.02	-3.79	260623.100	4.0	280870.500	5.0
493.7630	73.00	-1.11	17260.709	0.0	37513.340	0.0
493.7641	22.00	-2.45	26892.926	3.0	47139.860	4.0
493.7703	28.01	-4.32	99418.610	3.5	119665.290	2.5
493.7725	22.00	-1.11	6556.828	1.0	26803.417	2.0
493.7725	26.02	-4.26	93388.750	4.0	113635.340	4.0
493.7779	28.01	-4.38	115785.060	1.5	136031.430	2.5
493.7833	7.00	-4.30	94770.850	.5	115017.000	.5
493.7833	7.00	-2.53	94770.850	.5	115017.000	1.5
493.7857	27.00	-4.60	23152.570	3.5	43398.620	3.5
493.7896	23.00	-3.60	19145.130	5.5	39391.020	4.5
493.7969	29.01	-.70	115665.400	1.0	135910.990	2.0
493.8028	22.00	-2.11	16106.080	4.0	36351.430	5.0
493.8040	28.01	-2.65	100845.410	.5	121090.710	.5
493.8086	18.01	-4.82	182222.030	1.5	202467.140	1.5
493.8090	77.00	-1.61	12098.628	0.0	32349.373	0.0
493.8100	62.01	-1.90	1935.780	0.0	22186.484	0.0
493.8106	23.00	-3.69	17116.920	3.5	37361.950	4.5
493.8148	22.00	-2.37	21469.494	3.0	41714.350	2.0
493.8152	24.00	-1.62	44591.460	5.0	64836.300	6.0
493.8171	26.00	-.99	31805.059	3.0	52049.820	2.0
493.8279	25.00	-3.93	45060.810	3.5	65305.130	3.5
493.8290	22.00	.03	20795.599	5.0	41039.874	5.0
493.8420	25.01	-4.75	87858.510	2.0	108102.250	3.0
493.8430	44.00	-1.18	9114.300	0.0	29363.651	0.0
493.8453	22.00	-3.58	7255.369	2.0	27498.975	3.0
493.8486	28.01	-3.95	116275.810	3.5	136519.280	4.5
493.8599	17.00	-2.39	74225.846	1.5	94468.857	.5
493.8610	64.00	.44	12421.258	0.0	32669.870	0.0
493.8628	26.02	-4.35	93392.450	3.0	113635.340	4.0
493.8673	19.01	-1.01	194776.100	0.0	215018.800	1.0
493.8703	12.01	-4.49	92790.510	.5	113033.090	1.5
493.8711	28.01	-2.50	110573.360	2.5	130815.910	3.5
493.8735	23.00	-4.97	22121.170	4.5	42363.620	3.5
493.8820	13.01	-4.47	125866.700	1.0	146108.800	1.0
493.8821	26.00	-1.28	23192.486	2.0	43434.585	3.0
493.8925	28.01	-.68	112686.300	2.5	132927.970	1.5
493.8972	27.00	-3.89	23184.230	2.5	43425.710	2.5
493.9013	27.00	-2.15	33462.830	2.5	53704.140	2.5
493.9040	30.02	-2.37	282628.600	2.0	302869.800	3.0
493.9042	10.00	-2.36	150315.861	2.0	170557.050	1.0
493.9106	25.00	.26	42053.730	2.5	62294.660	3.5
493.9106	25.00	-.66	41230.300	3.5	61471.230	2.5
493.9162	25.00	.94	41789.480	4.5	62030.180	4.5
493.9224	26.00	-1.16	33507.102	3.0	53747.547	3.0
493.9226	26.00	-1.81	34017.084	1.0	54257.520	2.0
493.9269	23.00	-1.93	19026.340	2.5	39266.600	1.5
493.9311	25.00	-4.35	35165.050	1.5	55405.140	2.5
493.9396	12.01	-4.79	92790.510	.5	113030.250	.5
493.9406	27.01	-3.47	27106.000	6.0	47345.700	5.0
493.9440	20.02	.29	370172.430	4.0	390411.990	5.0
493.9448	26.00	-4.97	33765.291	2.0	54004.820	3.0
493.9504	27.00	-3.03	33462.830	2.5	53702.130	3.5
493.9601	26.00	-4.83	23783.617	5.0	44022.518	4.0
493.9650	29.01	-4.83	118163.500	2.0	138402.200	3.0
493.9690	26.00	-3.06	6928.266	5.0	27166.804	4.0
493.9745	25.02	-2.60	174874.500	4.5	195112.810	3.5
493.9821	30.02	-1.65	260623.100	4.0	280861.100	5.0
493.9870	23.02	-1.14	161588.040	3.5	181825.840	4.5
493.9899	24.00	-2.09	38537.680	5.0	58775.360	6.0
493.9901	24.00	-2.59	31048.850	1.0	51286.520	2.0
493.9909	28.01	-3.28	99418.610	3.5	119656.250	3.5
493.9916	26.02	-4.86	117950.320	4.0	138187.930	3.0
493.9931	27.00	-1.94	32733.070	3.5	52970.620	2.5
493.9999	27.00	-1.21	33466.870	3.5	53704.140	2.5
494.0006	28.01	-3.08	100078.780	1.5	120316.020	.5
494.0058	29.01	-.80	115665.400	1.0	135902.430	0.0
494.0295	22.00	-1.67	28788.372	4.0	49024.430	3.0
494.0490	27.00	-2.77	33466.870	3.5	53702.130	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
494.0609	6.00	-2.92	68856.330	1.0	89091.100	1.0
494.0616	22.00	-2.65	26803.417	2.0	47038.160	3.0
494.0628	22.00	-3.79	21588.496	4.0	41823.190	3.0
494.0643	28.00	-2.97	35639.148	3.0	55873.780	2.0
494.0756	29.01	-4.26	108335.430	2.0	128569.600	2.0
494.0880	22.00	-2.84	15220.390	5.0	35454.051	4.0
494.0888	21.00	-2.84	16096.860	1.5	36330.490	2.5
494.0949	23.00	-.80	19189.280	1.5	39422.660	2.5
494.0961	22.00	-1.83	15975.590	3.0	36208.920	4.0
494.0971	24.01	-3.10	31351.150	2.5	51584.440	1.5
494.1122	23.02	-1.24	140933.140	3.5	161165.810	2.5
494.1169	25.02	-2.20	115711.600	4.5	135944.080	4.5
494.1301	21.00	-.44	17947.980	1.5	38179.920	1.5
494.1305	22.00	-1.74	6661.003	3.0	26892.926	3.0
494.1349	27.00	-1.14	33462.830	2.5	53694.570	3.5
494.1384	27.01	-6.57	25147.200	4.0	45378.800	4.0
494.1482	23.03	-1.24	265067.400	2.0	285298.600	1.0
494.1520	41.00	-1.44	12017.970	0.0	32254.658	0.0
494.1545	22.00	-2.53	25926.820	4.0	46157.760	5.0
494.1550	22.00	-1.03	17423.853	2.0	37654.770	2.0
494.1647	24.00	-2.11	24303.940	3.0	44534.460	4.0
494.1660	42.01	-.05	25729.749	0.0	45965.864	0.0
494.1669	27.00	-1.06	34196.210	1.5	54426.640	1.5
494.1725	22.00	-2.87	21588.496	4.0	41818.700	4.0
494.1764	28.00	-3.11	42585.296	4.0	62815.340	5.0
494.2007	19.00	-2.74	12985.170	.5	33214.220	.5
494.2138	23.00	-2.16	13801.530	1.5	34030.040	1.5
494.2239	30.02	-3.49	282680.400	4.0	302908.500	4.0
494.2307	27.00	-3.80	23207.760	1.5	43435.580	.5
494.2336	27.00	-1.20	33466.870	3.5	53694.570	3.5
494.2340	71.00	-2.44	1935.780	0.0	22169.111	0.0
494.2371	27.01	-3.77	64359.560	3.0	84587.120	4.0
494.2400	18.01	-2.29	189040.870	1.5	209268.310	1.5
494.2401	22.00	-4.73	25537.276	1.0	45764.710	1.0
494.2407	25.00	-3.27	23296.670	3.5	43524.080	3.5
494.2443	26.00	-1.81	34039.495	4.0	54266.760	5.0
494.2456	16.01	-.87	109560.500	.5	129787.710	.5
494.2490	24.00	-3.93	7593.160	2.0	27820.230	3.0
494.2507	23.03	-1.89	264113.100	4.0	284340.100	4.0
494.2541	22.00	-2.56	26803.417	2.0	47030.280	3.0
494.2577	26.00	-3.06	34328.733	3.0	54555.450	4.0
494.2595	7.00	-3.81	94830.860	2.5	115057.500	1.5
494.2788	28.01	-.77	112686.300	2.5	132912.150	2.5
494.2815	23.00	-4.43	17116.920	3.5	37342.660	2.5
494.2920	18.01	-1.46	159706.460	.5	179931.770	1.5
494.2940	76.00	-1.55	15324.929	0.0	35555.804	0.0
494.2950	60.01	-1.96	5887.999	0.0	26118.833	0.0
494.3018	29.01	-.20	115639.020	2.0	135863.930	1.0
494.3070	90.00	-2.21	2823.013	0.0	23053.356	0.0
494.3075	22.00	-3.64	7255.369	2.0	27480.047	3.0
494.3094	28.01	-2.68	93528.440	3.5	113753.040	4.5
494.3094	15.02	-1.29	202906.400	3.5	223131.000	3.5
494.3094	15.02	.25	202906.400	3.5	223131.000	4.5
494.3094	15.02	.14	202906.400	2.5	223131.000	3.5
494.3191	17.01	-3.31	139350.000	1.0	159574.200	2.0
494.3216	30.02	-3.19	260613.100	5.0	280837.200	4.0
494.3277	27.00	-3.00	31871.150	3.5	52095.000	3.5
494.3345	6.00	-4.82	68856.330	1.0	89079.900	2.0
494.3353	7.00	-3.71	94793.460	1.5	115017.000	.5
494.3353	7.00	-3.12	94793.460	1.5	115017.000	1.5
494.3363	26.00	-2.95	40534.180	3.0	60757.680	4.0
494.3370	29.01	-2.71	108335.430	2.0	128558.900	3.0
494.3450	58.01	-.55	9678.902	0.0	29907.690	0.0
494.3451	24.00	-3.73	42438.820	2.0	62661.960	3.0
494.3519	15.01	.08	103668.740	3.0	123891.600	2.0
494.3541	6.00	-2.46	69744.030	3.0	89966.800	3.0
494.3575	6.00	-3.37	69744.030	3.0	89966.660	2.0
494.3585	26.01	-7.81	18886.750	.5	39109.340	.5
494.3593	23.00	-1.37	19026.340	2.5	39248.900	1.5
494.3649	23.00	-2.99	19078.150	3.5	39300.480	2.5
494.3659	26.01	-3.01	66377.370	3.5	86599.660	2.5
494.3740	59.01	-2.29	3871.561	0.0	24099.162	0.0
494.3761	26.01	-4.79	59663.450	1.5	79885.320	2.5
494.3830	25.01	-3.81	81279.710	4.0	101501.300	3.0
494.3840	58.01	-1.39	7662.464	0.0	27889.656	0.0
494.3900	60.01	-2.27	1613.150	0.0	21840.096	0.0
494.3922	7.00	-2.93	94881.790	3.5	115103.000	2.5
494.4053	22.00	-2.15	28638.832	2.0	48859.510	1.0
494.4089	26.00	-3.79	40534.180	3.0	60754.710	4.0
494.4364	22.00	-2.57	19421.576	3.0	39640.980	3.0
494.4385	25.01	-3.88	81279.710	4.0	101499.030	4.0
494.4392	22.00	-1.88	15877.180	2.0	36096.470	3.0
494.4429	23.00	-1.38	13810.900	.5	34030.040	1.5
494.4463	27.01	-4.91	65657.500	1.0	85876.500	1.0
494.4546	25.00	-4.20	27248.000	1.5	47466.660	1.5
494.4575	24.00	-1.01	31028.330	2.0	51246.870	1.0
494.4620	58.01	-.82	8065.752	0.0	28289.753	0.0
494.4720	27.00	-3.69	23207.760	1.5	43425.710	2.5
494.4808	23.00	-3.02	13801.530	1.5	34019.120	1.5
494.4908	24.00	-3.81	27597.220	3.0	47814.400	3.0
494.4916	7.00	-3.21	94770.850	.5	114988.000	.5
494.4916	7.00	-3.84	94770.850	.5	114988.000	1.5
494.4962	24.00	-2.54	44534.460	4.0	64751.420	4.0
494.4977	24.00	-4.81	38537.680	5.0	58754.580	5.0
494.4988	10.00	-2.55	150315.861	2.0	170532.717	2.0
494.4989	23.00	-2.87	11100.650	4.5	31317.500	4.5
494.5074	23.01	-4.43	26839.820	3.0	47056.320	4.0
494.5099	22.01	-6.40	9518.050	2.5	29734.450	3.5
494.5277	24.00	-4.43	24897.550	4.0	45113.220	3.0
494.5282	27.00	-3.79	36329.860	2.5	56545.510	2.5
494.5304	26.00	-3.20	24335.764	2.0	44551.325	3.0
494.5443	28.00	-.69	30619.440	2.0	50834.435	2.0
494.5456	28.01	-2.42	115739.150	4.5	135954.090	3.5
494.5461	10.01	-2.97	301855.710	2.5	322070.630	2.5
494.5463	28.01	-4.93	32523.540	3.5	52738.450	2.5
494.5470	90.00	-2.56	0.000	0.0	20220.525	0.0
494.5522	10.01	-3.00	301855.710	2.5	322070.380	3.5
494.5547	26.02	-2.32	206233.310	2.0	226447.880	2.0
494.5556	24.01	-4.61	53271.070	2.5	73485.600	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
494.5622	26.00	-2.56	33946.920	2.0	54161.182	3.0
494.5649	23.00	-3.46	21646.390	3.5	41860.540	4.5
494.5662	30.02	-3.27	260623.100	4.0	280837.200	3.0
494.5662	30.02	-4.89	260623.100	4.0	280837.200	4.0
494.5733	23.00	-4.49	21963.500	3.5	42177.310	4.5
494.5850	57.00	-1.14	6936.547	0.0	27155.518	0.0
494.5938	23.00	-4.87	20767.570	3.5	40980.540	4.5
494.5950	26.02	-4.31	93392.450	3.0	113605.370	3.0
494.5963	25.02	-4.28	174332.910	1.5	194545.780	.5
494.5999	28.01	-.08	100010.170	.5	120222.890	1.5
494.6029	28.00	-.62	30619.440	2.0	50832.039	3.0
494.6102	22.00	-1.63	28702.768	3.0	48915.070	2.0
494.6158	23.01	-6.49	26839.820	3.0	47051.890	3.0
494.6182	22.00	-2.43	19573.968	4.0	39785.940	4.0
494.6229	28.01	-4.61	119796.980	2.5	140008.760	3.5
494.6320	62.00	-.67	1451.835	0.0	21668.885	0.0
494.6394	26.00	-1.31	27166.804	4.0	47377.909	4.0
494.6470	57.01	-2.50	1855.123	0.0	22071.560	0.0
494.6513	24.00	-2.55	44591.460	5.0	64802.080	5.0
494.6532	7.00	-3.48	94793.460	1.5	115004.000	2.5
494.6611	6.00	-4.70	60352.630	1.0	80562.850	1.0
494.6626	28.01	-3.81	101246.160	.5	121456.320	1.5
494.6660	22.00	-2.72	25797.600	3.0	46007.620	4.0
494.6720	75.00	-1.50	14921.641	0.0	35137.056	0.0
494.6897	26.02	-3.78	114339.950	4.0	134549.000	3.0
494.6922	28.01	-4.49	101247.370	2.5	121456.320	1.5
494.6964	23.02	-1.12	141714.500	2.5	161923.280	2.5
494.7101	23.00	-2.34	13810.900	.5	34019.120	1.5
494.7120	23.01	-4.63	52700.030	2.0	72908.170	3.0
494.7208	24.00	-4.09	42438.820	2.0	62646.600	2.0
494.7323	26.01	-5.70	23031.300	1.5	43238.610	2.5
494.7330	56.00	-.05	17905.969	0.0	38118.892	0.0
494.7571	23.01	-2.60	30267.460	2.0	50473.760	1.0
494.7607	14.00	-1.82	40991.884	1.0	61198.036	0.0
494.7638	22.00	-1.77	28596.293	1.0	48802.320	0.0
494.7857	7.01	-.70	209737.970	3.0	229943.100	4.0
494.7909	23.01	-2.32	32040.760	2.0	52245.680	2.0
494.7970	22.00	-1.73	6598.749	2.0	26803.417	2.0
494.8026	25.02	-4.17	195315.780	2.5	215520.220	2.5
494.8063	24.00	-.98	27500.370	3.0	47704.660	4.0
494.8095	25.00	-4.25	27248.000	1.5	47452.160	.5
494.8158	22.00	-2.66	19322.988	2.0	39526.890	2.0
494.8201	22.00	-1.23	17540.205	3.0	37743.933	3.0
494.8229	25.00	-3.58	35165.050	1.5	55368.660	1.5
494.8403	11.02	-2.38	444825.000	2.5	465027.900	1.5
494.8494	25.01	-3.76	62572.200	2.0	82774.730	1.0
494.8506	25.01	-3.36	59537.400	4.0	79739.880	5.0
494.8580	27.00	-1.18	32654.500	2.5	52856.680	3.5
494.8630	62.01	-1.43	4355.506	0.0	24563.119	0.0
494.8641	24.00	-1.08	27500.370	3.0	47702.300	3.0
494.8705	28.01	-2.41	118294.170	3.5	138495.840	4.5
494.8746	26.02	-2.61	206180.410	3.0	226381.910	3.0
494.8760	40.00	-1.98	4113.534	0.0	24320.616	0.0
494.8891	22.00	-2.60	28638.832	2.0	48839.740	3.0
494.8898	25.02	-3.05	195948.440	3.5	216149.320	3.5
494.8913	28.01	-2.85	99844.130	3.5	120044.950	4.5
494.8935	10.01	-1.76	301855.710	2.5	322056.440	3.5
494.8940	72.00	-1.78	10485.478	0.0	30691.825	0.0
494.8967	11.02	-3.95	443261.600	.5	463462.200	1.5
494.8972	24.00	-1.50	27500.370	3.0	47700.950	2.0
494.9017	22.00	-4.07	27907.026	2.0	48107.420	2.0
494.9322	18.01	-2.85	183914.560	.5	204113.710	1.5
494.9403	18.01	-2.42	159393.310	1.5	179592.130	2.5
494.9408	23.03	-1.21	263902.300	3.0	284101.100	3.0
494.9427	22.00	-.37	17423.853	2.0	37622.573	3.0
494.9432	30.02	-4.64	260584.100	1.0	280782.800	2.0
494.9474	29.01	-2.46	115665.400	1.0	135863.930	1.0
494.9491	18.01	-3.89	182222.030	1.5	202420.490	.5
494.9506	30.02	-3.34	282628.600	2.0	302827.000	2.0
494.9528	28.01	-4.71	101258.010	1.5	121456.320	1.5
494.9547	23.00	-3.71	14548.830	2.5	34747.060	3.5
494.9565	28.01	-4.96	115785.060	1.5	135983.220	1.5
494.9599	24.00	-1.47	31048.850	1.0	51246.870	1.0
494.9646	6.00	-4.15	68856.330	1.0	89054.160	2.0
494.9676	26.00	-3.33	34039.495	4.0	54237.200	4.0
494.9721	25.02	-.38	172682.640	3.5	192880.160	3.5
494.9721	24.00	-4.09	27816.880	5.0	48014.400	4.0
494.9770	57.00	-.85	0.000	0.0	20202.959	0.0
494.9788	18.01	-1.94	194800.180	4.5	214997.430	4.5
494.9810	28.01	-4.55	100845.410	.5	121042.570	1.5
494.9822	28.01	.26	100845.410	.5	121042.520	1.5
494.9834	25.00	-2.81	38669.600	3.5	58866.660	4.5
494.9937	28.01	-3.88	96535.870	3.5	116732.510	2.5
494.9942	18.01	-3.58	194800.180	4.5	214996.800	3.5
495.0053	22.00	-2.40	25493.722	2.0	45689.890	3.0
495.0110	64.00	-.35	10243.505	0.0	30445.076	0.0
495.0111	14.03	-1.67	293718.990	2.5	313914.920	2.5
495.0111	14.03	-.37	293718.990	3.5	313914.920	2.5
495.0111	14.03	-.53	293718.990	2.5	313914.920	1.5
495.0114	26.00	-1.72	27559.568	2.0	47755.485	3.0
495.0118	9.00	-2.66	115917.909	2.5	136113.810	1.5
495.0162	10.01	-3.47	301855.710	2.5	322051.430	2.5
495.0170	92.01	-2.10	5726.684	0.0	25928.010	0.0
495.0182	21.01	-2.79	12154.340	2.0	32349.980	3.0
495.0226	24.01	-2.12	70317.040	2.5	90512.500	1.5
495.0280	10.01	-4.44	301855.710	2.5	322050.950	1.5
495.0290	8.01	-4.03	255755.800	2.5	275951.000	2.5
495.0427	26.01	-3.59	44915.070	3.5	65109.710	3.5
495.0452	7.00	-3.41	94793.460	1.5	114988.000	.5
495.0452	7.00	-2.69	94793.460	1.5	114988.000	1.5
495.0452	7.00	-2.51	94793.460	1.5	114988.000	2.5
495.0508	26.00	-3.17	26406.490	1.0	46600.800	1.0
495.0513	25.00	-2.00	41031.480	4.5	61225.770	5.5
495.0574	20.02	.13	344149.810	2.0	364343.850	1.0
495.0579	24.00	-1.10	44746.260	6.0	64940.280	7.0
495.0587	22.00	-3.66	11531.760	2.0	31725.750	1.0
495.0620	42.00	-.86	18147.942	0.0	38347.432	0.0
495.0753	22.00	-3.14	25699.950	2.0	45893.260	3.0
495.0783	28.01	-.14	100078.780	1.5	120271.970	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
495.0814	19.00	-2.54	12985.170	.5	33178.230	1.5
495.0861	24.00	-3.81	24200.230	6.0	44393.100	6.0
495.0922	20.02	-2.49	341601.460	2.0	361794.080	1.0
495.0930	27.00	-1.55	33150.680	1.5	53343.270	1.5
495.0967	26.02	-4.53	93412.930	2.0	113605.370	3.0
495.0977	28.01	-.74	112719.750	3.5	132912.150	2.5
495.0994	23.00	-4.81	22313.990	5.5	42506.320	4.5
495.1099	28.01	-2.80	110573.360	2.5	130765.260	3.5
495.1173	8.01	-4.55	255759.400	3.5	275951.000	2.5
495.1227	26.01	-4.36	62945.120	3.5	83136.500	3.5
495.1263	18.01	-4.02	170400.940	2.5	190592.170	1.5
495.1327	18.02	-3.01	211563.830	1.0	231754.800	0.0
495.1415	24.00	-2.25	38537.680	5.0	58728.290	4.0
495.1435	29.01	-.70	117883.140	4.0	138073.670	4.0
495.1524	22.00	-2.93	11639.804	3.0	31829.972	4.0
495.1580	64.00	-.47	11775.998	0.0	31971.572	0.0
495.1614	29.01	.58	116080.460	3.0	136270.260	4.0
495.1656	23.01	-3.97	14556.090	4.0	34745.720	3.0
495.1700	21.00	-1.69	16141.040	2.5	36330.490	2.5
495.1712	30.02	-4.78	282680.400	4.0	302869.800	3.0
495.1808	28.01	-1.08	100010.170	.5	120199.180	1.5
495.1832	27.00	-.70	32781.710	2.5	52970.620	2.5
495.1900	20.00	-3.75	20349.260	2.0	40537.893	3.0
495.1928	26.01	-3.25	66522.320	2.5	86710.840	1.5
495.2000	7.04	-.23	713327.000	0.0	733520.861	0.0
495.2070	57.01	-.58	19115.832	0.0	39309.408	0.0
495.2110	23.01	-5.88	20242.320	4.0	40430.100	4.0
495.2156	26.00	-4.93	34692.130	1.0	54879.720	2.0
495.2276	28.00	-1.87	29084.478	4.0	49271.578	3.0
495.2370	62.01	-1.82	2661.698	0.0	22854.050	0.0
495.2382	26.01	-5.00	63273.030	2.5	83459.700	1.5
495.2460	60.00	-.84	1048.548	0.0	21240.533	0.0
495.2470	64.00	-1.19	1693.808	0.0	21885.753	0.0
495.2512	7.00	-4.72	94830.860	2.5	115017.000	1.5
495.2592	26.00	-1.96	33095.922	4.0	53281.735	5.0
495.2640	27.01	-3.44	64401.500	4.0	84587.120	4.0
495.2654	26.00	-2.70	33946.920	2.0	54132.480	1.0
495.2779	27.00	-3.19	25739.930	2.5	45924.980	3.5
495.2814	24.01	-1.60	50667.330	3.5	70852.240	3.5
495.2920	18.01	-2.81	138243.550	1.5	158428.030	.5
495.3020	23.01	-2.25	32420.040	0.0	52604.110	1.0
495.3030	62.01	-2.39	1451.835	0.0	21641.497	0.0
495.3090	74.00	-1.10	19680.435	0.0	39869.852	0.0
495.3101	9.00	-3.52	115917.909	2.5	136101.650	3.5
495.3116	25.01	-3.94	53597.130	2.0	73780.810	3.0
495.3125	23.01	-4.80	52767.360	3.0	72951.000	4.0
495.3130	41.00	-1.77	9356.272	0.0	29545.526	0.0
495.3172	27.00	-3.78	4142.660	3.5	24326.110	3.5
495.3200	28.00	-.66	30163.140	2.0	50346.477	2.0
495.3204	21.01	-2.77	39344.900	2.0	59528.220	3.0
495.3227	17.00	-4.66	82918.893	2.5	103102.120	1.5
495.3317	28.01	-2.08	112686.300	2.5	132869.160	3.5
495.3359	22.00	-2.90	6842.964	5.0	27025.652	4.0
495.3419	17.00	-3.52	82918.893	2.5	103101.340	2.5
495.3520	63.00	-.15	15808.874	0.0	35996.539	0.0
495.3611	25.00	-3.88	38934.940	2.5	59116.600	2.5
495.3611	23.00	-4.04	30694.340	3.5	50876.000	4.5
495.3638	24.01	-2.43	68992.550	4.5	89174.100	3.5
495.3714	24.00	-1.65	25177.390	4.0	45358.630	4.0
495.3729	29.01	.92	117883.140	4.0	138064.320	5.0
495.3758	10.01	-4.89	308136.890	1.5	328317.950	2.5
495.3802	18.01	-1.66	186074.350	2.5	206255.230	2.5
495.3906	28.01	-4.44	101144.630	3.5	121325.090	2.5
495.3989	26.01	-3.01	44929.590	2.5	65109.710	3.5
495.4026	23.00	-3.43	17181.980	4.5	37361.950	4.5
495.4031	25.00	-2.00	41031.480	4.5	61211.430	4.5
495.4043	21.00	-1.92	16096.860	1.5	36276.760	1.5
495.4100	21.00	-.07	18000.250	2.5	38179.920	1.5
495.4171	28.01	.05	100010.170	.5	120189.550	.5
495.4220	9.00	-2.18	117622.923	2.5	137802.100	2.5
495.4227	7.00	-3.17	94770.850	.5	114950.000	.5
495.4227	7.00	-4.30	94770.850	.5	114950.000	1.5
495.4283	26.00	-4.72	33695.378	5.0	53874.300	5.0
495.4313	18.01	-2.82	194800.180	4.5	214978.980	4.5
495.4355	15.01	-.54	103166.370	1.0	123345.000	0.0
495.4436	23.03	-.21	264161.800	5.0	284340.100	4.0
495.4570	90.01	-1.26	11453.368	0.0	31636.754	0.0
495.4583	23.03	-2.30	265879.200	2.0	286056.900	3.0
495.4613	24.00	-3.65	44534.460	4.0	64712.040	3.0
495.4673	22.00	-2.39	21739.713	5.0	41917.050	4.0
495.4689	22.00	-3.15	25635.740	1.0	45813.010	2.0
495.4780	60.00	-.25	0.000	0.0	20182.531	0.0
495.4807	24.00	-.43	25177.390	4.0	45354.180	5.0
495.4917	9.02	-2.72	444552.080	3.5	464728.420	4.5
495.4993	26.00	-4.38	24335.764	2.0	44511.795	2.0
495.5109	18.01	-2.05	174820.930	.5	194996.490	1.5
495.5165	18.01	-3.49	194822.100	3.5	214997.430	4.5
495.5213	22.00	-1.48	20209.444	2.0	40384.580	1.0
495.5254	25.00	-3.30	45130.160	4.5	65305.130	3.5
495.5260	44.00	.68	26697.639	0.0	46878.215	0.0
495.5320	18.01	-2.04	194822.100	3.5	214996.800	3.5
495.5372	23.00	-2.63	13801.530	1.5	33976.020	1.5
495.5399	18.01	-3.45	194800.180	4.5	214974.560	3.5
495.5411	9.00	-2.30	115917.909	2.5	136092.240	2.5
495.5704	7.00	-2.74	94830.860	2.5	115004.000	2.5
495.5704	7.00	-3.73	94830.860	2.5	115004.000	3.5
495.5780	92.00	-.84	7581.807	0.0	27760.265	0.0
495.5885	25.02	-.17	172569.270	1.5	192741.670	.5
495.5952	29.01	-4.87	115662.770	4.0	135834.900	4.0
495.6001	9.00	-2.34	115917.909	2.5	136089.840	1.5
495.6038	24.01	-3.11	70679.220	4.5	90851.000	4.5
495.6146	19.00	-2.45	13042.880	1.5	33214.220	.5
495.6163	26.02	-4.26	93412.930	2.0	113584.200	2.0
495.6175	18.01	-1.36	186074.350	2.5	206245.570	3.5
495.6229	25.03	-3.91	152700.500	4.0	172871.500	5.0
495.6330	25.01	-4.23	62564.700	1.0	82735.290	2.0
495.6455	25.02	-4.71	115774.000	3.5	135944.080	4.5
495.6591	7.01	-1.03	209737.970	3.0	229907.500	4.0
495.6650	59.01	-1.70	5000.766	0.0	25175.683	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
495.6714	22.00	-.93	27025.652	4.0	47194.680	4.0
495.6727	22.00	-2.50	21588.496	4.0	41757.470	3.0
495.6733	28.01	-4.41	94705.930	3.5	114874.880	2.5
495.6750	24.00	-2.29	27816.880	5.0	47985.760	5.0
495.6760	75.00	-.66	23471.338	0.0	43645.807	0.0
495.6765	25.00	-2.37	34938.700	4.5	55107.520	3.5
495.6939	23.00	-3.11	17116.920	3.5	37285.030	4.5
495.7077	25.01	-2.89	65567.070	2.0	85734.620	3.0
495.7087	9.02	-4.38	444056.420	.5	464223.930	1.5
495.7089	23.00	-3.76	11100.650	4.5	31268.150	3.5
495.7239	20.00	-3.00	20371.000	3.0	40537.893	3.0
495.7239	20.00	-3.29	20371.000	3.0	40537.893	3.0
495.7305	26.00	-.62	22996.661	4.0	43163.282	4.0
495.7338	9.02	-3.37	444057.440	1.5	464223.930	1.5
495.7360	66.01	-1.53	0.000	0.0	20172.027	0.0
495.7370	74.00	-1.78	13711.778	0.0	33883.764	0.0
495.7381	22.00	-1.75	18911.399	2.0	39077.713	1.0
495.7422	9.00	-1.67	117622.923	2.5	137789.070	3.5
495.7425	22.00	-3.29	11639.804	3.0	31805.940	2.0
495.7442	28.00	-4.06	34408.574	1.0	54574.640	1.0
495.7483	28.01	-1.78	115956.710	2.5	136122.610	2.5
495.7517	28.01	-2.83	95573.390	3.5	115739.150	4.5
495.7540	42.00	-.73	18228.600	0.0	38399.895	0.0
495.7606	26.00	.04	22650.415	6.0	42815.814	5.0
495.7655	24.01	-3.57	53271.070	2.5	73436.270	2.5
495.7657	23.00	-5.19	13801.530	1.5	33966.720	.5
495.7663	26.00	-.92	33801.555	2.0	53966.720	2.0
495.7674	23.00	-2.03	13810.900	.5	33976.020	1.5
495.7721	25.00	-3.00	35114.980	2.5	55279.910	1.5
495.7758	9.00	-3.28	117622.923	2.5	137787.700	1.5
495.7800	24.01	-2.83	50687.630	2.5	70852.240	3.5
495.7883	7.01	-3.00	202714.120	1.0	222878.390	2.0
495.7910	29.01	-3.12	114511.440	1.0	134675.600	2.0
495.7925	30.02	-4.48	282640.200	5.0	302804.300	5.0
495.7938	24.00	-2.45	36558.550	2.0	56722.600	1.0
495.7979	24.01	-1.97	70427.220	3.5	90591.100	2.5
495.8007	22.00	-2.68	21739.713	5.0	41903.480	5.0
495.8100	60.01	-2.02	2984.328	0.0	23153.344	0.0
495.8174	25.01	-3.87	62572.200	2.0	82735.290	2.0
495.8281	22.00	-4.90	27614.667	4.0	47777.320	5.0
495.8283	22.00	-3.06	7255.369	2.0	27418.015	2.0
495.8284	24.00	-3.24	27703.840	4.0	47866.480	4.0
495.8356	26.00	-2.91	34328.733	3.0	54491.080	3.0
495.8392	23.00	-2.90	17242.050	5.5	37404.250	6.5
495.8459	20.02	-4.46	350741.190	3.0	370903.120	3.0
495.8591	18.01	-1.29	186470.280	1.5	206631.670	2.5
495.8623	20.02	-.87	350900.040	2.0	371061.300	3.0
495.8646	25.01	-4.22	87941.080	4.0	108102.250	3.0
495.8764	20.02	-3.06	350741.190	3.0	370901.880	2.0
495.8790	64.00	.06	11211.395	0.0	31377.605	0.0
495.8818	24.00	-1.81	28679.430	1.0	48839.900	1.0
495.8852	9.00	-1.23	115917.909	2.5	136078.240	2.5
495.8877	28.01	.67	112686.300	2.5	132846.530	3.5
495.8943	24.00	-3.43	44591.460	5.0	64751.420	4.0
495.8951	27.00	-4.16	14036.280	1.5	34196.210	1.5
495.8993	18.01	-2.03	189437.690	.5	209597.450	1.5
495.9002	20.02	-2.79	373401.870	3.0	393561.590	4.0
495.9012	22.00	-3.55	25605.030	0.0	45764.710	1.0
495.9014	22.00	-4.57	8436.618	0.0	28596.293	1.0
495.9066	25.01	-4.10	55759.270	3.0	75918.730	2.0
495.9118	25.02	-1.69	195752.480	2.5	215911.730	1.5
495.9130	60.01	-1.60	483.945	0.0	20648.772	0.0
495.9155	30.02	-3.82	260613.100	5.0	280772.200	6.0
495.9246	28.01	-2.96	99844.130	3.5	120002.860	3.5
495.9386	25.02	-3.19	115711.600	4.5	135869.760	3.5
495.9436	28.00	-3.30	29013.228	2.0	49171.187	1.0
495.9485	18.01	-1.40	189040.870	1.5	209198.630	2.5
495.9494	24.00	-2.20	28682.180	2.0	48839.900	1.0
495.9568	25.02	-3.44	195315.780	2.5	215473.200	1.5
495.9630	28.01	-2.77	110573.360	2.5	130730.530	2.5
495.9637	7.00	-3.54	94830.860	2.5	114988.000	1.5
495.9637	7.00	-2.37	94830.860	2.5	114988.000	3.5
495.9640	26.01	-4.38	50157.610	4.5	70314.740	4.5
495.9681	27.00	-4.72	5075.830	1.5	25232.790	.5
495.9701	18.01	-1.19	194822.100	3.5	214978.980	4.5
495.9785	7.00	-3.17	94793.460	1.5	114950.000	.5
495.9785	7.00	-3.49	94793.460	1.5	114950.000	1.5
495.9832	28.01	-4.06	100010.170	.5	120166.520	1.5
495.9860	44.00	.37	26697.639	0.0	46859.498	0.0
495.9933	22.00	-4.59	26494.322	2.0	46650.260	3.0
495.9962	23.00	-4.87	13810.900	.5	33966.720	.5
496.0105	23.00	-3.77	21603.170	4.5	41758.410	3.5
496.0164	24.01	-2.35	69170.600	5.5	89325.600	4.5
496.0210	63.00	-.15	15808.874	0.0	35969.311	0.0
496.0294	26.00	-2.80	31307.235	4.0	51461.707	4.0
496.0326	27.00	-2.24	24627.790	4.5	44782.130	4.5
496.0373	9.00	-3.42	117308.558	1.5	137462.710	1.5
496.0410	12.02	.65	562136.100	2.0	582290.100	3.0
496.0410	12.02	.65	562136.100	2.0	582290.100	3.0
496.0526	24.01	-3.90	34631.140	4.5	54784.670	3.5
496.0664	9.00	-1.07	115917.909	2.5	136070.880	3.5
496.0705	26.02	-3.15	117950.320	4.0	138103.120	4.0
496.0779	30.02	-2.04	216895.300	1.0	237047.800	2.0
496.0789	18.01	-4.84	194822.100	3.5	214974.560	3.5
496.0804	18.01	-3.57	194822.100	3.5	214974.500	2.5
496.0821	20.02	-1.99	350305.320	4.0	370957.650	5.0
496.0885	26.02	-3.66	206295.810	1.0	226447.880	2.0
496.1164	20.02	-1.36	373401.870	3.0	393552.810	3.0
496.1259	27.01	-4.05	65016.830	2.0	85167.380	3.0
496.1286	20.02	.20	373401.870	3.0	393552.310	4.0
496.1301	27.00	-3.96	13795.520	2.5	33945.900	2.5
496.1353	22.00	-2.78	6742.757	4.0	26892.926	3.0
496.1390	60.01	-1.34	5000.766	0.0	25156.408	0.0
496.1416	9.02	-1.73	444578.510	4.5	464728.420	4.5
496.1417	23.01	-4.17	20280.190	5.0	40430.100	4.0
496.1429	28.01	-2.20	109148.050	4.5	129297.910	3.5
496.1490	58.01	-1.83	5565.369	0.0	25720.605	0.0
496.1540	28.01	.12	112719.750	3.5	132869.160	3.5
496.1606	27.00	-3.87	34133.590	3.5	54282.730	2.5
496.1737	22.01	-6.03	9395.760	1.5	29544.370	2.5
496.1739	26.02	-1.42	206233.310	2.0	226381.910	3.0
496.1754	7.00	-3.75	94793.460	1.5	114942.000	2.5
496.1840	23.02	-.91	141421.220	.5	161569.410	1.5
496.1877	18.01	-4.66	183985.940	1.5	204133.980	2.5
496.1920	26.00	-3.52	29313.008	6.0	49460.876	5.0
496.1939	25.01	-3.29	62587.500	3.0	82735.290	2.0
496.1940	62.01	-1.54	3468.273	0.0	23621.681	0.0
496.2027	20.02	-.40	370304.540	2.0	390451.970	3.0
496.2109	13.01	-2.09	124792.000	2.0	144939.100	1.0
496.2184	26.00	-3.44	38678.015	2.0	58824.810	2.0
496.2229	24.00	-.74	42515.350	2.0	62661.960	3.0
496.2260	38.00	.25	14760.326	0.0	34912.434	0.0
496.2266	24.01	-3.66	64061.820	1.5	84208.280	.5
496.2278	22.00	-4.29	8492.421	1.0	28638.832	2.0
496.2300	40.00	-.87	14921.641	0.0	35073.587	0.0
496.2345	23.01	-1.95	44657.990	2.0	64804.130	2.0
496.2370	72.00	-1.19	17986.627	0.0	38138.288	0.0
496.2421	28.00	-3.16	29013.228	2.0	49159.060	2.0
496.2478	17.01	-1.82	138623.000	1.0	158768.600	2.0
496.2550	63.00	-.15	15808.874	0.0	35959.804	0.0
496.2552	26.00	-1.92	33695.378	5.0	53840.680	6.0
496.2568	22.00	-1.12	26892.926	3.0	47038.160	3.0
496.2614	27.00	-1.88	28470.510	1.5	48615.560	2.5
496.2675	25.00	-2.69	35041.370	3.5	55186.170	2.5
496.2702	28.00	-3.06	30392.052	1.0	50536.742	1.0
496.2845	28.01	-.22	100078.780	1.5	120222.890	1.5
496.3089	28.00	-1.24	33610.916	2.0	53754.036	2.0
496.3168	30.02	-2.20	260584.100	1.0	280726.900	2.0
496.3168	30.02	-2.51	260584.100	1.0	280726.900	1.0
496.3173	9.00	-2.94	117308.558	1.5	137451.340	2.5
496.3188	7.00	-3.87	95475.280	.5	115618.000	.5
496.3188	7.00	-3.13	95475.280	.5	115618.000	1.5
496.3200	90.01	-1.92	11050.080	0.0	31198.371	0.0
496.3263	22.00	-2.84	6661.003	3.0	26803.417	2.0
496.3427	28.01	-4.33	117872.780	2.5	138014.530	2.5
496.3513	9.00	-3.38	117308.558	1.5	137449.960	1.5
496.3557	22.00	-3.83	25926.820	4.0	46068.040	4.0
496.3634	26.02	-.88	184951.620	3.0	205092.530	4.0
496.3644	24.01	-3.55	53271.070	2.5	73411.940	1.5
496.3658	23.01	-3.56	52767.360	3.0	72908.170	3.0
496.3710	45.00	-1.55	10888.765	0.0	31034.986	0.0
496.3720	40.00	-.70	15647.559	0.0	35793.740	0.0
496.3737	22.00	-1.96	26803.417	2.0	46943.910	2.0
496.3755	23.01	-2.71	32040.760	2.0	52181.180	1.0
496.3760	22.00	-.88	28896.062	5.0	49036.460	4.0
496.3772	25.01	-4.89	62572.200	2.0	82712.550	3.0
496.3794	28.01	-2.86	115739.150	4.5	135879.410	3.5
496.3833	28.01	-3.20	94729.250	2.5	114869.350	1.5
496.3947	28.01	-3.52	101246.160	.5	121385.800	1.5
496.4006	22.00	-2.36	18061.540	1.0	38200.940	0.0
496.4079	26.00	-2.79	31322.603	3.0	51461.707	4.0
496.4154	8.01	-3.90	255812.200	1.5	275951.000	1.5
496.4154	8.01	-4.87	255812.200	1.5	275951.000	2.5
496.4190	42.00	-.54	25810.406	0.0	45954.679	0.0
496.4245	28.01	-3.29	101247.370	2.5	121385.800	1.5
496.4319	24.01	-4.39	31531.620	1.5	51669.750	2.5
496.4376	8.01	-3.93	255813.100	2.5	275951.000	1.5
496.4376	8.01	-4.48	255813.100	2.5	275951.000	2.5
496.4410	42.00	-1.05	20245.038	0.0	40388.419	0.0
496.4482	22.00	-2.63	11776.806	4.0	31914.277	5.0
496.4499	22.01	-3.64	47466.800	3.5	67604.200	3.5
496.4510	22.00	-2.03	26892.926	3.0	47030.280	3.0
496.4560	62.01	-2.39	1451.835	0.0	21594.607	0.0
496.4573	12.02	-3.24	586779.500	4.0	606916.600	4.0
496.4573	12.02	-1.65	586779.500	4.0	606916.600	5.0
496.4605	22.00	-1.62	28702.768	3.0	48839.740	3.0
496.4684	27.00	-4.43	25739.930	2.5	45876.580	2.5
496.4696	28.01	-3.10	116824.150	2.5	136960.750	2.5
496.4748	22.00	-.71	15877.180	2.0	36013.570	2.0
496.4807	23.00	-3.99	22121.170	4.5	42257.320	5.5
496.4825	20.02	-1.25	373425.510	4.0	393561.590	4.0
496.4884	25.02	-4.97	124823.900	4.5	144959.740	4.5
496.4913	21.00	-2.65	16141.040	2.5	36276.760	1.5
496.4916	28.01	-4.93	116824.150	2.5	136959.860	2.5
496.4916	24.00	-1.76	7593.160	2.0	27728.870	2.0
496.4961	18.01	-1.14	194861.270	2.5	214996.800	3.5
496.5004	19.00	-3.22	13042.880	1.5	33178.230	1.5
496.5031	19.00	-2.27	13042.880	1.5	33178.120	2.5
496.5050	64.01	-.41	19277.147	0.0	39417.931	0.0
496.5075	18.01	-.20	139258.250	.5	159393.310	1.5
496.5165	28.00	-.75	30619.440	2.0	50754.137	2.0
496.5209	27.00	-.72	32027.500	3.5	52162.020	3.5
496.5218	9.00	-1.94	117308.558	1.5	137443.040	2.5
496.5330	25.02	-1.93	172855.020	4.5	192989.050	5.5
496.5370	41.00	-1.14	10808.108	0.0	30947.594	0.0
496.5374	23.00	-2.78	17181.980	4.5	37315.830	5.5
496.5397	23.01	-1.20	30641.710	3.0	50775.470	2.0
496.5781	26.00	-3.70	22946.810	1.0	43079.013	1.0
496.5784	24.00	-.45	42538.810	3.0	62671.000	4.0
496.5801	25.00	-2.49	45130.160	4.5	65262.280	4.5
496.5853	25.00	-1.44	23296.670	3.5	43428.580	4.5
496.5900	23.01	-3.97	52657.510	4.0	72789.230	3.0
496.5954	12.02	-1.73	586785.100	3.0	606916.600	4.0
496.5993	27.00	-2.60	32733.070	3.5	52864.410	4.5
496.6016	24.00	-.77	42515.350	2.0	62646.600	2.0
496.6036	22.00	-1.44	17423.853	2.0	37555.021	3.0
496.6080	23.01	-3.96	14461.730	3.0	34592.720	2.0
496.6097	26.00	-.98	26874.534	5.0	47005.455	5.0
496.6102	23.00	-.24	23935.150	2.5	44066.050	3.5
496.6151	28.01	-3.34	94705.930	3.5	114836.630	3.5
496.6349	20.02	-1.75	323655.060	2.0	343784.960	1.0
496.6398	23.03	-.30	263593.000	2.0	283722.700	1.0
496.6425	24.00	-2.86	37205.880	3.0	57335.470	4.0
496.6556	24.00	-4.22	25177.390	4.0	45306.450	5.0
496.6578	22.00	-3.47	25635.740	1.0	45764.710	1.0
496.6581	27.00	-.49	32027.500	3.5	52156.460	4.5
496.6581	27.00	-4.31	3482.820	4.5	23611.780	5.5
496.6685	22.00	-1.75	28596.293	1.0	48724.830	1.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
496.6806	22.00	-2.57	28596.293	1.0	48724.340	2.0
496.6810	24.00	-1.35	31048.850	1.0	51176.880	0.0
496.6818	30.02	-4.94	282680.400	4.0	302808.400	4.0
496.6869	28.01	-3.16	101258.010	1.5	121385.800	1.5
496.6910	70.00	-.70	19599.777	0.0	39733.019	0.0
496.6990	20.02	-2.79	373425.510	4.0	393552.810	3.0
496.7072	28.01	-2.53	115827.120	3.5	135954.090	3.5
496.7114	20.02	-1.35	373425.510	4.0	393552.310	4.0
496.7116	26.01	-3.73	50187.950	3.5	70314.740	4.5
496.7119	28.01	-.14	112719.750	3.5	132846.530	3.5
496.7225	20.02	.30	373425.510	4.0	393551.860	5.0
496.7250	26.00	-2.64	33765.291	2.0	53891.540	3.0
496.7284	24.00	-.27	42564.850	4.0	62690.960	5.0
496.7298	22.00	-3.73	0.000	2.0	20126.055	3.0
496.7330	92.00	-1.31	3710.246	0.0	23841.785	0.0
496.7457	24.00	-2.79	27816.880	5.0	47942.290	6.0
496.7511	25.02	-2.75	172451.230	1.5	192576.420	2.5
496.7518	27.00	-.87	34133.590	3.5	54258.750	2.5
496.7520	28.00	-2.61	30619.440	2.0	50744.593	1.0
496.7546	25.01	-3.36	62587.500	3.0	82712.550	3.0
496.7594	26.00	-4.96	24118.815	4.0	44243.668	5.0
496.7630	28.01	-.50	100078.780	1.5	120203.490	2.5
496.7637	27.00	-4.31	26250.490	.5	46375.170	1.5
496.7721	7.00	-2.41	95493.660	1.5	115618.000	.5
496.7721	7.00	-2.56	95493.660	1.5	115618.000	1.5
496.7721	7.00	-3.14	95493.660	1.5	115618.000	2.5
496.7740	18.00	-3.53	106087.305	1.0	126211.570	1.0
496.7753	25.02	-1.30	172755.950	3.5	192880.160	3.5
496.7780	41.00	-.70	12905.203	0.0	33034.919	0.0
496.7829	30.02	-2.56	282680.400	4.0	302804.300	5.0
496.7878	26.00	-.87	33801.555	2.0	53925.260	1.0
496.7886	28.01	-3.30	109148.050	4.5	129271.720	3.5
496.7891	20.02	-1.29	350779.470	3.0	370903.120	3.0
496.7901	27.00	-1.16	32733.070	3.5	52856.680	3.5
496.7940	38.00	-.54	14760.326	0.0	34889.394	0.0
496.7973	25.02	-1.92	195592.090	1.5	215715.410	1.5
496.7990	25.02	-2.66	195752.480	2.5	215875.730	2.5
496.8015	24.00	-.12	42538.810	3.0	62661.960	3.0
496.8054	26.02	-4.22	206324.890	2.0	226447.880	2.0
496.8057	24.01	-1.76	69498.270	4.5	89621.250	3.5
496.8143	10.01	-1.93	301948.000	1.5	322070.630	2.5
496.8179	22.00	-3.77	18037.225	4.0	38159.710	3.0
496.8198	20.02	-2.58	350779.470	3.0	370901.880	2.0
496.8247	7.00	-4.14	94881.790	3.5	115004.000	2.5
496.8247	7.00	-3.03	94881.790	3.5	115004.000	3.5
496.8368	7.00	-3.45	95475.280	.5	115597.000	1.5
496.8376	26.00	-2.05	34039.495	4.0	54161.182	3.0
496.8398	8.01	-4.06	255829.400	3.5	275951.000	2.5
496.8415	26.02	-2.73	179178.620	3.0	199300.150	2.0
496.8442	29.01	-3.38	116643.960	3.0	136765.380	4.0
496.8484	26.00	-3.22	26623.726	2.0	46744.975	3.0
496.8512	26.00	-3.65	29313.008	6.0	49434.142	6.0
496.8516	23.01	-3.27	19112.930	4.0	39234.050	3.0
496.8530	73.00	-.81	22261.476	0.0	42388.153	0.0
496.8545	26.02	-2.91	179579.830	5.0	199700.830	4.0
496.8568	27.00	-4.45	20500.710	1.5	40621.620	1.5
496.8575	22.00	-.54	15975.590	3.0	36096.470	3.0
496.8580	64.01	-.71	17583.339	0.0	37709.814	0.0
496.8676	24.01	-3.03	68305.730	1.5	88426.200	.5
496.8694	28.01	.07	100078.780	1.5	120199.180	1.5
496.8736	24.01	-2.25	69388.400	6.5	89508.630	5.5
496.8817	26.00	-3.42	33946.920	2.0	54066.821	2.0
496.8817	23.00	-2.55	17242.050	5.5	37361.950	4.5
496.8839	23.00	-4.14	17054.870	2.5	37174.680	3.5
496.8869	21.00	-4.28	16210.800	3.5	36330.490	2.5
496.8876	26.02	-3.44	206328.220	3.0	226447.880	2.0
496.8900	44.00	-1.31	8711.012	0.0	28836.191	0.0
496.8992	7.01	-1.87	209823.910	4.0	229943.100	4.0
496.9002	7.00	-3.37	94770.850	.5	114890.000	1.5
496.9004	7.00	-3.20	94830.860	2.5	114950.000	1.5
496.9039	28.02	-4.30	97996.300	3.0	118115.300	2.0
496.9064	12.02	-2.83	586777.900	3.0	606896.800	3.0
496.9064	12.02	-1.40	586777.900	3.0	606896.800	4.0
496.9074	24.00	-4.35	25106.340	3.0	45225.200	2.0
496.9136	25.02	-2.35	195462.260	.5	215580.870	.5
496.9145	15.01	-3.66	87805.000	2.0	107923.570	2.0
496.9160	64.00	-.15	10485.478	0.0	30609.604	0.0
496.9289	28.01	-3.11	110573.360	2.5	130691.350	1.5
496.9336	27.00	-4.74	32654.500	2.5	52772.300	2.5
496.9459	12.02	-3.72	586779.500	4.0	606896.800	3.0
496.9459	12.02	-2.19	586779.500	4.0	606896.800	4.0
496.9538	28.01	-.59	98822.550	6.5	118939.530	5.5
496.9558	28.01	-4.02	115785.060	1.5	135901.960	2.5
496.9690	73.00	-1.97	10888.765	0.0	31010.744	0.0
496.9709	15.01	-.22	103340.010	2.0	123456.300	1.0
496.9724	23.00	-4.63	30635.600	2.5	50751.830	3.5
496.9808	29.01	-4.27	116326.160	3.0	136442.050	3.0
496.9900	18.00	-3.26	106087.305	1.0	126202.820	0.0
496.9930	26.00	-1.14	34017.084	1.0	54132.480	1.0
496.9998	27.00	-2.52	27497.060	2.5	47612.180	1.5
497.0005	24.01	-2.52	69506.160	3.5	89621.250	3.5
497.0062	25.00	-3.60	35165.050	1.5	55279.910	1.5
497.0077	17.01	-1.14	126219.000	3.0	146333.800	2.0
497.0102	26.01	-4.93	83868.650	2.5	103983.350	3.5
497.0135	22.00	-2.30	17540.205	3.0	37654.770	2.0
497.0168	18.01	-1.03	194883.000	3.5	214997.430	4.5
497.0223	22.00	-2.33	27025.652	4.0	47139.860	4.0
497.0228	7.01	-.23	209823.910	4.0	229938.100	5.0
497.0324	18.01	-2.58	194883.000	3.5	214996.800	3.5
497.0351	25.02	-2.78	195948.440	3.5	216062.130	2.5
497.0373	23.03	-.19	264113.100	4.0	284226.700	3.0
497.0390	57.01	-1.91	2581.041	0.0	22700.187	0.0
497.0450	18.01	-3.30	194861.270	2.5	214974.560	3.5
497.0465	18.01	-2.08	194861.270	2.5	214974.500	2.5
497.0480	77.00	-1.83	12824.546	0.0	32943.327	0.0
497.0490	7.01	-1.68	202765.260	2.0	222878.390	2.0
497.0497	12.02	.38	562634.200	1.0	582747.300	2.0
497.0497	12.02	.38	562634.200	1.0	582747.300	2.0
497.0507	22.00	-3.50	25699.950	2.0	45813.010	2.0
497.0507	26.00	-1.79	29320.050	1.0	49433.108	2.0
497.0603	28.01	-4.90	116824.150	2.5	136936.820	3.5
497.0642	26.00	-1.92	31937.308	1.0	52049.820	2.0
497.0759	26.01	-4.70	83871.310	4.5	103983.350	3.5
497.0764	23.00	-2.88	21646.390	3.5	41758.410	3.5
497.0769	30.02	.34	215340.500	2.0	235452.500	2.0
497.0843	12.02	-2.30	586785.100	3.0	606896.800	3.0
497.0843	12.02	-3.74	586785.100	3.0	606896.800	4.0
497.0930	60.01	-2.25	2500.383	0.0	22617.343	0.0
497.0939	26.01	-2.81	66012.830	4.5	86124.140	4.5
497.0967	23.00	-2.08	19189.280	1.5	39300.480	2.5
497.0982	7.00	-2.79	94830.860	2.5	114942.000	2.5
497.1073	28.01	-1.07	100078.780	1.5	120189.550	.5
497.1125	24.00	-4.63	27703.840	4.0	47814.400	3.0
497.1183	9.00	-2.55	116040.883	1.5	136151.210	.5
497.1226	29.01	-2.61	116643.960	3.0	136754.110	2.0
497.1466	27.00	-1.46	32654.500	2.5	52763.680	3.5
497.1584	28.00	-1.56	29668.918	3.0	49777.619	3.0
497.1587	24.00	-4.93	25177.390	4.0	45286.080	4.0
497.1700	3.00	-1.13	14904.000	0.0	35017.844	0.0
497.1754	17.00	-2.24	74865.667	.5	94973.683	.5
497.1810	24.00	-.36	42538.810	3.0	62646.600	2.0
497.1906	23.03	-.62	264591.900	5.0	284699.300	5.0
497.1926	27.00	-1.27	25568.680	5.5	45676.000	5.5
497.1930	41.00	-2.68	0.000	0.0	20112.914	0.0
497.2085	20.02	-1.15	323003.560	1.0	343110.240	0.0
497.2100	92.01	-2.55	887.233	0.0	20999.459	0.0
497.2160	62.01	-1.53	7420.492	0.0	27532.476	0.0
497.2161	18.01	-1.12	135601.650	.5	155708.020	.5
497.2201	7.00	-4.62	94881.790	3.5	114988.000	2.5
497.2201	7.00	-2.39	94881.790	3.5	114988.000	3.5
497.2215	24.00	-.04	42564.850	4.0	62671.000	4.0
497.2422	22.00	-3.73	19421.576	3.0	39526.890	2.0
497.2451	12.02	-1.56	586791.600	2.0	606896.800	3.0
497.2556	23.00	-4.75	14514.750	1.5	34619.520	2.5
497.2570	74.00	-1.51	19115.832	0.0	39226.157	0.0
497.2610	64.00	-.85	6936.547	0.0	27046.710	0.0
497.2680	26.02	-3.76	117950.320	4.0	138054.590	5.0
497.2779	22.00	-4.76	8492.421	1.0	28596.293	1.0
497.2888	10.01	-1.59	301948.000	1.5	322051.430	2.5
497.2910	7.00	-3.55	95493.660	1.5	115597.000	1.5
497.2913	26.00	-2.99	26623.726	2.0	46727.055	2.0
497.3006	10.01	-2.09	301948.000	1.5	322050.950	1.5
497.3034	22.00	-.54	16106.080	4.0	36208.920	4.0
497.3086	26.00	-.91	31937.308	1.0	52039.939	1.0
497.3138	29.01	-2.11	119039.680	2.0	139142.100	2.0
497.3140	41.00	-.85	12421.258	0.0	32529.278	0.0
497.3160	23.01	-2.10	30673.140	2.0	50775.470	2.0
497.3249	24.00	-2.08	37233.500	5.0	57335.470	4.0
497.3279	15.00	-4.41	56090.450	1.5	76192.300	1.5
497.3299	24.00	-2.80	35813.730	3.0	55915.500	4.0
497.3313	24.00	.02	42589.250	5.0	62690.960	5.0
497.3360	42.00	-1.23	20809.640	0.0	40916.771	0.0
497.3400	23.01	-4.26	19132.690	2.0	39234.050	3.0
497.3425	27.00	-2.43	28470.510	1.5	48571.770	.5
497.3440	24.02	-3.55	138362.400	2.0	158463.600	3.0
497.3563	17.01	-2.96	138623.000	1.0	158723.700	1.0
497.3613	17.02	-.71	185838.000	1.5	205938.500	1.5
497.3631	22.00	-4.32	8602.340	2.0	28702.768	3.0
497.3647	21.00	-.30	17025.360	1.5	37125.720	.5
497.3682	29.01	-.29	117928.480	1.0	138028.700	1.0
497.3740	62.01	-2.33	2661.698	0.0	22767.293	0.0
497.3806	23.02	-1.78	141488.320	4.5	161588.040	3.5
497.3817	22.00	-4.52	7255.369	2.0	27355.042	1.0
497.3912	22.00	-3.26	14105.680	3.0	34204.971	4.0
497.4053	25.02	-3.27	115762.600	1.5	135861.320	1.5
497.4120	44.00	-.35	22019.503	0.0	42123.562	0.0
497.4130	28.01	.81	112719.750	3.5	132818.160	4.5
497.4150	29.01	-.42	118163.500	2.0	138261.830	3.0
497.4207	26.01	-3.27	66612.740	1.5	86710.840	1.5
497.4219	25.01	-4.03	82605.290	4.0	102703.340	4.0
497.4281	20.02	-3.06	350805.320	4.0	370903.120	3.0
497.4300	39.00	-.06	18389.915	0.0	38493.246	0.0
497.4345	25.00	.19	41932.640	3.5	62030.180	4.5
497.4358	28.00	-1.92	30619.440	2.0	50716.927	1.0
497.4452	24.00	-1.47	42564.850	4.0	62661.960	3.0
497.4475	22.00	-1.40	25388.334	4.0	45485.350	5.0
497.4486	27.00	-2.61	16778.160	2.5	36875.130	1.5
497.4593	7.00	-2.57	94793.460	1.5	114890.000	1.5
497.4637	25.02	-3.14	115762.600	1.5	135858.960	2.5
497.4692	28.01	-3.18	98467.250	3.5	118563.390	3.5
497.4764	23.02	-1.30	141144.170	4.5	161240.020	5.5
497.4786	25.02	-2.31	115774.000	3.5	135869.760	3.5
497.4811	22.00	-3.27	25797.600	3.0	45893.260	3.0
497.4912	25.00	-3.59	23549.200	2.5	43644.450	1.5
497.5078	29.01	-2.47	115639.020	2.0	135733.600	3.0
497.5088	28.01	-1.20	112906.930	1.5	133001.470	.5
497.5123	25.03	-4.46	152858.200	3.0	172952.600	3.0
497.5140	41.00	-1.17	12259.943	0.0	32359.880	0.0
497.5177	23.02	-1.83	140933.140	3.5	161027.320	4.5
497.5182	24.00	-4.64	37233.500	5.0	57327.660	5.0
497.5250	72.00	-2.43	2339.068	0.0	22438.560	0.0
497.5294	27.00	-2.62	32027.500	3.5	52121.210	4.5
497.5344	22.00	.25	20209.444	2.0	40302.950	3.0
497.5417	28.01	-4.73	96052.480	2.5	116145.690	3.5
497.5417	26.00	-3.02	26627.612	4.0	46720.624	4.0
497.5474	28.00	-.61	33610.916	2.0	53703.899	1.0
497.5760	63.00	.03	18309.257	0.0	38406.689	0.0
497.5826	18.01	-1.94	194883.000	3.5	214974.560	3.5
497.5841	18.01	-3.38	194883.000	3.5	214974.500	2.5
497.5890	24.00	-1.60	37244.170	4.0	57335.470	4.0
497.5965	24.00	-4.13	24282.340	4.0	44373.340	3.0
497.5980	62.00	-.59	0.000	0.0	20096.544	0.0
497.6118	27.00	-2.42	23152.570	3.5	43242.950	2.5
497.6130	28.00	-1.89	29084.478	4.0	49174.811	4.0
497.6200	44.00	.67	26697.639	0.0	46793.294	0.0
497.6200	73.00	-2.42	9194.957	0.0	29290.612	0.0
497.6202	24.00	-2.49	44746.260	6.0	64836.300	6.0
497.6205	22.01	-5.71	12676.990	4.5	32767.020	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
497.6217	24.00	-2.93	27703.840	4.0	47793.820	5.0
497.6237	28.01	-3.93	114874.880	2.5	134964.780	1.5
497.6243	7.00	-2.21	95532.120	2.5	115622.000	2.5
497.6320	28.00	-2.94	13521.352	2.0	33610.916	2.0
497.6329	25.02	-4.51	115780.230	2.5	135869.760	3.5
497.6410	23.01	-4.14	52700.030	2.0	72789.230	3.0
497.6410	18.01	-2.24	194822.100	3.5	214911.300	2.5
497.6547	26.00	-4.16	26224.961	3.0	46313.610	2.0
497.6618	17.00	-1.46	74225.846	1.5	94314.206	1.5
497.6688	20.02	-.24	370304.540	2.0	390392.620	3.0
497.6693	28.00	-1.39	34163.294	2.0	54251.353	3.0
497.6772	28.01	-4.27	100078.780	1.5	120166.520	1.5
497.7067	25.01	-2.27	53698.700	2.0	73785.250	2.0
497.7074	27.00	-4.12	34196.210	1.5	54282.730	2.5
497.7087	26.00	-2.89	34362.860	1.0	54449.330	1.0
497.7204	22.00	-1.58	28638.832	2.0	48724.830	1.0
497.7220	20.02	-.30	344257.920	1.0	364343.850	1.0
497.7230	58.01	-1.23	7259.177	0.0	27350.674	0.0
497.7233	7.00	-2.47	95532.120	2.5	115618.000	1.5
497.7233	7.00	-2.87	95532.120	2.5	115618.000	2.5
497.7234	22.00	-4.42	26564.385	3.0	46650.260	3.0
497.7325	22.00	-1.68	28638.832	2.0	48724.340	2.0
497.7414	24.00	-1.35	42605.810	6.0	62690.960	5.0
497.7461	25.02	-3.29	115774.000	3.5	135858.960	2.5
497.7533	24.00	-.07	42589.250	5.0	62673.920	6.0
497.7641	26.00	-2.15	31686.342	2.0	51770.577	3.0
497.7699	8.01	-4.83	255913.000	1.5	275997.000	.5
497.7719	22.00	-.70	16267.510	5.0	36351.430	5.0
497.7744	26.02	-3.09	179178.620	3.0	199262.440	3.0
497.7746	28.01	-1.08	115870.280	2.5	135954.090	3.5
497.7750	45.00	-1.64	10243.505	0.0	30332.903	0.0
497.7773	29.01	-4.80	128558.900	3.0	148642.600	2.0
497.7800	7.01	-1.21	209823.910	4.0	229907.500	4.0
497.7843	9.00	-1.97	116040.883	1.5	136124.300	.5
497.7850	6.00	-3.47	69689.480	1.0	89772.870	2.0
497.7950	57.00	-1.91	0.000	0.0	20088.591	0.0
497.8096	26.00	-4.32	31937.308	1.0	52019.706	1.0
497.8103	22.00	-1.53	17540.205	3.0	37622.573	3.0
497.8120	15.00	-1.78	55939.300	.5	76021.600	1.5
497.8130	24.00	-3.00	35862.820	4.0	55945.080	5.0
497.8167	25.01	-3.33	53698.700	2.0	73780.810	3.0
497.8222	22.00	-.16	15877.180	2.0	35959.070	1.0
497.8257	24.00	-1.48	42589.250	5.0	62671.000	4.0
497.8319	12.02	-4.73	586779.500	4.0	606861.000	5.0
497.8420	25.02	-3.66	115780.230	2.5	135861.320	1.5
497.8440	26.02	-4.46	179579.830	5.0	199660.840	5.0
497.8492	22.00	-3.41	25926.820	4.0	46007.620	4.0
497.8541	11.00	-1.21	16956.172	.5	37036.774	1.5
497.8603	26.00	-1.03	32133.977	2.0	52214.330	1.0
497.8606	23.02	-.95	141507.700	3.5	161588.040	3.5
497.8653	28.01	-3.92	116468.400	1.5	136548.550	2.5
497.8691	21.02	.44	128183.000	.5	148263.000	1.5
497.8735	29.01	-3.56	119039.680	2.0	139119.500	3.0
497.8767	24.01	-2.75	68843.510	3.5	88923.200	2.5
497.8854	27.00	-4.40	23184.230	2.5	43263.570	1.5
497.8942	22.00	-2.90	21739.713	5.0	41818.700	4.0
497.9005	25.02	-2.52	115780.230	2.5	135858.960	2.5
497.9120	42.00	-1.51	10646.793	0.0	30730.663	0.0
497.9141	22.00	-3.65	25643.695	3.0	45721.878	4.0
497.9157	24.00	-3.66	25177.390	4.0	45255.510	3.0
497.9180	45.00	-1.60	11856.655	0.0	31940.283	0.0
497.9199	23.01	-3.98	52604.110	1.0	72682.060	2.0
497.9256	28.01	-3.95	101247.370	2.5	121325.090	2.5
497.9270	22.00	-1.56	17540.205	3.0	37617.868	4.0
497.9320	76.00	-1.31	16131.504	0.0	36214.568	0.0
497.9350	26.01	-3.14	66522.320	2.5	86599.660	2.5
497.9355	23.00	-2.61	19189.280	1.5	39266.600	1.5
497.9363	28.01	-2.61	116512.060	3.5	136589.350	3.5
497.9382	24.00	-4.85	31987.060	4.0	52064.270	4.0
497.9509	8.00	-2.89	88630.599	1.0	108707.300	1.0
497.9601	26.00	-2.64	29356.780	2.0	49433.108	2.0
497.9648	8.00	-2.67	88631.158	2.0	108707.300	1.0
497.9687	8.00	-3.37	88631.315	0.0	108707.300	1.0
497.9787	28.01	-1.20	112906.930	1.5	132982.510	1.5
497.9792	27.00	-3.00	28470.510	1.5	48546.070	1.5
497.9838	26.00	-3.91	24335.764	2.0	44411.137	1.0
497.9850	74.00	-1.07	18147.942	0.0	38228.868	0.0
497.9869	7.01	-.96	209673.650	2.0	229748.900	3.0
497.9886	28.01	-3.28	116824.150	2.5	136899.330	1.5
497.9893	22.01	-2.98	44902.420	2.5	64977.570	3.5
497.9936	26.01	-4.68	65109.710	3.5	85184.690	4.5
497.9938	27.00	-.43	32781.710	2.5	52856.680	3.5
497.9980	25.01	-4.26	82605.290	4.0	102680.090	5.0
498.0000	29.01	-.91	117928.480	1.0	138003.200	2.0
498.0033	18.01	-.86	186074.350	2.5	206148.940	3.5
498.0042	24.00	-2.20	35870.530	4.0	55945.080	5.0
498.0124	27.00	-2.23	34352.420	1.5	54426.640	1.5
498.0166	28.00	-.63	29084.478	4.0	49158.529	5.0
498.0267	26.00	-2.35	33695.378	5.0	53769.020	4.0
498.0315	24.00	-2.62	24299.890	2.0	44373.340	3.0
498.0345	21.00	-.16	17012.980	2.5	37086.310	1.5
498.0350	44.00	-1.21	9517.587	0.0	29596.497	0.0
498.0352	12.02	-.40	564664.600	2.0	584737.900	2.0
498.0352	12.02	-.40	564664.600	2.0	584737.900	2.0
498.0422	21.00	-3.56	15672.550	1.5	35745.570	2.5
498.0422	24.01	-4.72	67875.680	3.5	87948.700	4.5
498.0427	29.01	-3.97	128569.600	2.0	148642.600	2.0
498.0444	9.00	-2.62	116040.883	1.5	136113.810	1.5
498.0600	29.01	-3.80	128558.900	3.0	148631.200	3.0
498.0648	27.00	-3.19	33439.720	4.5	53511.830	5.5
498.0871	28.01	-4.51	116824.150	2.5	136895.360	3.5
498.0876	25.00	-3.14	35114.980	2.5	55186.170	2.5
498.0965	29.01	-4.09	115662.770	4.0	135733.600	3.0
498.0982	9.00	-2.15	117391.950	.5	137462.710	1.5
498.1000	28.01	.38	98822.550	6.5	118893.240	6.5
498.1000	23.00	-5.25	14548.830	2.5	34619.520	2.5
498.1012	29.01	-2.94	116371.410	4.0	136442.050	3.0
498.1037	24.00	-1.91	37205.880	3.0	57276.420	3.0
498.1062	28.01	-1.43	98822.550	6.5	118892.990	5.5
498.1129	23.01	-4.41	52604.110	1.0	72674.280	2.0
498.1156	26.02	-2.21	179630.770	4.0	199700.630	4.0
498.1298	25.02	-2.31	115711.600	4.5	135781.090	5.5
498.1320	24.00	-2.90	24303.940	3.0	44373.340	3.0
498.1370	28.01	-3.85	99844.130	3.5	119913.330	4.5
498.1377	22.01	-3.09	12628.770	1.5	32697.940	2.5
498.1419	30.02	-2.98	282839.500	3.0	302908.500	4.0
498.1469	12.02	.70	564664.600	2.0	584733.400	3.0
498.1469	12.02	.70	564664.600	2.0	584733.400	3.0
498.1532	9.00	-3.55	116040.883	1.5	136109.430	.5
498.1537	9.00	-1.49	117872.916	1.5	137941.440	2.5
498.1613	26.02	-2.28	179194.220	4.0	199262.440	3.0
498.1620	26.00	-4.49	31686.342	2.0	51754.534	1.0
498.1640	24.00	.02	42605.810	6.0	62673.920	6.0
498.1730	62.01	-1.93	5242.739	0.0	25316.087	0.0
498.1732	22.00	.60	6842.964	5.0	26910.705	6.0
498.1771	22.00	-2.12	25643.695	3.0	45711.280	4.0
498.1792	27.00	-1.53	32027.500	3.5	52095.000	3.5
498.1896	28.01	-4.85	101258.010	1.5	121325.090	2.5
498.1913	22.00	-3.81	19573.968	4.0	39640.980	3.0
498.1973	28.01	-3.48	116893.980	2.5	136960.750	2.5
498.2075	25.00	-2.11	38008.700	5.5	58075.060	5.5
498.2127	25.00	-3.02	35041.370	3.5	55107.520	3.5
498.2130	39.01	-1.87	8227.067	0.0	28298.803	0.0
498.2244	23.01	-2.36	30673.140	2.0	50738.820	1.0
498.2472	22.00	-4.48	25699.950	2.0	45764.710	1.0
498.2510	26.00	-.31	33095.922	4.0	53160.530	3.0
498.2522	14.02	-3.13	230301.660	4.0	250366.220	3.0
498.2600	74.00	-2.71	0.000	0.0	20069.843	0.0
498.2609	14.02	-3.02	230302.010	4.0	250366.220	3.0
498.2661	12.02	-3.40	586777.900	3.0	606841.900	2.0
498.2661	12.02	-2.10	586777.900	3.0	606841.900	3.0
498.2666	23.00	-2.97	17116.920	3.5	37180.900	4.5
498.2728	23.00	-4.38	24992.880	3.5	45056.610	3.5
498.2748	28.01	-4.67	95017.710	4.5	115081.360	4.5
498.2793	18.02	-2.18	211563.830	1.0	231627.300	1.0
498.2809	11.00	-1.91	16973.368	1.5	37036.774	1.5
498.2814	11.00	-.95	16973.368	1.5	37036.754	2.5
498.2922	28.01	-3.64	95893.760	1.5	115956.710	2.5
498.2944	28.01	-3.95	116468.400	1.5	136531.260	1.5
498.3023	27.00	-1.35	34196.210	1.5	54258.750	2.5
498.3024	6.00	-3.52	69710.660	2.0	89773.200	3.0
498.3059	12.02	-3.87	586779.500	4.0	606841.900	3.0
498.3106	6.00	-2.70	69710.660	2.0	89772.870	2.0
498.3108	27.00	-2.17	32654.500	2.5	52716.700	3.5
498.3252	26.00	-.58	33507.102	3.0	53568.720	2.0
498.3257	29.01	-4.10	128569.600	2.0	148631.200	3.0
498.3304	23.02	-2.29	161588.040	3.5	181649.450	3.5
498.3344	26.00	-4.33	29371.860	3.0	49433.108	2.0
498.3418	21.00	-.41	17025.360	1.5	37086.310	1.5
498.3450	44.00	-1.75	8952.985	0.0	29019.405	0.0
498.3485	24.00	-2.90	35884.400	5.0	55945.080	5.0
498.3558	18.01	-3.49	183090.810	1.5	203151.200	2.5
498.3575	24.01	-3.62	54444.190	3.5	74504.510	4.5
498.3603	7.00	-2.14	94881.790	3.5	114942.000	2.5
498.3632	24.00	-.69	27649.710	4.0	47709.800	5.0
498.3749	23.00	-2.50	19189.280	1.5	39248.900	1.5
498.3796	26.02	-4.06	186268.790	2.0	206328.220	3.0
498.3851	26.00	-.39	33095.922	4.0	53155.130	4.0
498.3868	7.00	-2.27	94830.860	2.5	114890.000	1.5
498.3972	27.00	-2.41	23184.230	2.5	43242.950	2.5
498.4112	28.00	.24	30619.440	2.0	50677.599	3.0
498.4395	26.02	-4.05	206324.890	2.0	226381.910	3.0
498.4449	12.02	-3.99	586785.100	3.0	606841.900	2.0
498.4450	24.00	-3.49	33060.740	3.0	53117.540	4.0
498.4469	28.01	-4.34	113753.040	4.5	133809.760	3.5
498.4514	23.00	-1.21	21603.170	4.5	41659.710	5.5
498.4514	18.01	-3.85	182951.150	.5	203007.690	1.5
498.4599	25.02	-2.99	124823.900	4.5	144880.100	5.5
498.4614	23.00	-4.80	22121.170	4.5	42177.310	4.5
498.4624	26.02	-3.14	186268.790	2.0	206324.890	2.0
498.4693	24.00	-3.70	44746.260	6.0	64802.080	5.0
498.4696	27.00	-2.08	23207.760	1.5	43263.570	1.5
498.4708	29.01	-4.08	117883.140	4.0	137938.900	4.0
498.4720	74.00	-1.39	18873.860	0.0	38935.167	0.0
498.4875	26.02	-3.77	179579.830	5.0	199634.920	6.0
498.4909	24.00	-1.20	27649.710	4.0	47704.660	4.0
498.4919	24.01	-4.70	66727.160	2.5	86782.070	3.5
498.4922	26.00	-4.71	24772.019	1.0	44826.920	0.0
498.4966	7.00	-3.40	95475.280	.5	115530.000	.5
498.4966	7.00	-2.48	95475.280	.5	115530.000	1.5
498.5133	29.01	-4.81	116388.000	2.0	136442.050	3.0
498.5223	26.02	-2.65	206328.220	3.0	226381.910	3.0
498.5239	26.00	-.65	31686.342	2.0	51739.964	2.0
498.5240	24.00	-3.89	35398.020	4.0	55451.640	3.0
498.5329	24.01	-3.21	68583.440	2.5	88636.700	1.5
498.5353	22.00	-3.86	11776.806	4.0	31829.972	4.0
498.5380	90.00	-1.96	3629.588	0.0	23688.239	0.0
498.5439	24.01	-3.85	31531.620	1.5	51584.440	1.5
498.5444	27.01	-5.89	27484.300	3.0	47537.100	2.0
498.5474	24.00	-4.69	35862.820	4.0	55915.500	4.0
498.5494	29.01	-.26	116080.460	3.0	136133.060	4.0
498.5496	24.00	-1.94	27649.710	4.0	47702.300	3.0
498.5541	23.00	-3.04	8715.720	3.5	28768.130	4.5
498.5554	26.00	-1.59	23110.925	3.0	43163.282	4.0
498.5560	42.00	-1.13	21212.928	0.0	41270.855	0.0
498.5571	28.01	-.70	115827.120	3.5	135879.410	3.5
498.5643	23.03	.52	237638.800	2.0	257690.800	3.0
498.5730	26.00	-3.76	29798.960	4.0	49850.610	3.0
498.5800	22.00	-1.17	28788.372	4.0	48839.740	3.0
498.5803	9.00	-1.94	116040.883	1.5	136092.240	2.5
498.5819	25.00	-1.60	27248.000	1.5	47299.290	.5
498.5895	22.00	-2.79	26892.926	3.0	46943.910	2.0
498.5929	26.02	-2.05	184951.620	3.0	205002.470	3.0
498.5944	24.00	-1.05	31009.000	3.0	51059.790	4.0
498.5964	26.00	-2.69	34328.733	3.0	54379.440	3.0
498.5980	75.00	-1.23	17180.052	0.0	37236.290	0.0
498.5991	27.01	-6.47	25147.200	4.0	45197.800	5.0
498.6066	12.02	-3.67	586791.600	2.0	606841.900	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
498.6066	12.02	-2.26	586791.600	2.0	606841.900	2.0
498.6113	22.00	-3.94	14028.470	2.0	34078.580	3.0
498.6133	18.01	-2.84	194861.270	2.5	214911.300	2.5
498.6205	26.00	-1.79	34017.084	1.0	54066.821	2.0
498.6240	24.00	-3.75	27816.880	5.0	47866.480	4.0
498.6262	28.01	-1.81	101144.630	3.5	121194.140	2.5
498.6400	9.00	-1.78	116040.883	1.5	136089.840	1.5
498.6420	58.01	-.81	8227.067	0.0	28281.535	0.0
498.6438	28.01	-4.57	116468.400	1.5	136517.200	.5
498.6459	7.00	-2.68	95475.280	.5	115524.000	.5
498.6459	7.00	-3.09	95475.280	.5	115524.000	1.5
498.6518	9.00	-2.84	115917.909	2.5	135966.390	1.5
498.6573	27.00	-2.88	32654.500	2.5	52702.760	1.5
498.6682	23.00	-3.46	19189.280	1.5	39237.100	.5
498.6715	28.01	-.14	101144.630	3.5	121192.320	3.5
498.6781	26.00	-4.18	24118.815	4.0	44166.240	3.0
498.6830	57.01	-2.02	1371.178	0.0	21423.997	0.0
498.6866	27.00	-3.41	23152.570	3.5	43199.650	2.5
498.6890	26.00	-1.95	34328.733	3.0	54375.719	2.0
498.6900	92.01	-2.56	887.233	0.0	20939.771	0.0
498.6940	74.00	-1.39	15002.299	0.0	35054.676	0.0
498.7060	25.00	-3.70	23549.200	2.5	43595.500	2.5
498.7065	24.01	-2.01	70679.220	4.5	90725.500	3.5
498.7075	23.00	-4.53	25111.500	4.5	45157.740	4.5
498.7086	22.00	-2.39	25643.695	3.0	45689.890	3.0
498.7135	18.01	-2.22	186074.350	2.5	206120.350	2.5
498.7236	22.00	-2.80	21469.494	3.0	41515.090	4.0
498.7260	44.00	-1.75	9033.642	0.0	29084.732	0.0
498.7294	24.01	-3.08	64448.840	2.5	84494.200	2.5
498.7377	7.01	-.66	168892.210	1.0	188937.240	0.0
498.7391	24.00	-2.25	35870.530	4.0	55915.500	4.0
498.7538	23.00	-4.35	18198.080	2.5	38242.460	3.5
498.7605	26.00	-2.11	33695.378	5.0	53739.488	5.0
498.7814	26.00	-3.67	31307.235	4.0	51350.505	4.0
498.7820	40.00	-.85	16212.162	0.0	36261.001	0.0
498.7837	28.01	.19	112686.300	2.5	132729.480	2.5
498.7857	27.00	-3.92	4690.180	2.5	24733.280	2.5
498.7862	26.00	-1.78	33765.291	2.0	53808.370	1.0
498.7886	23.00	-4.61	17242.050	5.5	37285.030	4.5
498.7921	28.01	-5.00	116893.980	2.5	136936.820	3.5
498.7967	26.00	-4.95	24335.764	2.0	44378.420	1.0
498.8006	27.00	-1.45	32027.500	3.5	52070.000	2.5
498.8031	27.00	-.73	32733.070	3.5	52775.470	4.5
498.8294	7.00	-2.46	95493.660	1.5	115535.000	2.5
498.8297	24.00	-4.81	24833.860	3.0	44875.190	2.0
498.8598	23.01	-5.89	26839.820	3.0	46879.940	2.0
498.8613	24.01	-3.71	54444.190	3.5	74484.250	2.5
498.8690	24.00	-3.80	36552.130	3.0	56591.880	2.0
498.8770	23.00	-3.61	22313.990	5.5	42353.420	6.5
498.8790	26.02	-2.38	179661.480	3.0	199700.830	4.0
498.8820	27.00	-3.27	32733.070	3.5	52772.300	2.5
498.8835	24.01	-4.24	47354.630	2.5	67393.800	3.5
498.8914	26.01	-3.08	66377.370	3.5	86416.220	3.5
498.8927	27.01	-6.82	28111.900	2.0	48150.700	3.0
498.8932	26.00	-.85	33507.102	3.0	53545.882	3.0
498.8970	41.00	-2.04	645.260	0.0	20689.478	0.0
498.9066	23.02	-.73	141531.170	1.5	161569.410	1.5
498.9089	7.00	-3.00	94770.850	.5	114809.000	.5
498.9101	23.03	-.66	263902.300	3.0	283940.400	2.0
498.9126	8.01	-3.97	255913.000	1.5	275951.000	1.5
498.9126	8.01	-4.97	255913.000	1.5	275951.000	2.5
498.9131	22.00	-.02	15975.590	3.0	36013.570	2.0
498.9286	9.00	-2.02	116040.883	1.5	136078.240	2.5
498.9310	90.00	-1.62	7178.519	0.0	27221.371	0.0
498.9440	62.01	-2.41	1935.780	0.0	21978.109	0.0
498.9500	8.01	-4.68	255843.100	1.5	275879.600	2.5
498.9502	22.00	-4.95	8602.340	2.0	28638.832	2.0
498.9539	7.00	-3.70	95493.660	1.5	115530.000	1.5
498.9647	28.01	-.09	101144.630	3.5	121180.540	4.5
498.9759	28.01	-3.50	118893.240	6.5	138928.700	7.5
498.9781	26.01	-4.30	63273.030	2.5	83308.400	2.5
498.9826	27.00	-3.07	23207.760	1.5	43242.950	2.5
498.9861	26.02	-4.92	114325.350	5.0	134360.400	4.0
499.0097	26.02	-1.92	179178.620	3.0	199212.720	4.0
499.0140	28.01	-.94	101144.630	3.5	121178.560	3.5
499.0172	24.00	-4.98	33040.100	2.0	53073.900	3.0
499.0177	26.01	-4.93	62945.120	3.5	82978.900	4.5
499.0232	26.02	-4.28	166421.330	4.0	186454.890	5.0
499.0289	24.00	-4.07	36558.550	2.0	56591.880	2.0
499.0454	24.01	-2.54	47354.630	2.5	67387.300	2.5
499.0526	23.01	-3.63	44098.460	3.0	64130.840	4.0
499.0558	24.00	-2.14	37244.170	4.0	57276.420	3.0
499.0602	26.00	-2.74	38678.015	2.0	58710.090	3.0
499.0623	18.01	-2.51	194800.180	4.5	214832.170	3.5
499.0698	28.01	-4.41	113177.610	3.5	133209.300	2.5
499.0730	18.01	-2.08	182222.030	1.5	202253.590	1.5
499.0795	30.02	-2.35	260805.900	2.0	280837.200	3.0
499.0835	26.01	-4.63	64832.000	4.5	84863.140	5.5
499.0845	24.00	-3.55	35884.400	5.0	55915.500	4.0
499.0967	27.00	-1.46	32733.070	3.5	52763.680	3.5
499.1020	58.01	-.66	11211.395	0.0	31247.380	0.0
499.1034	7.00	-3.74	95493.660	1.5	115524.000	1.5
499.1034	7.00	-2.40	95493.660	1.5	115524.000	2.5
499.1044	30.02	-3.48	282839.500	3.0	302869.800	3.0
499.1067	22.00	.48	6742.757	4.0	26772.965	5.0
499.1087	10.01	-4.04	302307.750	2.5	322337.880	2.5
499.1101	26.02	-4.56	179630.770	4.0	199660.840	5.0
499.1104	26.01	-4.42	22409.820	.5	42439.880	.5
499.1109	7.01	-2.01	202714.120	1.0	222744.160	1.0
499.1179	27.00	-1.93	33674.380	2.5	53704.140	2.5
499.1211	10.01	-2.74	302307.750	2.5	322337.380	3.5
499.1244	7.01	-.16	205597.970	1.0	225627.470	2.0
499.1267	26.00	-1.36	33801.555	2.0	53830.960	3.0
499.1280	57.01	-1.70	7339.834	0.0	27374.775	0.0
499.1296	28.00	-4.23	15609.861	2.0	35639.148	3.0
499.1326	6.00	-2.47	69744.030	3.0	89773.200	3.0
499.1343	18.01	-2.93	186074.350	2.5	206103.450	1.5
499.1400	23.00	-4.33	17181.980	4.5	37210.850	5.5
499.1407	6.00	-3.37	69744.030	3.0	89772.870	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
499.1475	25.02	-.39	172547.850	2.5	192576.420	2.5
499.1542	18.01	-3.31	194883.000	3.5	214911.300	2.5
499.1642	26.00	-4.29	31322.603	3.0	51350.505	4.0
499.1680	27.00	-3.91	33674.380	2.5	53702.130	3.5
499.1799	26.00	-3.99	23051.744	0.0	43079.013	1.0
499.1818	22.00	-3.46	27750.124	5.0	47777.320	5.0
499.1848	26.00	-3.29	34039.495	4.0	54066.570	4.0
499.1859	15.01	-1.40	107923.570	2.0	127950.600	2.0
499.1861	26.02	-4.75	186268.790	2.0	206295.810	1.0
499.1918	16.01	-.67	109831.280	1.5	129858.070	1.5
499.1919	21.00	.15	17012.980	2.5	37039.770	2.5
499.2020	62.01	-1.37	7985.094	0.0	28017.065	0.0
499.2023	28.01	1.10	98822.550	6.5	118848.920	7.5
499.2036	22.01	-6.99	9518.050	2.5	29544.370	2.5
499.2276	26.00	-3.46	32873.623	4.0	52898.980	5.0
499.2330	25.02	.24	172855.020	4.5	192880.160	3.5
499.2420	26.02	-3.15	186303.440	3.0	206328.220	3.0
499.2460	26.01	-3.67	58666.360	3.5	78690.980	2.5
499.2470	27.00	-2.84	34133.590	3.5	54158.170	4.5
499.2592	24.00	-2.43	27597.220	3.0	47621.310	3.0
499.2669	26.02	-3.09	179579.830	5.0	199603.610	4.0
499.2684	24.00	-2.38	35884.400	5.0	55908.120	6.0
499.2740	44.00	-1.60	7420.492	0.0	27449.574	0.0
499.2794	24.00	-4.59	31377.960	4.0	51401.240	5.0
499.2929	24.00	-2.68	42648.260	3.0	62671.000	4.0
499.2998	23.00	-5.22	14514.750	1.5	34537.210	1.5
499.3008	27.00	-.60	32841.990	4.5	52864.410	4.5
499.3023	28.01	-4.24	114942.420	1.5	134964.780	1.5
499.3026	23.00	-4.38	24898.730	2.5	44921.080	2.5
499.3041	28.01	-4.47	115827.120	3.5	135849.410	2.5
499.3145	23.01	-4.47	52767.360	3.0	72789.230	3.0
499.3220	22.00	-1.49	28702.768	3.0	48724.340	2.0
499.3250	26.02	-3.34	186303.440	3.0	206324.890	2.0
499.3333	25.00	-4.27	35165.050	1.5	55186.170	2.5
499.3352	28.01	-.04	112906.930	1.5	132927.970	1.5
499.3352	26.01	-3.27	22637.190	4.5	42658.230	3.5
499.3387	25.02	-3.42	115711.600	4.5	135732.500	4.5
499.3450	18.01	-4.31	184093.060	.5	204113.710	1.5
499.3500	26.02	-3.80	114339.950	4.0	134360.400	4.0
499.3507	29.01	-3.42	110365.980	2.0	130386.400	2.0
499.3565	27.00	-1.97	33674.380	2.5	53694.570	3.5
499.3662	26.00	-2.31	33946.920	2.0	53966.720	2.0
499.3697	28.01	-4.05	101366.140	2.5	121385.800	1.5
499.3744	18.01	-.92	190106.230	1.5	210125.700	2.5
499.3880	57.00	-1.61	0.000	0.0	20024.510	0.0
499.3934	26.00	-3.47	31686.342	2.0	51705.052	2.0
499.3986	26.02	-.91	179194.220	4.0	199212.720	4.0
499.4051	24.01	-4.16	66649.710	1.5	86667.950	1.5
499.4130	71.01	-1.32	12340.601	0.0	32364.109	0.0
499.4132	26.00	-2.82	7376.762	4.0	27394.676	3.0
499.4163	25.01	-3.63	62587.500	3.0	82605.290	4.0
499.4243	28.01	-3.46	98276.700	4.5	118294.170	3.5
499.4251	25.00	-2.34	27281.850	.5	47299.290	.5
499.4330	23.00	-3.94	8578.520	2.5	28595.640	3.5
499.4353	7.01	-.68	202861.360	3.0	222878.390	2.0
499.4361	7.01	-.15	205654.220	2.0	225671.220	3.0
499.4371	7.01	-.15	168892.210	1.0	188909.170	1.0
499.4483	25.00	-3.38	38120.180	4.5	58136.690	3.5
499.4650	21.00	-3.74	18855.760	1.5	38871.600	2.5
499.4725	7.00	-3.00	94793.460	1.5	114809.000	.5
499.4755	27.00	-4.42	23184.230	2.5	43199.650	2.5
499.4757	22.00	-4.29	25797.600	3.0	45813.010	2.0
499.4760	40.00	-.35	15002.299	0.0	35023.281	0.0
499.4905	22.00	-2.44	17540.205	3.0	37555.021	3.0
499.4912	24.00	-2.59	37205.880	3.0	57220.670	2.0
499.4937	27.00	-4.17	32841.990	4.5	52856.680	3.5
499.4947	23.00	-4.46	24830.180	1.5	44844.830	1.5
499.4972	24.01	-3.28	47372.750	1.5	67387.300	2.5
499.5007	21.00	-.91	17025.360	1.5	37039.770	2.5
499.5032	22.00	-2.71	18145.400	2.0	38159.710	3.0
499.5081	23.00	-2.60	15078.250	.5	35092.360	1.5
499.5179	29.01	-1.24	118163.500	2.0	138177.220	2.0
499.5184	24.00	-2.53	42648.260	3.0	62661.960	3.0
499.5249	24.00	-3.26	24286.540	1.0	44299.980	2.0
499.5319	24.00	-3.79	33060.740	3.0	53073.900	3.0
499.5320	42.00	-.92	23390.681	0.0	43409.419	0.0
499.5320	74.00	-1.07	22745.421	0.0	42764.159	0.0
499.5394	26.00	-2.68	34362.860	1.0	54375.719	2.0
499.5462	26.00	-3.96	27543.000	1.0	47555.584	1.0
499.5481	22.00	-2.01	27025.652	4.0	47038.160	3.0
499.5491	28.01	-4.75	111783.790	3.5	131796.260	2.5
499.5508	17.01	-.56	126456.600	4.0	146469.000	3.0
499.5568	24.00	-2.50	35862.820	4.0	55874.980	5.0
499.5636	24.01	-3.76	50667.330	3.5	70679.220	4.5
499.5643	28.00	-2.80	29320.782	3.0	49332.643	4.0
499.5675	7.01	-.77	209737.970	3.0	229749.700	4.0
499.5775	15.01	-2.92	107923.570	2.0	127934.900	1.0
499.5835	18.01	-2.09	185093.230	4.5	205104.320	4.5
499.5843	24.00	-2.21	35934.020	6.0	55945.080	5.0
499.5873	25.02	-2.72	195462.260	.5	215473.200	1.5
499.5875	7.01	-1.78	209737.970	3.0	229748.900	3.0
499.5894	26.00	-1.83	34121.623	0.0	54132.480	1.0
499.6018	24.01	-1.86	69498.270	4.5	89508.630	5.5
499.6090	18.01	-3.27	194822.100	3.5	214832.170	3.5
499.6175	28.01	-1.13	112719.750	3.5	132729.480	2.5
499.6325	28.01	-.33	115870.280	2.5	135879.410	3.5
499.6330	40.00	-.40	15082.956	0.0	35097.647	0.0
499.6390	22.01	-2.97	12758.150	2.5	32767.020	3.5
499.6450	28.01	-5.00	115108.090	2.5	135116.720	2.5
499.6487	26.02	-3.24	114351.920	3.0	134360.400	4.0
499.6529	23.00	-3.78	21646.390	3.5	41654.700	2.5
499.6677	7.00	-3.95	95475.280	.5	115483.000	.5
499.6677	7.00	-2.86	95475.280	.5	115483.000	1.5
499.6699	9.00	-3.20	116143.579	.5	136151.210	.5
499.6782	18.01	-.34	185093.230	4.5	205100.530	5.5
499.6802	28.01	-1.27	116512.060	3.5	136519.280	4.5
499.6814	24.01	-2.88	47372.750	1.5	67379.920	1.5
499.6819	25.02	-1.57	172569.270	1.5	192576.420	2.5
499.6820	57.01	-.89	19115.832	0.0	39128.560	0.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
499.6841	28.00	-1.96	29320.782	3.0	49327.845	2.0
499.6879	28.01	-4.40	115739.150	4.5	135746.060	3.5
499.6887	24.00	-4.22	25106.340	3.0	45113.220	3.0
499.6992	24.01	-4.95	70584.640	2.5	90591.100	2.5
499.7031	12.02	.46	564731.600	1.0	584737.900	2.0
499.7031	12.02	.46	564731.600	1.0	584737.900	2.0
499.7098	22.00	-1.81	0.000	2.0	20006.032	2.0
499.7224	7.01	-.64	205597.970	1.0	225603.500	1.0
499.7266	28.01	-4.87	116893.980	2.5	136899.340	2.5
499.7269	28.01	-3.53	116893.980	2.5	136899.330	1.5
499.7301	28.01	-.57	112906.930	1.5	132912.150	2.5
499.7319	26.02	-2.27	179207.570	5.0	199212.720	4.0
499.7339	25.00	-4.08	30354.210	3.5	50359.280	3.5
499.7426	7.00	-3.69	95475.280	.5	115480.000	.5
499.7426	7.00	-3.68	95475.280	.5	115480.000	1.5
499.7449	22.00	-3.03	27025.652	4.0	47030.280	3.0
499.7494	24.00	-2.27	35870.530	4.0	55874.980	5.0
499.7539	24.00	-2.44	33113.270	4.0	53117.540	4.0
499.7576	20.02	-.18	341349.190	1.0	361353.310	1.0
499.7637	26.00	-4.97	26406.490	1.0	46410.366	1.0
499.7709	18.01	-2.98	183914.560	.5	203918.150	1.5
499.7718	25.01	-3.99	53781.700	3.0	73785.250	2.0
499.7731	56.01	-1.34	50011.220	0.0	70020.300	0.0
499.7831	28.02	-4.64	121412.200	2.0	141415.300	1.0
499.7836	20.02	-2.75	350900.040	2.0	370903.120	3.0
499.7880	41.00	-1.05	12017.970	0.0	32026.454	0.0
499.7886	7.00	-2.93	95532.120	2.5	115535.000	2.5
499.7886	7.00	-2.72	95532.120	2.5	115535.000	3.5
499.7984	9.02	-2.85	444489.400	2.5	464491.890	3.5
499.8018	28.01	-1.61	101144.630	3.5	121146.980	2.5
499.8063	28.01	-2.62	98561.220	2.5	118563.390	3.5
499.8146	20.02	-1.49	350900.040	2.0	370901.880	2.0
499.8218	28.00	-.30	29084.478	4.0	49086.030	4.0
499.8256	13.01	-3.85	120089.800	1.0	140091.200	0.0
499.8256	13.01	-3.46	120089.800	1.0	140091.200	1.0
499.8256	13.01	-3.15	120089.800	1.0	140091.200	2.0
499.8261	28.01	-4.23	116893.980	2.5	136895.360	3.5
499.8353	28.01	-4.91	114052.040	3.5	134053.050	2.5
499.8370	64.01	-.25	18228.600	0.0	38235.122	0.0
499.8583	24.00	-3.37	24299.890	2.0	44299.980	2.0
499.8646	6.00	-3.57	69710.660	2.0	89710.500	3.0
499.8821	24.00	-4.82	28637.000	3.0	48636.140	3.0
499.8826	26.02	-1.38	185003.350	2.0	205002.470	3.0
499.8828	25.01	-2.21	53781.700	3.0	73780.810	3.0
499.8871	26.01	-4.92	63559.560	.5	83558.500	.5
499.8876	23.00	-2.98	17181.980	4.5	37180.900	4.5
499.8883	22.00	-4.99	13981.750	1.0	33980.639	2.0
499.8993	21.00	-2.64	15672.550	1.5	35671.000	1.5
499.9020	24.00	-3.05	42648.260	3.0	62646.600	2.0
499.9070	64.00	-.23	10808.108	0.0	30811.829	0.0
499.9098	28.01	-2.81	72375.420	1.5	92373.450	2.5
499.9108	26.00	-1.44	33765.291	2.0	53763.280	3.0
499.9135	7.00	-3.32	95532.120	2.5	115530.000	1.5
499.9250	24.00	-3.88	33040.100	2.0	53037.520	2.0
499.9260	28.01	.10	115956.710	2.5	135954.090	3.5
499.9343	25.01	-4.32	44521.520	4.0	64518.570	5.0
499.9350	24.01	-3.70	69478.060	2.5	89475.080	2.5
499.9365	28.01	-1.76	113172.960	4.5	133169.920	3.5
499.9425	28.01	-3.69	115120.000	2.5	135116.720	2.5
499.9470	57.01	-1.51	3226.301	0.0	23228.421	0.0
499.9504	22.00	.34	6661.003	3.0	26657.409	4.0
499.9523	28.01	-2.89	109846.000	3.5	129842.330	2.5
499.9596	24.00	-4.29	24303.940	3.0	44299.980	2.0
499.9680	72.01	-2.04	14276.381	0.0	34277.661	0.0
499.9716	24.00	-2.25	26787.500	3.0	46783.060	4.0
499.9740	77.00	.25	32343.666	0.0	52344.706	0.0
499.9751	25.00	-3.08	43428.580	4.5	63424.000	3.5
499.9910	42.00	-.10	24358.571	0.0	44358.931	0.0
499.9950	90.01	-1.63	14195.724	0.0	34195.924	0.0
499.9978	26.01	-4.53	63465.190	1.5	83459.700	1.5
500.0117	22.00	-6.07	8602.340	2.0	28596.293	1.0
500.0183	10.01	-1.25	302057.260	.5	322050.950	1.5
500.0338	28.00	-.31	29320.782	3.0	49313.851	3.0
500.0428	18.01	-2.06	190592.170	1.5	210584.880	1.5
500.0431	23.00	-3.11	17181.980	4.5	37174.680	3.5
500.0471	25.00	-4.11	35114.980	2.5	55107.520	3.5
500.0516	28.01	-3.92	115108.090	2.5	135100.450	3.5
500.0528	28.01	-3.29	113177.610	3.5	133169.920	3.5
500.0633	27.00	-4.17	23207.760	1.5	43199.650	2.5
500.0636	7.00	-4.52	95532.120	2.5	115524.000	1.5
500.0636	7.00	-3.37	95532.120	2.5	115524.000	2.5
500.0636	7.00	-2.45	95532.120	2.5	115524.000	3.5
500.0681	30.02	-2.44	260878.800	3.0	280870.500	4.0
500.0696	26.02	-3.46	184951.620	3.0	204943.260	2.0
500.0728	26.01	-4.47	22409.820	.5	42401.330	1.5
500.0866	27.00	-1.96	26232.050	3.5	46223.010	4.5
500.0911	27.00	-3.59	33945.900	2.5	53936.680	2.5
500.0950	41.00	-.87	13066.518	0.0	33062.719	0.0
500.0959	27.00	-4.01	32781.710	2.5	52772.300	2.5
500.0961	24.00	-2.24	35884.400	5.0	55874.980	5.0
500.1009	22.00	.12	16106.080	4.0	36096.470	3.0
500.1091	25.00	-2.69	38120.180	4.5	58110.240	4.5
500.1121	22.00	-2.35	25699.950	2.0	45689.890	3.0
500.1131	13.01	-1.35	124792.000	2.0	144781.900	3.0
500.1134	7.01	.28	166521.690	1.0	186511.580	2.0
500.1140	71.00	-1.55	4113.534	0.0	24108.975	0.0
500.1159	24.01	-4.38	47354.630	2.5	67344.420	2.5
500.1181	29.01	-4.23	128569.600	2.0	148559.300	2.0
500.1220	62.01	-2.40	1451.835	0.0	21446.956	0.0
500.1221	22.00	-4.15	17369.590	1.0	37359.130	2.0
500.1271	24.01	-4.42	69348.360	1.5	89337.700	1.5
500.1271	7.00	-3.26	95493.660	1.5	115483.000	.5
500.1271	7.00	-3.35	95493.660	1.5	115483.000	1.5
500.1271	7.00	-2.87	95493.660	1.5	115483.000	2.5
500.1341	21.00	-2.68	15756.510	2.5	35745.570	2.5
500.1411	25.02	-2.94	195592.090	1.5	215580.870	.5
500.1426	26.00	-4.30	24772.019	1.0	44760.739	1.0
500.1474	7.01	.45	166582.450	2.0	186570.980	3.0
500.1479	20.01	-.52	60533.020	.5	80521.530	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
500.1511	23.00	-4.08	14548.830	2.5	34537.210	1.5
500.1607	23.03	-.89	264113.100	4.0	284101.100	3.0
500.1759	27.00	-3.07	25937.590	4.5	45924.980	3.5
500.1790	57.00	-.72	7985.094	0.0	27977.937	0.0
500.1834	25.00	-4.06	30354.210	3.5	50341.300	4.5
500.1850	26.00	-.19	31307.235	4.0	51294.262	3.0
500.1877	26.01	-4.73	66612.740	1.5	86599.660	2.5
500.1882	30.02	-1.29	217655.800	3.0	237642.700	3.0
500.2022	7.00	-2.99	95493.660	1.5	115480.000	.5
500.2022	7.00	-4.18	95493.660	1.5	115480.000	1.5
500.2120	23.00	-7.21	8476.200	1.5	28462.150	2.5
500.2130	57.01	-1.01	18147.942	0.0	38139.426	0.0
500.2250	41.00	-1.12	12017.970	0.0	32008.974	0.0
500.2277	29.01	-2.38	117928.480	1.0	137913.800	1.0
500.2325	23.00	-.02	19023.470	4.5	39008.600	5.5
500.2440	24.00	-2.51	27703.840	4.0	47688.510	4.0
500.2450	59.01	-1.49	6371.944	0.0	26362.149	0.0
500.2673	28.01	-3.20	91800.050	4.5	111783.790	3.5
500.2700	27.00	-2.60	32733.070	3.5	52716.700	3.5
500.2702	7.01	-.85	148908.590	0.0	168892.210	1.0
500.2740	77.00	-2.74	6291.287	0.0	26280.333	0.0
500.2750	23.00	-1.42	23935.150	2.5	43918.580	2.5
500.2768	22.00	-4.06	28788.372	4.0	48771.730	5.0
500.2800	26.00	-1.63	27394.676	3.0	47377.909	4.0
500.2800	74.00	-1.37	20325.695	0.0	40314.501	0.0
500.2818	25.02	-2.47	172682.640	3.5	192665.800	4.5
500.3051	22.01	-4.54	44902.420	2.5	64884.650	2.5
500.3101	23.01	-3.81	52700.030	2.0	72682.060	2.0
500.3116	27.00	-1.48	32781.710	2.5	52763.680	3.5
500.3291	28.01	-.86	98822.550	6.5	118803.820	6.5
500.3326	25.00	-2.45	41230.300	3.5	61211.430	4.5
500.3356	29.01	-2.83	117231.690	1.0	137212.700	1.0
500.3414	28.01	.82	101144.630	3.5	121125.410	4.5
500.3428	9.00	-2.26	116143.579	.5	136124.300	.5
500.3497	28.01	-4.73	115120.000	2.5	135100.450	3.5
500.3597	23.00	-4.35	18126.270	1.5	38106.320	2.5
500.3697	24.01	-2.97	54444.190	3.5	74423.840	3.5
500.3734	28.00	-2.91	13521.352	2.0	33500.854	3.0
500.3827	28.01	-1.06	115870.280	2.5	135849.410	2.5
500.3852	22.01	-3.26	47625.170	2.5	67604.200	3.5
500.3885	7.01	-1.01	202765.260	2.0	222744.160	1.0
500.4025	26.00	-2.28	33946.920	2.0	53925.260	1.0
500.4108	18.01	-1.21	194996.490	1.5	214974.500	2.5
500.4208	26.00	-3.08	29320.050	1.0	49297.660	1.0
500.4312	18.00	-4.77	106087.305	1.0	126064.500	2.0
500.4342	26.00	-2.92	26623.726	2.0	46600.800	1.0
500.4356	24.00	-3.76	24282.340	4.0	44259.360	3.0
500.4376	24.00	-3.09	27816.880	5.0	47793.820	5.0
500.4381	28.01	-3.26	116145.690	3.5	136122.610	2.5
500.4386	30.02	-2.79	260805.900	2.0	280782.800	2.0
500.4386	30.02	-3.94	260805.900	2.0	280782.800	3.0
500.4416	24.00	-4.27	33060.740	3.0	53037.520	2.0
500.4481	28.01	-3.56	95893.760	1.5	115870.280	2.5
500.4580	59.01	-1.62	7743.122	0.0	27724.819	0.0
500.4664	18.01	-1.76	189437.690	.5	209413.480	1.5
500.4779	25.01	-4.57	59537.400	4.0	79512.730	3.0
500.4859	25.01	-4.45	53805.800	4.0	73780.810	3.0
500.4892	25.00	-1.64	23549.200	2.5	43524.080	3.5
500.4944	25.00	-3.79	45013.550	2.5	64988.220	3.5
500.5050	23.01	-3.90	52700.030	2.0	72674.280	2.0
500.5087	24.00	-2.07	35934.020	6.0	55908.120	6.0
500.5112	30.02	-2.97	217073.800	2.0	237047.800	2.0
500.5119	18.00	-3.24	106237.597	2.0	126211.570	1.0
500.5150	7.01	.60	166678.640	3.0	186652.490	4.0
500.5177	22.01	-2.58	12628.770	1.5	32602.510	1.5
500.5255	24.00	-1.43	27728.870	2.0	47702.300	3.0
500.5300	27.00	-3.32	28470.510	1.5	48443.760	2.5
500.5300	7.01	-.90	205654.220	2.0	225627.470	2.0
500.5388	22.00	-4.31	14105.680	3.0	34076.580	3.0
500.5403	26.02	-2.98	179630.770	4.0	199603.610	4.0
500.5440	82.00	-.28	29278.680	0.0	49256.944	0.0
500.5536	25.01	-4.21	44521.520	4.0	64493.830	4.0
500.5563	27.01	-5.49	27106.000	6.0	47078.200	6.0
500.5593	24.00	-1.20	27728.870	2.0	47700.950	2.0
500.5601	23.00	-3.07	14514.750	1.5	34486.800	2.5
500.5621	20.02	-.59	344257.920	1.0	364229.890	0.0
500.5659	28.01	-.82	100309.290	5.5	120281.110	4.5
500.5696	24.01	-3.89	47372.750	1.5	67344.420	2.5
500.5699	26.00	-.34	31322.603	3.0	51294.262	3.0
500.5726	24.00	-3.96	33040.100	2.0	53011.650	1.0
500.5731	25.00	-4.53	30411.740	.5	50383.270	1.5
500.5733	22.00	-4.28	22081.198	2.0	42052.720	3.0
500.5764	19.01	-.69	163237.000	1.0	183208.400	1.0
500.5786	24.00	-1.24	27728.870	2.0	47700.180	1.0
500.5809	17.00	-4.32	83130.900	1.5	103102.120	1.5
500.5852	24.01	-1.99	70879.950	5.5	90851.000	4.5
500.5890	18.01	-4.10	194861.270	2.5	214832.170	3.5
500.6057	9.00	-1.60	116143.579	.5	136113.810	1.5
500.6060	14.00	-1.33	40991.884	1.0	60962.105	2.0
500.6092	28.01	-.38	98969.440	5.5	118939.530	5.5
500.6125	26.00	-.87	22845.856	5.0	42815.814	5.0
500.6142	22.00	-3.91	28702.768	3.0	48672.660	4.0
500.6152	22.01	-3.15	44914.800	1.5	64884.650	2.5
500.6160	74.00	-1.78	6129.972	0.0	26105.362	0.0
500.6270	23.02	-1.78	141196.430	2.5	161165.810	2.5
500.6345	25.02	-3.54	195948.440	3.5	215917.520	4.5
500.6386	24.01	-1.95	69506.160	3.5	89475.080	2.5
500.6416	23.00	-2.43	17242.050	5.5	37210.850	5.5
500.6658	22.00	-2.38	21588.496	4.0	41556.330	5.0
500.6739	16.01	-.40	131028.760	1.5	150996.270	2.5
500.6789	29.01	.58	118163.500	2.0	138130.810	3.0
500.6882	28.01	-4.23	111783.790	3.5	131750.730	3.5
500.6970	39.00	-.12	18389.915	0.0	38362.074	0.0
500.7000	6.00	-4.51	69744.030	3.0	89710.500	3.0
500.7007	22.00	-4.60	25926.820	4.0	45893.260	3.0
500.7101	22.00	-4.65	26564.385	3.0	46530.450	4.0
500.7141	18.00	-2.31	106087.305	1.0	126053.210	2.0
500.7143	24.02	-4.63	138362.400	2.0	158328.300	2.0
500.7155	9.00	-1.73	116143.579	.5	136109.430	.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
500.7193	17.01	-2.72	153257.000	2.0	173222.700	3.0
500.7209	22.00	.19	6598.749	2.0	26564.385	3.0
500.7239	26.00	-2.63	31805.059	3.0	51770.577	3.0
500.7279	26.00	-.66	33095.922	4.0	53061.280	5.0
500.7286	27.00	-4.25	5075.830	1.5	25041.160	1.5
500.7328	7.01	.15	168892.210	1.0	188857.370	2.0
500.7486	26.02	-3.50	179630.770	4.0	199595.300	3.0
500.7489	26.02	-3.55	186268.790	2.0	206233.310	2.0
500.7644	12.02	-.39	564664.600	2.0	584628.500	2.0
500.7644	12.02	-.39	564664.600	2.0	584628.500	2.0
500.7737	26.00	-1.56	34636.820	2.0	54600.350	3.0
500.7740	24.00	-1.76	39158.630	4.0	59122.150	3.0
500.7810	28.01	-1.33	100309.290	5.5	120272.530	4.5
500.7888	25.02	-2.50	195752.480	2.5	215715.410	1.5
500.7958	23.00	-3.97	14514.750	1.5	34477.400	.5
500.7983	25.02	-1.80	172613.870	2.5	192576.420	2.5
500.8068	18.01	-3.50	189414.960	3.5	209377.170	2.5
500.8099	28.01	-3.66	113753.040	4.5	133715.130	4.5
500.8214	24.01	-3.97	55023.300	2.5	74984.930	1.5
500.8220	92.01	-2.00	1693.808	0.0	21660.982	0.0
500.8334	28.01	.26	100309.290	5.5	120270.440	5.5
500.8465	24.00	-2.91	33113.270	4.0	53073.900	3.0
500.8886	28.01	-3.42	101366.140	2.5	121325.090	2.5
500.8917	20.02	-3.67	362893.470	2.0	382852.300	2.0
500.8939	20.02	.23	339198.090	1.0	359156.830	1.0
500.8999	25.02	-2.31	115774.000	3.5	135732.500	4.5
500.9024	30.02	-1.93	260878.800	3.0	280837.200	4.0
500.9024	30.02	-4.00	260878.800	3.0	280837.200	3.0
500.9152	26.02	-4.82	186303.440	3.0	206261.330	4.0
500.9170	77.00	-2.14	12421.258	0.0	32384.645	0.0
500.9223	26.02	-4.90	166421.330	4.0	186378.940	4.0
500.9230	28.01	-.61	98969.440	5.5	118927.020	4.5
500.9313	16.01	-5.00	110176.830	1.5	130134.080	2.5
500.9339	18.01	-.45	135085.920	1.5	155043.070	2.5
500.9406	21.00	-4.14	24866.180	1.5	44823.060	1.5
500.9451	29.01	-3.16	128558.900	3.0	148515.600	4.0
500.9519	16.01	-.17	109831.280	1.5	129787.710	.5
500.9520	70.01	-.86	32827.611	0.0	52789.603	0.0
500.9646	22.00	-1.93	170.132	3.0	20126.055	3.0
500.9660	15.01	-2.89	87967.700	3.0	107923.570	2.0
500.9672	23.00	-4.64	8412.940	.5	28368.760	1.5
500.9673	22.00	-2.28	17369.590	1.0	37325.407	2.0
500.9772	24.00	-4.46	24303.940	3.0	44259.360	3.0
500.9833	29.01	-.74	116080.460	3.0	136035.640	3.0
500.9908	25.00	-4.34	38120.180	4.5	58075.060	5.5
500.9916	28.01	.25	116167.760	1.5	136122.610	2.5
500.9973	23.00	-2.03	15270.420	1.5	35225.040	2.5
501.0022	28.00	-1.06	30392.052	1.0	50346.477	2.0
501.0032	9.00	-2.77	116040.883	1.5	135995.270	.5
501.0139	24.00	-1.65	28682.180	2.0	48636.140	3.0
501.0197	26.02	-1.25	199701.820	3.0	219655.550	2.0
501.0224	25.00	-4.36	30419.610	2.5	50373.230	2.5
501.0265	22.01	-1.58	24961.340	1.5	44914.800	1.5
501.0330	23.01	-4.34	20242.320	4.0	40195.520	3.0
501.0345	27.00	-4.49	14399.280	.5	34352.420	1.5
501.0345	25.00	-3.33	23719.520	1.5	43672.660	.5
501.0388	23.00	-2.76	21646.390	3.5	41599.360	4.5
501.0388	25.00	-1.60	27201.540	2.5	47154.510	1.5
501.0465	26.02	-2.71	179748.170	5.0	199700.830	4.0
501.0581	29.01	-4.89	128569.600	2.0	148521.800	1.0
501.0589	22.00	-4.78	14028.470	2.0	33980.639	2.0
501.0621	7.01	-.50	148940.170	1.0	168892.210	1.0
501.0681	27.01	-5.30	27585.300	1.0	47537.100	2.0
501.0729	25.01	-4.94	44521.520	4.0	64473.130	3.0
501.0810	42.00	-.60	26455.667	0.0	46412.520	0.0
501.0820	64.01	-1.37	8469.040	0.0	28425.853	0.0
501.0877	23.00	-4.89	20202.490	2.5	40153.510	2.5
501.0912	7.00	-2.82	95532.120	2.5	115483.000	1.5
501.0912	7.00	-2.50	95532.120	2.5	115483.000	2.5
501.0934	28.00	-.42	29320.782	3.0	49271.578	3.0
501.1038	24.00	-4.22	35501.260	3.0	55451.640	3.0
501.1216	26.00	-3.71	24335.764	2.0	44285.436	2.0
501.1225	26.00	-2.35	34017.084	1.0	53966.720	2.0
501.1230	44.00	-1.21	9517.587	0.0	29472.768	0.0
501.1272	22.00	-3.92	28638.832	2.0	48588.280	3.0
501.1314	26.02	-3.85	186378.940	4.0	206328.220	3.0
501.1314	7.01	-.17	205654.220	2.0	225603.500	1.0
501.1342	18.01	-3.11	194883.000	3.5	214832.170	3.5
501.1380	28.01	-.76	100332.090	4.5	120281.110	4.5
501.1420	92.00	-1.95	564.603	0.0	20519.027	0.0
501.1460	40.00	-.63	16938.079	0.0	36892.344	0.0
501.1666	7.00	-3.65	95532.120	2.5	115480.000	1.5
501.1706	28.01	-4.11	53037.930	2.5	72985.650	1.5
501.1740	64.00	-.26	11775.998	0.0	31729.148	0.0
501.1757	25.00	-4.11	30425.710	1.5	50373.230	2.5
501.1770	58.01	-.76	8388.382	0.0	28341.413	0.0
501.1812	25.02	-2.55	115762.600	1.5	135709.900	2.5
501.1927	23.02	-1.26	140933.140	3.5	160879.980	4.5
501.1945	28.01	.01	101247.370	2.5	121194.140	2.5
501.1970	26.00	-4.63	24338.766	3.0	44285.436	2.0
501.2010	28.01	-3.61	114836.630	3.5	134783.140	2.5
501.2028	23.01	-2.02	32299.240	1.0	52245.680	2.0
501.2035	7.01	.15	205724.810	3.0	225671.220	3.0
501.2071	26.00	-2.28	6928.266	5.0	26874.534	5.0
501.2073	9.00	-2.39	116143.579	.5	136089.840	1.5
501.2113	23.00	-4.36	24898.730	2.5	44844.830	1.5
501.2141	26.00	-1.45	33801.555	2.0	53747.547	3.0
501.2254	26.02	-3.83	179194.220	4.0	199139.760	5.0
501.2254	23.01	-3.98	44657.990	2.0	64603.530	3.0
501.2362	23.00	-3.91	25111.500	4.5	45056.610	3.5
501.2402	28.01	-.69	101247.370	2.5	121192.320	3.5
501.2415	28.01	-.84	98969.440	5.5	118914.340	4.5
501.2438	28.00	-.48	29832.810	3.0	49777.619	3.0
501.2520	73.00	-1.74	10888.765	0.0	30838.810	0.0
501.2586	28.01	-2.98	101754.800	2.5	121699.020	1.5
501.2616	29.01	.02	116326.160	3.0	136270.260	4.0
501.2669	26.00	-3.98	34547.192	2.0	54491.080	3.0
501.2782	18.01	-1.05	195031.120	2.5	214974.560	3.5
501.2794	29.01	-1.93	117130.360	2.0	137073.750	2.0
501.2797	18.01	-2.35	195031.120	2.5	214974.500	2.5
501.2810	23.00	-4.75	22313.990	5.5	42257.320	5.5
501.2930	26.02	-2.80	179757.980	4.0	199700.830	4.0
501.2976	18.01	-4.09	189654.780	2.5	209597.450	1.5
501.3058	28.01	-2.21	116824.150	2.5	136766.490	2.5
501.3111	26.02	-2.74	179661.480	3.0	199603.610	4.0
501.3170	63.00	.21	14437.696	0.0	34385.154	0.0
501.3184	26.02	-1.52	182392.550	2.0	202334.390	1.0
501.3239	29.01	-3.57	119039.680	2.0	138981.300	2.0
501.3270	41.00	-1.20	12905.203	0.0	32852.264	0.0
501.3290	24.00	-2.46	31009.000	3.0	50950.420	3.0
501.3292	22.00	.25	16267.510	5.0	36208.920	4.0
501.3320	27.00	-1.56	28777.270	3.5	48718.570	2.5
501.3335	25.01	-4.83	52379.380	2.0	72320.620	1.0
501.3375	22.01	-2.26	24961.340	1.5	44902.420	2.5
501.3405	24.00	-3.31	35934.020	6.0	55874.980	5.0
501.3425	26.00	-3.19	29356.780	2.0	49297.660	1.0
501.3448	24.01	-2.25	66727.160	2.5	86667.950	1.5
501.3536	28.01	.08	100332.090	4.5	120272.530	4.5
501.3599	23.00	-3.70	18302.270	3.5	38242.460	3.5
501.3618	28.00	-3.13	29013.228	2.0	48953.344	1.0
501.3669	26.02	-2.00	185003.350	2.0	204943.260	2.0
501.3695	9.02	-2.21	444552.080	3.5	464491.890	3.5
501.3700	22.01	-2.00	12758.150	2.5	32697.940	2.5
501.3730	25.00	-3.97	30419.610	2.5	50359.280	3.5
501.3813	7.01	-2.02	203162.480	0.0	223101.820	1.0
501.3836	20.02	.26	370533.070	4.0	390472.320	5.0
501.3861	9.02	-3.10	440202.480	2.5	460141.630	2.5
501.3936	23.00	-3.66	17242.050	5.5	37180.900	4.5
501.3968	20.02	-1.39	370533.070	4.0	390471.790	4.0
501.3998	16.01	.16	113461.220	1.5	133399.820	1.5
501.4016	27.01	-4.71	65657.500	1.0	85596.030	2.0
501.4062	28.01	-.49	100332.090	4.5	120270.440	5.5
501.4074	12.02	-.99	562136.100	2.0	582074.400	2.0
501.4074	12.02	-.99	562136.100	2.0	582074.400	2.0
501.4099	23.03	-.72	264401.900	4.0	284340.100	4.0
501.4157	23.00	-2.89	14548.830	2.5	34486.800	2.5
501.4175	30.02	-4.06	282970.600	3.0	302908.500	4.0
501.4185	22.00	-.92	0.000	2.0	19937.859	1.0
501.4211	28.00	-.43	35639.148	3.0	55576.905	3.0
501.4277	22.00	.04	6556.828	1.0	26494.322	2.0
501.4366	20.02	-.73	328090.990	2.0	348028.130	3.0
501.4472	28.01	-1.03	100332.090	4.5	120268.810	3.5
501.4499	20.02	-1.29	370515.360	3.0	390451.970	3.0
501.4600	42.00	.13	24681.201	0.0	44622.971	0.0
501.4620	28.01	.19	101258.010	1.5	121194.140	2.5
501.4660	23.00	-.33	21603.170	4.5	41539.140	4.5
501.4660	23.00	.08	19145.130	5.5	39081.100	6.5
501.4663	23.02	-1.98	141987.320	3.5	161923.280	2.5
501.4678	25.02	-4.10	115774.000	3.5	135709.900	2.5
501.4695	24.00	-3.11	25177.390	4.0	45113.220	3.0
501.4835	22.00	-4.76	17423.853	2.0	37359.130	2.0
501.4907	27.00	-2.04	32781.710	2.5	52716.700	3.5
501.4922	18.01	-1.46	190592.170	1.5	210527.100	2.5
501.4928	26.00	-.37	31805.059	3.0	51739.964	2.0
501.4950	44.00	-1.50	9114.300	0.0	29054.678	0.0
501.4980	77.00	-1.72	13873.093	0.0	33813.352	0.0
501.4990	23.00	-2.53	15078.250	.5	35012.910	.5
501.5010	24.00	-4.90	24940.610	2.0	44875.190	2.0
501.5040	64.00	.47	8388.382	0.0	28328.402	0.0
501.5201	26.02	-4.58	179661.480	3.0	199595.300	3.0
501.5206	29.01	-.91	116080.460	3.0	136014.260	2.0
501.5249	25.01	-4.50	52373.180	3.0	72306.810	2.0
501.5281	18.01	-3.21	183797.360	2.5	203730.860	1.5
501.5320	74.00	-2.13	4758.794	0.0	24697.701	0.0
501.5359	16.01	-2.28	133268.530	.5	153201.720	1.5
501.5540	59.01	-2.57	1693.808	0.0	21631.841	0.0
501.5546	10.01	-1.68	294086.490	1.5	314018.940	.5
501.5606	18.01	-3.68	183985.940	1.5	203918.150	1.5
501.5611	26.02	-2.58	179207.570	5.0	199139.760	5.0
501.5611	18.01	-1.70	186171.260	.5	206103.450	1.5
501.5680	2.00	-.82	166278.000	0.0	186215.476	0.0
501.5833	24.00	-4.55	31355.210	2.0	51286.520	2.0
501.5863	28.01	.37	101247.370	2.5	121178.560	3.5
501.5873	15.00	-1.49	56090.450	1.5	76021.600	1.5
501.5875	28.01	-2.16	116191.470	2.5	136122.610	2.5
501.5936	30.02	-3.10	282977.600	4.0	302908.500	4.0
501.5996	23.02	-1.74	140750.820	2.5	160681.480	3.5
501.6084	27.00	-3.17	34352.420	1.5	54282.730	2.5
501.6162	22.00	-.47	6842.964	5.0	26772.965	5.0
501.6195	26.02	-3.18	186303.440	3.0	206233.310	2.0
501.6245	25.02	-4.43	115780.230	2.5	135709.900	2.5
501.6368	9.00	-1.78	117872.916	1.5	137802.100	2.5
501.6382	7.01	-.63	166582.450	2.0	186511.580	2.0
501.6434	18.01	-1.15	188766.150	2.5	208695.070	1.5
501.6468	26.00	-1.67	34328.733	3.0	54257.520	2.0
501.6605	23.01	-1.52	44657.990	2.0	64586.230	2.0
501.6610	62.01	-1.71	7097.862	0.0	27031.642	0.0
501.6611	29.00	-.86	44522.951	0.0	64456.727	0.0
501.6615	23.00	-4.11	24992.880	3.5	44921.080	2.5
501.6633	25.02	-2.79	195592.090	1.5	215520.220	2.5
501.6665	26.00	-2.88	29798.960	4.0	49726.964	4.0
501.6701	24.01	-3.52	70584.640	2.5	90512.500	1.5
501.6780	42.00	-.39	27262.242	0.0	47195.347	0.0
501.6809	25.01	-4.99	52379.380	2.0	72306.810	2.0
501.6814	25.00	-3.60	45060.810	3.5	64988.220	3.5
501.6845	25.02	-4.66	195948.440	3.5	215875.730	2.5
501.6850	26.01	-4.17	66672.390	3.5	86599.660	2.5
501.6898	18.01	-3.36	182222.030	1.5	202149.110	2.5
501.6911	22.00	-3.09	15108.121	3.0	35035.147	2.0
501.7020	22.00	-3.16	21588.496	4.0	41515.090	4.0
501.7137	25.00	-3.24	37586.030	1.5	57512.160	1.5
501.7160	18.01	-1.46	150474.900	1.5	170400.940	2.5
501.7180	20.02	.06	373626.850	2.0	393552.810	3.0
501.7223	7.01	-2.34	209823.910	4.0	229749.700	4.0
501.7237	25.00	-2.72	41031.480	4.5	60957.210	3.5
501.7260	90.01	-1.35	7259.177	0.0	27190.375	0.0
501.7294	9.00	-3.13	116040.883	1.5	135966.390	1.5
501.7295	25.02	-.55	173063.550	5.5	192989.050	5.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
501.7358	24.00	-.91	21856.940	3.0	41782.190	4.0
501.7371	24.00	-4.44	27163.200	0.0	47088.400	1.0
501.7383	27.00	-3.41	26450.020	2.5	46375.170	1.5
501.7424	7.01	-3.48	209823.910	4.0	229748.900	3.0
501.7568	28.00	-.06	28542.113	5.0	48466.530	5.0
501.7572	25.00	-2.00	41031.480	4.5	60955.880	4.5
501.7603	22.00	-4.29	25797.600	3.0	45721.878	4.0
501.7633	18.01	-1.93	138243.550	1.5	158167.710	1.5
501.7638	25.00	1.02	41789.480	4.5	61713.620	5.5
501.7723	28.01	-.01	98969.440	5.5	118893.240	6.5
501.7750	41.00	-2.00	322.630	0.0	20251.881	0.0
501.7786	28.01	.34	98969.440	5.5	118892.990	5.5
501.7849	23.00	-4.44	20202.490	2.5	40125.790	3.5
501.7852	26.02	-1.88	179216.470	6.0	199139.760	5.0
501.7900	29.01	-4.56	128558.900	3.0	148482.000	3.0
501.7946	22.00	-4.10	28596.293	1.0	48519.210	2.0
501.7990	26.00	-4.57	34636.820	2.0	54559.560	3.0
501.8000	28.01	-1.08	115956.710	2.5	135879.410	3.5
501.8018	26.00	-4.01	29320.050	1.0	49242.680	2.0
501.8056	27.00	-2.66	23207.760	1.5	43130.240	.5
501.8129	24.00	-4.63	31364.330	3.0	51286.520	2.0
501.8154	24.00	-1.20	31028.330	2.0	50950.420	3.0
501.8176	18.01	-4.25	184191.710	.5	204113.710	1.5
501.8200	72.00	-.29	20809.640	0.0	40737.104	0.0
501.8255	27.00	-1.03	32841.990	4.5	52763.680	3.5
501.8278	28.00	-.24	30912.838	1.0	50834.435	2.0
501.8298	24.01	-3.71	69348.360	1.5	89269.880	.5
501.8328	8.01	-3.21	255689.600	2.5	275611.000	1.5
501.8386	21.00	-.45	17012.980	2.5	36934.150	1.5
501.8410	26.00	-3.16	26105.908	6.0	46026.980	6.0
501.8416	27.00	-3.78	32781.710	2.5	52702.760	1.5
501.8426	26.01	-7.76	23317.600	2.5	43238.610	2.5
501.8429	30.02	-3.74	260805.900	2.0	280726.900	1.0
501.8429	30.02	-4.69	260805.900	2.0	280726.900	2.0
501.8680	21.02	.70	128363.000	1.5	148283.000	2.5
501.8730	9.00	-1.55	117872.916	1.5	137792.720	2.5
501.8756	23.03	-2.98	265879.200	1.0	285798.900	2.0
501.8756	23.03	-3.87	265879.200	2.0	285798.900	2.0
501.8782	8.00	-2.13	86625.769	1.0	106545.366	2.0
501.8837	24.01	-3.56	53566.220	3.5	73485.600	3.5
501.8907	30.02	-2.82	282950.700	2.0	302869.800	3.0
501.8958	20.02	-2.22	370533.070	4.0	390451.970	3.0
501.9081	26.02	-2.67	179676.890	2.0	199595.300	3.0
501.9134	29.01	-3.44	118484.000	3.0	138402.200	3.0
501.9142	25.02	-3.63	115774.000	3.5	135692.170	3.5
501.9157	23.00	-4.85	18085.820	.5	38003.930	1.5
501.9164	28.01	-1.72	100332.090	4.5	120250.170	3.5
501.9172	24.00	-3.44	7810.820	1.0	27728.870	2.0
501.9172	26.00	-2.19	36940.600	2.0	56858.650	2.0
501.9234	26.00	-3.05	31686.342	2.0	51604.146	3.0
501.9291	8.00	-1.90	86627.790	2.0	106545.366	2.0
501.9318	24.00	-3.72	27703.840	4.0	47621.310	3.0
501.9358	24.01	-3.03	50667.330	3.5	70584.640	2.5
501.9360	28.00	-1.64	30619.440	2.0	50536.742	1.0
501.9360	64.01	-1.48	10001.532	0.0	29924.391	0.0
501.9386	25.00	-3.25	43314.230	5.5	63231.430	4.5
501.9454	26.01	-3.03	44915.070	3.5	64832.000	4.5
501.9467	18.01	-1.95	183090.810	1.5	203007.690	1.5
501.9510	41.00	-1.20	12905.203	0.0	32827.466	0.0
501.9631	26.02	-4.43	179661.480	3.0	199577.710	2.0
501.9728	26.00	-2.12	32133.977	2.0	52049.820	2.0
501.9777	28.01	-.15	101246.160	.5	121161.810	1.5
501.9837	23.01	-.99	34228.790	3.0	54144.200	4.0
501.9850	42.00	-.71	25649.091	0.0	45570.005	0.0
501.9880	22.00	-3.20	18061.540	1.0	37976.780	2.0
501.9971	20.01	-.26	60611.280	1.5	80526.160	2.5
501.9989	18.01	-4.00	194996.490	1.5	214911.300	2.5
501.9995	9.00	-3.22	117872.916	1.5	137787.700	1.5
502.0004	18.01	-1.01	186340.480	1.5	206255.230	2.5
502.0028	22.00	-.32	6742.757	4.0	26657.409	4.0
502.0069	21.00	-3.78	15756.510	2.5	35671.000	1.5
502.0082	28.01	-.66	101247.370	2.5	121161.810	1.5
502.0120	25.02	-2.74	172451.230	1.5	192365.520	1.5
502.0190	23.00	-2.82	14514.750	1.5	34428.760	1.5
502.0218	8.00	-1.76	86631.466	3.0	106545.366	2.0
502.0261	23.01	-4.22	52604.110	1.0	72517.840	1.0
502.0273	22.00	-2.84	25797.600	3.0	45711.280	4.0
502.0349	9.02	-2.35	444578.510	4.5	464491.890	3.5
502.0370	64.00	-1.09	7501.149	0.0	27420.000	0.0
502.0498	7.01	-1.59	203189.030	1.0	223101.820	1.0
502.0528	26.02	-3.89	179748.170	5.0	199660.840	5.0
502.0596	29.01	-3.10	128569.600	2.0	148482.000	3.0
502.0619	28.01	-3.66	57420.160	2.5	77332.470	2.5
502.0652	24.00	-1.90	27176.220	1.0	47088.400	1.0
502.0652	26.00	-3.71	26224.961	3.0	46137.140	3.0
502.0672	23.01	-5.61	20089.560	1.0	40001.660	2.0
502.0695	10.01	-3.36	302425.870	1.5	322337.880	2.5
502.0712	25.02	-2.36	115780.230	2.5	135692.170	3.5
502.0732	28.01	-2.89	98467.250	3.5	118379.110	2.5
502.0741	26.00	-4.28	31307.235	4.0	51219.059	3.0
502.0813	26.00	-2.78	28604.610	2.0	48516.150	1.0
502.0831	28.01	-3.62	111120.540	1.5	131032.010	2.5
502.0944	25.02	-3.10	195752.480	2.5	215663.500	3.5
502.1000	6.03	-.45	448854.000	0.0	468770.351	0.0
502.1139	20.01	-1.21	60611.280	1.5	80521.530	1.5
502.1239	25.02	-.59	172755.950	3.5	192665.800	4.5
502.1279	29.01	.37	116080.460	3.0	135990.150	3.0
502.1297	27.00	-3.56	14036.280	1.5	33945.900	2.5
502.1300	26.02	-3.36	179725.310	6.0	199634.920	6.0
502.1471	28.01	1.03	100309.290	5.5	120218.220	6.5
502.1506	21.00	-.20	17025.360	1.5	36934.150	1.5
502.1557	28.01	-4.11	116824.150	2.5	136732.740	1.5
502.1588	26.00	-1.71	34328.733	3.0	54237.200	4.0
502.1640	28.01	-4.21	114874.880	2.5	134783.140	2.5
502.1645	23.00	-3.98	18198.080	2.5	38106.320	2.5
502.1661	26.00	-1.82	34017.084	1.0	53925.260	1.0
502.1750	72.00	-1.38	18228.600	0.0	38141.977	0.0
502.1834	25.00	-3.03	41031.480	4.5	60938.970	4.5
502.1905	24.00	-1.68	7593.160	2.0	27500.370	3.0
502.1910	22.00	-4.55	22081.198	2.0	41988.390	3.0
502.1915	18.01	-3.15	188766.150	2.5	208673.320	2.5
502.1928	26.00	-4.77	26406.490	1.0	46313.610	2.0
502.1991	28.01	-4.94	115209.850	3.5	135116.720	2.5
502.2013	25.00	-3.58	45013.550	2.5	64920.330	3.5
502.2082	25.00	-2.06	27248.000	1.5	47154.510	1.5
502.2087	22.01	-2.90	20891.880	3.5	40798.370	3.5
502.2127	27.00	-1.08	34352.420	1.5	54258.750	2.5
502.2203	28.01	-4.37	101144.630	3.5	121050.660	2.5
502.2220	26.00	-.58	32133.977	2.0	52039.939	1.0
502.2223	28.01	-4.22	115739.150	4.5	135645.100	5.5
502.2291	22.00	-1.81	25926.820	4.0	45832.500	5.0
502.2538	27.01	-5.04	27902.500	4.0	47807.200	4.0
502.2561	29.01	-1.78	117130.360	2.0	137034.970	3.0
502.2581	26.01	-4.20	44929.590	2.5	64834.120	1.5
502.2662	23.00	-3.74	25253.530	5.5	45157.740	4.5
502.2715	30.02	-4.53	260878.800	3.0	280782.800	2.0
502.2715	30.02	-2.38	260878.800	3.0	280782.800	3.0
502.2765	28.01	-.39	101258.010	1.5	121161.810	1.5
502.2770	26.02	-3.17	185003.350	2.0	204907.130	1.0
502.2773	28.01	-4.55	117872.780	2.5	137776.550	3.5
502.2790	26.00	-4.71	24118.815	4.0	44022.518	4.0
502.2813	22.01	-6.61	12628.770	1.5	32532.380	.5
502.2834	25.00	-4.33	31001.150	2.5	50904.680	2.5
502.2864	10.00	-2.56	149824.221	2.0	169727.630	1.0
502.2870	58.01	-.69	8388.382	0.0	28297.319	0.0
502.2871	22.00	-.35	6661.003	3.0	26564.385	3.0
502.2909	24.01	-4.35	55081.700	1.5	74984.930	1.5
502.2910	63.00	.17	14437.696	0.0	34346.474	0.0
502.3000	6.03	-.15	448861.000	0.0	468769.421	0.0
502.3003	26.02	-4.83	179757.980	4.0	199660.840	5.0
502.3003	18.01	-2.45	185093.230	4.5	204996.090	3.5
502.3025	28.01	-3.64	111783.790	3.5	131686.560	4.5
502.3043	24.00	-3.97	33060.740	3.0	52963.440	4.0
502.3053	7.01	-.15	205724.810	3.0	225627.470	2.0
502.3056	24.00	-3.14	27223.050	2.0	47125.700	3.0
502.3130	64.01	-1.38	9033.642	0.0	28941.548	0.0
502.3157	25.00	-2.49	41031.480	4.5	60933.730	5.5
502.3185	26.00	-1.84	34547.192	2.0	54449.330	1.0
502.3217	28.01	-.80	100309.290	5.5	120211.300	5.5
502.3308	29.01	-4.01	117747.450	3.0	137649.100	2.0
502.3332	22.00	-2.27	17423.853	2.0	37325.407	2.0
502.3369	25.01	-3.32	53781.700	3.0	73683.110	4.0
502.3459	25.00	-2.64	37586.030	1.5	57487.080	2.5
502.3476	26.00	-1.95	34782.406	5.0	54683.390	4.0
502.3500	62.01	-2.22	1935.780	0.0	21842.220	0.0
502.3518	26.02	-4.30	179676.890	2.0	199577.710	2.0
502.3538	23.00	-3.88	8412.940	.5	28313.680	.5
502.3629	24.00	-4.93	24286.540	1.0	44186.920	2.0
502.3674	12.02	.60	562939.500	2.0	582839.700	3.0
502.3674	12.02	.60	562939.500	2.0	582839.700	3.0
502.3684	23.01	-5.36	26839.820	3.0	46739.980	2.0
502.3725	21.02	-.26	128363.000	1.5	148263.000	1.5
502.3726	26.00	-3.55	31805.059	3.0	51705.052	2.0
502.3745	25.00	-2.05	43524.080	3.5	63424.000	3.5
502.3823	28.01	-.42	101247.370	2.5	121146.980	2.5
502.3885	22.00	-1.35	21469.494	3.0	41368.860	4.0
502.4015	29.01	.26	116371.410	4.0	136270.260	4.0
502.4169	23.00	-2.62	21603.170	4.5	41501.410	4.5
502.4222	20.02	-3.22	362893.470	2.0	382791.500	3.0
502.4240	23.01	-3.86	44159.430	2.0	64057.390	3.0
502.4479	24.01	-1.73	50687.630	2.5	70584.640	2.5
502.4508	12.02	-4.57	564731.600	1.0	584628.500	2.0
502.4508	12.02	-4.57	564731.600	1.0	584628.500	2.0
502.4515	27.00	-2.49	27497.060	2.5	47393.930	2.5
502.4525	28.01	-3.69	99418.610	3.5	119315.440	2.5
502.4775	26.00	-1.39	33765.291	2.0	53661.130	3.0
502.4788	18.01	-2.46	172816.210	.5	192712.000	1.5
502.4842	22.00	-.52	6598.749	2.0	26494.322	2.0
502.4884	23.02	-1.18	141270.400	3.5	161165.810	2.5
502.4899	21.00	-4.25	25014.150	2.5	44909.500	2.5
502.4947	26.00	-4.47	32873.623	4.0	52768.780	4.0
502.5045	26.02	-2.75	179682.940	1.0	199577.710	2.0
502.5073	26.00	-2.94	34362.860	1.0	54257.520	2.0
502.5126	24.00	-4.74	31352.420	1.0	51246.870	1.0
502.5295	25.02	.12	172682.640	3.5	192576.420	2.5
502.5304	26.00	-2.58	34555.586	0.0	54449.330	1.0
502.5553	24.00	-5.66	7927.470	2.0	27820.230	3.0
502.5555	23.00	-2.37	21646.390	3.5	41539.140	4.5
502.5563	22.00	.37	16458.710	6.0	36351.430	5.0
507.5568	28.01	-1.75	115956.710	2.5	135849.410	2.5
502.5585	22.00	-1.06	21588.496	4.0	41481.130	5.0
502.5603	23.00	-3.64	8476.200	1.5	28368.760	1.5
502.5659	7.01	-.69	166678.640	3.0	186570.980	3.0
502.5672	22.00	-4.67	25797.600	3.0	45689.890	3.0
502.5694	30.02	-4.48	282977.600	4.0	302869.800	3.0
502.5734	26.00	-3.79	24772.019	1.0	44664.061	2.0
502.5831	24.00	-4.12	31355.210	2.0	51246.870	1.0
502.5871	29.01	-4.74	118991.500	4.0	138883.000	4.0
502.5899	22.00	-4.07	19322.988	2.0	39214.380	3.0
502.5939	20.02	-3.86	362893.470	2.0	382784.700	3.0
502.6099	28.01	-4.22	115209.850	3.5	135100.450	3.5
502.6180	44.00	-1.58	8469.040	0.0	28364.865	0.0
502.6225	26.02	-3.93	182392.550	2.0	202282.650	2.0
502.6268	28.01	-4.24	116087.380	4.5	135977.310	4.5
502.6360	41.00	-.77	11937.313	0.0	31832.426	0.0
502.6437	28.01	-4.59	115739.150	4.5	135628.410	4.5
502.6473	23.00	-3.20	21603.170	4.5	41492.290	3.5
502.6474	28.00	-1.77	29888.505	2.0	49777.619	3.0
502.6478	23.00	-4.15	2424.890	4.5	22313.990	5.5
502.6511	28.01	.19	101258.010	1.5	121146.980	2.5
502.6604	30.02	-3.62	260981.900	3.0	280870.500	4.0
502.7001	24.00	-4.28	24299.890	2.0	44186.920	2.0
502.7106	26.00	-.91	33507.102	3.0	53393.715	4.0
502.7196	10.00	-3.50	152970.733	0.0	172856.990	1.0
502.7238	26.00	-1.95	29356.780	2.0	49242.872	3.0
502.7290	58.01	-1.13	11372.710	0.0	31264.143	0.0
502.7380	92.00	-1.16	0.000	0.0	19891.076	0.0
502.7385	22.00	-3.51	28702.768	3.0	48588.280	3.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
502.7481	16.01	-1.68	133268.530	.5	153153.660	.5
502.7658	24.00	-2.82	27820.230	3.0	47704.660	4.0
502.7691	28.00	-4.90	30392.052	1.0	50276.354	0.0
502.7694	22.00	-3.30	28788.372	4.0	48672.660	4.0
502.7757	26.00	-2.73	33946.920	2.0	53830.960	3.0
502.7850	60.01	-1.80	4355.506	0.0	24244.723	0.0
502.7861	23.00	-3.47	8578.520	2.5	28462.150	2.5
502.7982	23.02	-.48	141144.170	4.5	161027.320	4.5
502.8017	26.00	-3.26	36975.640	3.0	56858.650	2.0
502.8025	24.00	-4.02	24309.940	3.0	44186.920	2.0
502.8025	16.01	-3.06	133399.820	1.5	153282.800	2.5
502.8045	23.03	-.32	264482.800	2.0	284365.700	1.0
502.8133	26.00	-1.34	28819.966	5.0	48702.518	4.0
502.8159	28.01	.11	100389.520	2.5	120271.970	2.5
502.8160	44.00	-1.47	10566.135	0.0	30454.126	0.0
502.8174	26.02	-4.78	186378.940	4.0	206261.330	4.0
502.8217	24.00	-3.32	27703.840	4.0	47586.060	5.0
502.8247	30.02	-4.37	260988.400	4.0	280870.500	4.0
502.8247	30.02	-2.72	260988.400	4.0	280870.500	5.0
502.8255	24.00	-2.93	27820.230	3.0	47702.300	3.0
502.8288	23.01	-2.69	32299.240	1.0	52181.180	1.0
502.8296	26.02	-2.01	185061.350	1.0	204943.260	2.0
502.8318	24.00	-3.86	37205.880	3.0	57087.700	2.0
502.8376	28.01	-4.25	98561.220	2.5	118442.810	1.5
502.8440	62.01	-.59	11937.313	0.0	31824.196	0.0
502.8488	24.00	-4.19	31009.000	3.0	50890.150	2.0
502.8498	25.02	-3.43	195592.090	1.5	215473.200	1.5
502.8580	22.00	-3.64	19421.576	3.0	39302.360	4.0
502.8597	24.00	-3.35	27820.230	3.0	47700.950	2.0
502.8660	90.01	-1.26	10485.478	0.0	30371.491	0.0
502.8667	27.00	-2.16	33462.830	2.5	53343.270	1.5
502.8683	22.00	-3.70	28636.832	2.0	48519.210	2.0
502.8711	10.01	-3.21	307894.840	2.5	327775.110	3.5
502.8734	18.01	-3.72	195031.120	2.5	214911.300	2.5
502.8796	23.00	-3.60	14548.830	2.5	34428.760	1.5
502.8799	23.00	-3.44	8715.720	3.5	28595.640	3.5
502.8958	28.01	.30	100389.520	2.5	120268.810	3.5
502.8976	23.00	-4.19	10892.500	3.5	30771.720	4.5
502.8978	28.01	.93	100332.090	4.5	120211.300	5.5
502.9000	42.00	-.30	23955.283	0.0	43839.952	0.0
502.9067	27.00	-4.40	13795.520	2.5	33674.380	2.5
502.9264	24.00	-4.63	28637.000	3.0	48515.080	3.0
502.9338	27.01	-4.50	65604.400	3.0	85482.190	4.0
502.9371	23.00	-4.62	18126.270	1.5	38003.930	1.5
502.9450	60.00	-.64	1048.548	0.0	20931.438	0.0
502.9459	25.01	-2.12	53805.800	4.0	73683.110	4.0
502.9459	22.00	-3.15	22081.198	2.0	41958.510	2.0
502.9471	20.02	-.79	370515.360	3.0	390392.620	3.0
502.9538	26.00	-1.90	27543.000	1.0	47420.000	2.0
502.9540	63.00	-.03	14437.696	0.0	34320.230	0.0
502.9545	26.02	-4.31	186303.440	3.0	206180.410	3.0
502.9664	27.01	-4.73	27469.200	5.0	47345.700	5.0
502.9715	30.02	-3.53	282950.700	2.0	302827.000	2.0
502.9796	25.00	-1.95	23719.520	1.5	43595.500	2.5
502.9829	28.01	-3.11	115870.280	2.5	135746.130	1.5
502.9875	22.00	-3.11	28896.062	5.0	48771.730	5.0
502.9966	22.00	-2.28	21739.713	5.0	41615.020	6.0
503.0054	22.00	-5.81	14105.680	3.0	33980.639	2.0
503.0117	27.00	-4.62	32841.990	4.5	52716.700	3.5
503.0127	24.01	-3.40	54444.190	3.5	74318.860	2.5
503.0130	41.00	-1.13	13389.148	0.0	33269.350	0.0
503.0140	25.01	-4.42	82830.750	4.0	102705.370	3.0
503.0246	25.01	-4.60	52373.180	3.0	72247.380	3.0
503.0249	7.00	-2.57	96750.810	1.5	116625.000	1.5
503.0249	7.00	-2.53	96750.810	1.5	116625.000	2.5
503.0325	18.01	-3.37	195123.540	5.5	214997.430	4.5
503.0328	22.00	-1.49	18825.890	1.0	38699.767	2.0
503.0363	26.02	-3.61	182408.910	3.0	202282.650	2.0
503.0413	23.02	-2.11	141714.500	2.5	161588.040	3.5
503.0484	24.01	-4.90	70852.240	3.5	90725.500	3.5
503.0540	22.00	-3.74	26657.409	4.0	46530.450	4.0
503.0636	25.00	-1.66	27281.850	.5	47154.510	1.5
503.0666	18.01	-4.89	190592.170	1.5	210464.710	2.5
503.0674	28.01	-2.54	116893.980	2.5	136766.490	2.5
503.0765	22.00	-2.50	18287.560	4.0	38159.710	3.0
503.0770	26.00	-2.66	26105.908	6.0	45978.040	7.0
503.0780	29.01	-3.75	116080.460	3.0	135952.550	2.0
503.0780	42.01	-.17	25810.406	0.0	45688.039	0.0
503.0897	24.00	-3.92	27816.880	5.0	47688.510	4.0
503.0993	24.00	-3.04	27176.220	1.0	47047.470	2.0
503.1021	21.01	-.38	10944.510	2.0	30815.650	1.0
503.1023	26.00	-4.27	28604.610	2.0	48475.740	3.0
503.1053	26.00	-2.52	29371.860	3.0	49242.872	3.0
503.1054	23.00	-2.12	17054.870	2.5	36925.880	3.5
503.1089	28.01	-3.26	114052.040	3.5	133922.910	4.5
503.1102	26.00	-3.81	29371.860	3.0	49242.680	2.0
503.1180	62.01	-1.29	11937.313	0.0	31813.366	0.0
503.1213	26.00	-1.65	29356.780	2.0	49227.160	3.0
503.1213	28.01	-4.88	115108.090	2.5	134978.470	2.5
503.1290	64.01	-.82	12985.861	0.0	32861.479	0.0
503.1297	24.01	-3.41	53566.220	3.5	73436.270	2.5
503.1297	29.01	-4.47	118532.150	2.0	138402.200	3.0
503.1310	23.00	-4.58	18372.460	3.5	38242.460	3.5
503.1320	24.00	-3.47	33934.880	3.0	53804.840	3.0
503.1385	24.01	-3.65	64448.840	2.5	84318.540	1.5
503.1515	24.00	-2.64	33935.650	2.0	53804.840	3.0
503.1522	18.01	-4.92	195128.270	4.5	214997.430	4.5
503.1560	64.01	-1.51	9275.615	0.0	29150.167	0.0
503.1621	9.02	-4.58	444623.120	3.5	464491.890	3.5
503.1656	28.01	-3.71	116087.380	4.5	135956.010	5.5
503.1682	18.01	-3.47	195128.270	4.5	214996.800	3.5
503.1722	25.00	-4.07	25287.740	3.5	45156.110	2.5
503.1830	76.00	-1.29	15082.956	0.0	34956.441	0.0
503.1854	25.01	-2.04	72648.800	4.0	92516.650	4.0
503.1901	26.00	-2.38	35257.309	4.0	55124.974	3.0
503.1943	8.01	-4.91	256083.500	1.5	275951.000	1.5
503.1970	58.01	-.84	11292.053	0.0	31164.985	0.0
503.2222	23.03	-2.29	263593.000	2.0	283459.400	3.0
503.2386	16.01	.23	110268.330	2.5	130134.080	2.5
503.2487	24.00	-2.05	27223.050	2.0	47088.400	1.0
503.2518	10.01	-1.08	318828.550	3.5	338693.780	4.5
503.2525	29.01	-1.19	118163.500	2.0	138028.700	1.0
503.2543	10.01	-1.00	318828.550	2.5	338693.680	3.5
503.2543	10.01	.25	318828.550	3.5	338693.680	3.5
503.2556	24.00	-1.29	35934.020	6.0	55799.100	7.0
503.2641	14.00	-3.84	40991.884	1.0	60856.630	1.0
503.2723	28.00	-1.38	31441.665	2.0	51306.085	3.0
503.2763	26.02	-1.88	199701.820	3.0	219566.080	3.0
503.2865	27.00	-2.92	28470.510	1.5	48334.370	1.5
503.2915	25.01	-4.22	52383.720	4.0	72247.380	3.0
503.2964	23.00	-1.50	19145.130	5.5	39008.600	5.5
503.2981	8.01	-3.45	256087.600	2.5	275951.000	1.5
503.2981	8.01	-4.52	256087.600	2.5	275951.000	2.5
503.3179	23.00	-4.08	26171.960	4.5	46034.580	5.5
503.3193	26.00	-2.69	33412.706	3.0	53275.270	2.0
503.3321	27.00	-1.59	29216.370	2.5	49078.430	1.5
503.3382	24.00	-2.36	31028.330	2.0	50890.150	2.0
503.3520	60.01	-.86	9114.300	0.0	28981.113	0.0
503.3550	63.00	.07	15808.874	0.0	35675.568	0.0
503.3678	28.01	.21	100389.520	2.5	120250.170	3.5
503.3934	24.01	-3.37	69478.060	2.5	89337.700	1.5
503.3957	20.02	-2.21	370533.070	4.0	390392.620	3.0
503.3965	25.00	-3.86	45060.810	3.5	64920.330	3.5
503.4031	27.00	-2.48	16470.600	1.5	36329.860	2.5
503.4160	29.01	-2.88	119039.680	2.0	138898.430	1.0
503.4210	24.00	-4.40	27163.200	0.0	47021.750	1.0
503.4231	28.01	-3.66	115120.000	2.5	134978.470	2.5
503.4335	25.00	-3.19	45130.160	4.5	64988.220	3.5
503.4340	28.01	-.78	113172.960	4.5	133031.000	4.5
503.4360	29.00	-.86	43716.376	0.0	63579.874	0.0
503.4385	18.01	-2.73	185093.230	4.5	204951.090	3.5
503.4420	59.01	-.71	8872.327	0.0	28735.588	0.0
503.4555	28.01	-.08	99040.750	1.5	118897.940	2.5
503.4598	28.01	-4.93	116087.380	4.5	135944.400	3.5
503.4677	24.00	-1.38	35884.400	5.0	55741.110	6.0
503.4788	22.00	-3.57	17995.750	0.0	37852.021	1.0
503.4923	27.00	-1.72	28345.860	4.5	48201.600	3.5
503.4999	26.02	-3.01	179748.170	5.0	199603.610	4.0
503.4999	18.01	-4.31	195123.540	5.5	214978.980	4.5
503.5030	18.01	-2.56	195123.540	5.5	214978.860	5.5
503.5035	26.00	-4.05	29371.860	3.0	49227.160	3.0
503.5035	30.02	-2.62	260981.900	3.0	280837.200	4.0
503.5035	30.02	-4.38	260981.900	3.0	280837.200	3.0
503.5060	8.01	-3.67	255755.800	2.5	275611.000	1.5
503.5106	23.00	-1.19	21646.390	3.5	41501.410	4.5
503.5133	23.02	-1.26	141714.500	2.5	161569.410	1.5
503.5174	24.00	-3.85	37233.500	5.0	57088.250	5.0
503.5357	28.00	.38	29320.782	3.0	49174.811	4.0
503.5417	25.00	-3.29	23818.870	.5	43672.660	.5
503.5448	26.02	-2.61	182480.720	2.0	202334.390	1.0
503.5466	23.03	.35	264845.700	6.0	284699.300	5.0
503.5508	22.00	-.65	18911.399	2.0	38764.832	3.0
503.5519	28.01	.88	113177.610	3.5	133031.000	4.5
503.5577	26.01	-4.08	64832.000	4.5	84685.160	3.5
503.5740	23.01	-4.87	20343.000	2.0	40195.520	3.0
503.5881	18.00	-2.62	106237.597	2.0	126089.560	3.0
503.5890	10.01	-1.36	318841.850	3.5	338693.780	4.5
503.5900	10.01	.20	318841.890	4.5	338693.780	4.5
503.5907	22.00	.42	11776.806	4.0	31628.668	5.0
503.5915	10.01	.12	318841.850	3.5	338693.680	3.5
503.5925	10.01	-.53	318841.890	4.5	338693.680	3.5
503.5950	9.00	-3.44	116143.579	.5	135995.270	.5
503.5967	28.00	-.10	29481.020	4.0	49332.643	4.0
503.5973	9.02	-3.06	444470.240	1.5	464321.840	2.5
503.6100	23.03	-2.08	263608.300	3.0	283459.400	3.0
503.6199	18.01	-2.58	195128.270	4.5	214978.980	4.5
503.6230	18.01	-.76	195128.270	4.5	214978.860	5.5
503.6303	25.00	-3.08	38669.600	3.5	58519.900	3.5
503.6374	10.01	-1.10	318828.550	2.5	338678.570	3.5
503.6374	10.01	-.17	318828.550	3.5	338678.570	3.5
503.6452	24.00	-2.20	26787.500	3.0	46637.210	3.0
503.6468	22.00	.32	11639.804	3.0	31489.451	4.0
503.6546	25.01	-1.97	82830.750	4.0	102680.090	5.0
503.6673	24.00	-4.73	24277.060	0.0	44125.900	1.0
503.6683	30.02	-3.66	260988.400	4.0	280837.200	4.0
503.6770	29.01	-3.54	114511.440	1.0	134359.900	1.0
503.6861	30.02	-3.36	260878.800	3.0	280726.900	2.0
503.6889	26.02	-1.86	182486.400	1.0	202334.390	1.0
503.6912	26.01	-4.24	22810.330	3.5	42658.230	3.5
503.6914	24.00	-4.25	33934.880	3.0	53782.770	4.0
503.6926	26.00	-3.30	24335.764	2.0	44183.607	2.0
503.7031	23.00	-4.52	18258.890	2.5	38106.320	2.5
503.7069	25.01	-3.67	62572.200	2.0	82419.480	3.0
503.7180	22.00	-3.19	26803.417	2.0	46650.260	3.0
503.7242	22.01	-4.59	20951.770	2.5	40798.370	3.5
503.7370	73.00	-1.03	13227.833	0.0	33079.462	0.0
503.7419	23.00	-4.42	21646.390	3.5	41492.290	3.5
503.7450	26.02	-2.45	185061.350	1.0	204907.130	1.0
503.7513	24.00	-4.80	27176.220	1.0	47021.750	1.0
503.7551	18.01	-1.27	194822.100	3.5	214667.480	2.5
503.7587	27.00	-4.02	20500.710	1.5	40345.950	2.5
503.7660	73.00	-2.78	1935.780	0.0	21786.266	0.0
503.7757	18.01	-1.22	185093.230	4.5	204937.800	4.5
503.7762	28.01	.05	101246.160	.5	121090.710	.5
503.7770	58.01	-.73	8065.752	0.0	27915.805	0.0
503.7810	22.01	-3.56	12758.150	2.5	32602.510	1.5
503.7813	25.02	-2.25	172547.850	2.5	192392.200	3.5
503.7843	25.00	-3.21	44978.980	1.5	64823.210	2.5
503.7881	24.00	-3.94	37244.170	4.0	57088.250	5.0
503.8130	30.02	-.28	217663.700	1.0	237506.800	1.0
503.8184	26.02	-3.48	179760.720	3.0	199603.610	4.0
503.8196	7.01	-2.24	203258.980	2.0	223101.820	1.0
503.8230	26.00	-3.28	36940.600	2.0	56783.306	3.0
503.8399	22.00	.21	11531.760	2.0	31373.801	3.0
503.8460	25.01	-3.03	81659.500	3.0	101501.300	3.0
503.8587	24.00	-1.39	31048.850	1.0	50890.150	2.0
503.8588	28.00	-.78	30912.838	1.0	50754.137	2.0
503.8633	28.01	.97	113172.960	4.5	133014.080	5.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
503.8638	28.01	-.94	115739.150	4.5	135580.250	4.5
503.8681	24.00	-2.94	26796.280	2.0	46637.210	3.0
503.8700	3.01	-.69	561749.000	0.0	581595.389	0.0
503.8831	25.01	-4.37	81659.500	3.0	101499.840	2.0
503.8862	24.01	-4.82	34659.480	.5	54499.700	1.5
503.8905	24.00	-3.60	8095.210	3.0	27935.260	4.0
503.8910	42.01	-.65	25649.091	0.0	45494.653	0.0
503.8994	29.01	-.04	118163.500	2.0	138003.200	2.0
503.9037	25.01	-2.24	81659.500	3.0	101499.030	4.0
503.9040	41.00	-2.07	80.658	0.0	19925.708	0.0
503.9080	24.00	-4.35	24286.540	1.0	44125.900	1.0
503.9090	64.00	-.19	11211.395	0.0	31056.248	0.0
503.9120	76.00	-.94	18793.202	0.0	38637.937	0.0
503.9146	24.01	-4.15	55081.700	1.5	74920.800	.5
503.9180	26.00	-2.05	34547.192	2.0	54386.160	1.0
503.9219	22.00	-3.55	19573.968	4.0	39412.780	5.0
503.9240	90.00	-2.12	2500.383	0.0	22344.645	0.0
503.9260	26.00	-1.61	27166.804	4.0	47005.455	5.0
503.9355	28.00	-.70	29320.782	3.0	49159.060	2.0
503.9438	26.02	-1.73	182444.700	3.0	202282.650	2.0
503.9476	30.02	-2.27	282970.600	3.0	302808.400	4.0
503.9543	26.00	-4.88	19788.248	4.0	39625.784	4.0
503.9558	23.00	-4.19	8476.200	1.5	28313.680	.5
503.9591	7.00	-2.96	96787.650	1.5	116625.000	1.5
503.9591	7.00	-2.13	96787.650	1.5	116625.000	2.5
503.9598	26.02	-3.60	179757.980	4.0	199595.300	3.0
503.9674	23.00	-9.17	14910.040	3.5	34747.060	3.5
503.9751	10.01	-.53	318841.850	3.5	338678.570	3.5
503.9761	10.01	.80	318841.890	4.5	338678.570	3.5
503.9847	28.01	.23	99040.750	1.5	118877.090	1.5
503.9847	27.00	-3.20	25269.250	3.5	45105.590	3.5
503.9855	24.01	-3.74	69638.770	1.5	89475.080	2.5
503.9919	6.00	-3.94	69689.480	1.0	89525.540	1.0
503.9934	22.00	-1.79	18818.230	0.0	38654.230	1.0
503.9959	22.00	-.76	170.132	3.0	20006.032	2.0
503.9982	26.02	-4.16	179759.490	2.0	199595.300	3.0
504.0048	27.00	-3.93	23152.570	3.5	42988.120	3.5
504.0157	28.01	-1.97	101357.200	4.5	121192.320	3.5
504.0200	60.00	-.86	1048.548	0.0	20889.031	0.0
504.0208	23.02	-.06	141405.100	5.5	161240.020	5.5
504.0237	26.00	-3.79	34039.495	4.0	53874.300	5.0
504.0294	26.02	-4.80	179760.720	3.0	199595.300	3.0
504.0345	28.01	.95	98969.440	5.5	118803.820	6.5
504.0350	44.00	-.52	20809.640	0.0	40649.532	0.0
504.0360	74.00	-1.70	13227.833	0.0	33067.686	0.0
504.0486	18.00	-2.92	104102.144	1.0	123935.970	1.0
504.0592	23.00	-2.06	21603.170	4.5	41436.580	3.5
504.0602	28.01	-.57	100389.520	2.5	120222.890	1.5
504.0615	22.00	-1.70	6661.003	3.0	26494.322	2.0
504.0671	9.00	-1.76	117622.923	2.5	137456.020	3.5
504.0711	7.01	-2.41	166678.640	3.0	186511.580	2.0
504.0739	28.00	-4.01	29481.020	4.0	49313.851	3.0
504.0740	44.00	-1.97	8952.985	0.0	28791.342	0.0
504.0764	15.01	-.20	107923.570	2.0	127756.300	2.0
504.0772	28.01	-1.64	101258.010	1.5	121090.710	.5
504.0820	72.01	-1.80	11856.655	0.0	31694.697	0.0
504.0836	26.00	-1.06	34328.733	3.0	54161.182	3.0
504.0838	9.02	-2.48	444489.400	2.5	464321.840	2.5
504.0887	26.00	-1.09	34547.192	2.0	54379.440	3.0
504.0955	25.01	-3.50	62587.500	3.0	82419.480	3.0
504.1012	28.00	-1.88	30912.838	1.0	50744.593	1.0
504.1024	14.01	.28	81191.600	.5	101023.310	1.5
504.1075	26.00	-2.81	7728.058	3.0	27559.568	2.0
504.1108	22.00	-1.91	18145.400	2.0	37976.780	2.0
504.1255	30.02	-3.94	282977.600	4.0	302808.400	4.0
504.1301	18.01	-1.09	189437.690	.5	209268.310	1.5
504.1311	26.00	-3.99	40534.180	3.0	60364.760	3.0
504.1313	26.00	-3.68	34555.586	0.0	54386.160	1.0
504.1324	29.01	-.36	116080.460	3.0	135910.990	2.0
504.1338	26.00	-2.98	24335.764	2.0	44166.240	3.0
504.1410	7.00	-1.88	96750.810	1.5	116581.000	.5
504.1410	7.00	-1.61	96750.810	1.5	116581.000	1.5
504.1410	7.00	-1.57	96750.810	1.5	116581.000	2.5
504.1492	23.00	-4.92	18174.060	1.5	38003.930	1.5
504.1553	22.00	-3.67	25926.820	4.0	45756.450	5.0
504.1618	20.00	-2.65	21849.634	2.0	41679.008	1.0
504.1689	26.00	-2.73	38995.717	1.0	58824.810	2.0
504.1738	26.00	-3.55	29798.960	4.0	49627.861	4.0
504.1759	26.00	-2.78	11976.239	4.0	31805.059	3.0
504.1833	26.00	-1.12	34547.192	2.0	54375.719	2.0
504.1840	25.00	-1.76	43595.500	2.5	63424.000	3.5
504.1861	9.00	-2.34	117622.923	2.5	137451.340	2.5
504.1881	22.00	-1.67	18825.890	1.0	38654.230	1.0
504.1901	25.00	-4.68	31076.420	1.5	50904.680	2.5
504.1967	28.01	-.45	101366.140	2.5	121194.140	2.5
504.2038	24.00	-2.92	37205.880	3.0	57033.600	4.0
504.2041	28.01	-3.10	118294.170	3.5	138121.880	4.5
504.2101	26.00	-4.67	24338.766	3.0	44166.240	3.0
504.2137	24.01	-3.65	69498.270	4.5	89325.600	4.5
504.2173	25.00	-3.39	45060.810	3.5	64888.000	4.5
504.2182	28.00	-1.02	29500.690	1.0	49327.845	2.0
504.2209	26.01	-3.80	66589.170	4.5	86416.220	3.5
504.2212	9.00	-3.33	117622.923	2.5	137449.960	1.5
504.2246	18.00	-3.15	106237.597	2.0	126064.500	2.0
504.2247	13.01	-4.12	120089.800	1.0	139916.700	1.0
504.2298	30.02	-2.45	282977.600	4.0	302804.300	5.0
504.2406	22.00	-4.47	19322.988	2.0	39149.260	2.0
504.2417	18.01	-3.54	183675.570	3.5	203501.800	2.5
504.2430	28.01	.68	101366.140	2.5	121192.320	3.5
504.2473	24.00	-4.44	24299.890	2.0	44125.900	1.0
504.2481	23.00	-3.77	14548.830	2.5	34374.810	3.5
504.2527	23.02	-1.41	140750.820	2.5	160576.620	3.5
504.2583	25.00	-2.41	23818.870	.5	43644.450	1.5
504.2588	24.01	-2.66	54678.950	4.5	74504.510	4.5
504.2621	24.00	-3.41	27223.050	2.0	47048.480	3.0
504.2679	8.01	-2.79	256125.800	2.5	275951.000	1.5
504.2679	8.01	-3.63	256125.800	2.5	275951.000	2.5
504.2712	28.01	-3.31	100490.950	1.5	120316.020	.5
504.2781	23.03	-1.17	264401.900	4.0	284226.700	3.0
504.2878	24.00	-3.62	27223.050	2.0	47047.470	2.0
504.2954	26.02	-3.13	179876.710	4.0	199700.830	4.0
504.2974	14.00	-3.06	40991.884	1.0	60815.925	2.0
504.3076	24.00	-3.24	35862.820	4.0	55686.460	5.0
504.3152	28.01	.07	101357.200	4.5	121180.540	4.5
504.3203	7.01	-2.40	209925.760	2.0	229748.900	3.0
504.3287	9.00	-2.68	116143.579	.5	135966.390	1.5
504.3320	73.00	-1.65	11130.738	0.0	30958.946	0.0
504.3341	19.02	-.72	243947.400	1.5	263770.000	.5
504.3341	10.01	-3.02	302247.780	3.5	322070.380	3.5
504.3353	28.01	.45	112906.930	1.5	132729.480	2.5
504.3509	23.00	-2.32	15270.420	1.5	35092.360	1.5
504.3539	28.01	-4.32	111120.540	1.5	130942.360	1.5
504.3554	28.01	-3.19	111120.540	1.5	130942.300	1.5
504.3577	24.00	-2.23	28637.000	3.0	48458.670	2.0
504.3588	22.00	-1.65	6742.757	-4.0	26564.385	3.0
504.3656	28.01	-1.01	101357.200	4.5	121178.560	3.5
504.3707	28.01	-4.91	99844.130	3.5	119665.290	2.5
504.3761	6.00	-3.54	69689.480	1.0	89510.430	2.0
504.3761	16.01	-3.89	110313.130	2.5	130134.080	2.5
504.3883	25.02	-1.91	172755.950	3.5	192576.420	2.5
504.3926	27.02	-4.94	83773.400	1.5	103593.700	2.5
504.3961	22.00	-4.97	22081.198	2.0	41901.360	1.0
504.3973	9.00	-2.63	117622.923	2.5	137443.040	2.5
504.4010	58.01	-.36	9678.902	0.0	29504.398	0.0
504.4017	27.00	-1.29	33150.680	1.5	52970.620	2.5
504.4040	78.00	-1.81	15405.586	0.0	35230.964	0.0
504.4091	28.01	-.77	115739.150	4.5	135558.800	4.5
504.4145	24.01	-1.98	69506.160	3.5	89325.600	4.5
504.4218	26.00	-2.19	22996.661	4.0	42815.814	5.0
504.4276	22.00	-2.64	17540.205	3.0	37359.130	2.0
504.4280	62.00	-.07	1451.835	0.0	21276.270	0.0
504.4282	29.01	-4.96	115665.400	1.0	135484.300	0.0
504.4539	28.01	-4.24	98561.220	2.5	118379.110	2.5
504.4560	23.01	-4.50	52700.030	2.0	72517.840	1.0
504.4562	28.01	-4.31	96052.480	2.5	115870.280	2.5
504.4595	25.02	-.02	172547.850	2.5	192365.520	1.5
504.4708	26.00	-4.28	31937.308	1.0	51754.534	1.0
504.4730	90.00	-2.13	0.000	0.0	19822.666	0.0
504.4768	26.02	-4.56	179760.720	3.0	199577.710	2.0
504.4863	22.00	-3.72	21739.713	5.0	41556.330	5.0
504.4908	22.00	-3.93	28702.768	3.0	48519.210	2.0
504.4944	18.01	-2.58	183914.560	.5	203730.860	1.5
504.5038	24.00	-1.58	35870.530	4.0	55686.460	5.0
504.5041	25.00	-3.10	38669.600	3.5	58485.520	4.5
504.5099	7.01	-.39	149076.520	2.0	168892.210	1.0
504.5119	18.00	-3.93	106237.597	2.0	126053.210	2.0
504.5135	9.00	-2.24	117622.923	2.5	137438.470	3.5
504.5173	17.01	-3.51	158723.700	1.0	178539.100	2.0
504.5222	22.00	-4.42	18037.225	4.0	37852.434	4.0
504.5250	90.00	-1.61	7420.492	0.0	27241.115	0.0
504.5364	15.00	-1.43	56090.450	1.5	75905.100	2.5
504.5416	22.00	-1.91	6842.964	5.0	26657.409	4.0
504.5537	28.01	-.15	100389.520	2.5	120203.490	2.5
504.5578	23.00	-4.60	18126.270	1.5	37940.080	.5
504.5644	24.00	-3.75	27816.880	5.0	47630.430	6.0
504.5665	27.00	-3.40	26063.110	1.5	45876.580	2.5
504.5680	28.01	-4.64	115827.120	3.5	135640.530	4.5
504.5687	26.02	-4.32	117950.320	4.0	137763.700	5.0
504.5932	28.01	-.23	101366.140	2.5	121178.560	3.5
504.5957	24.01	-3.99	45730.740	2.5	65543.060	3.5
504.6008	28.01	-4.06	99844.130	3.5	119656.250	3.5
504.6060	77.00	.23	34924.706	0.0	54742.148	0.0
504.6105	6.00	-4.04	69710.660	2.0	89522.400	2.0
504.6118	24.00	-4.48	33816.060	4.0	53627.750	5.0
504.6350	25.02	-1.03	172855.020	4.5	192665.800	4.5
504.6480	28.01	-.67	116312.340	1.5	136122.610	2.5
504.6520	42.00	-1.16	21051.613	0.0	40867.248	0.0
504.6580	40.00	-.31	12259.943	0.0	32075.343	0.0
504.6599	23.00	-4.69	2311.370	3.5	22121.170	4.5
504.6635	28.01	-1.04	100389.520	2.5	120199.180	1.5
504.6635	25.00	-4.56	45013.550	2.5	64823.210	2.5
504.6706	24.00	-4.29	35398.020	4.0	55207.400	4.0
504.6813	23.00	-2.33	17116.920	3.5	36925.880	3.5
504.6880	57.00	-.85	3468.273	0.0	23282.495	0.0
504.6890	10.01	-4.47	302247.780	3.5	322056.440	3.5
504.6923	20.02	.07	340580.150	3.0	360388.680	3.0
504.6938	6.00	-4.31	69710.660	2.0	89519.130	3.0
504.6956	28.01	-2.50	116145.690	3.5	135954.090	3.5
504.6995	10.01	-2.06	302247.780	3.5	322056.030	4.5
504.7050	90.00	-1.92	4920.109	0.0	24733.663	0.0
504.7068	26.02	-1.63	182392.550	2.0	202200.510	3.0
504.7099	18.01	-4.51	186815.960	3.5	206623.800	3.5
504.7109	12.02	-2.35	562939.500	2.0	582747.300	2.0
504.7109	12.02	-2.35	562939.500	2.0	582747.300	2.0
504.7135	8.01	-2.64	256143.300	3.5	275951.000	2.5
504.7143	26.00	-2.14	36975.640	3.0	56783.306	3.0
504.7234	16.01	-.54	113461.220	1.5	133268.530	.5
504.7244	26.02	-4.53	179893.560	5.0	199700.830	4.0
504.7259	23.00	-1.68	15571.900	2.5	35379.110	3.5
504.7285	23.01	-2.16	20622.990	3.0	40430.100	4.0
504.7290	24.00	-3.67	35934.020	6.0	55741.110	6.0
504.7310	44.00	-1.60	9517.587	0.0	29330.121	0.0
504.7338	29.01	.63	116326.160	3.0	136133.060	4.0
504.7376	28.01	.51	99132.780	5.5	118939.530	5.5
504.7420	92.01	-2.65	2258.411	0.0	22070.513	0.0
504.7450	72.00	-1.76	8872.327	0.0	28684.311	0.0
504.7455	26.02	-2.59	186454.890	5.0	206261.330	4.0
504.7515	18.01	-2.39	194861.270	2.5	214667.480	2.5
504.7606	23.00	-4.18	18198.080	2.5	38003.930	1.5
504.7670	27.00	-1.55	32654.500	2.5	52460.100	2.5
504.7695	8.00	-2.74	88630.599	1.0	108436.100	1.0
504.7710	26.00	-2.50	29798.960	4.0	49604.402	5.0
504.7710	42.00	-.62	20809.640	0.0	40620.604	0.0
504.7740	2.00	-1.60	171135.000	0.0	190945.846	0.0
504.7749	28.01	.02	100475.820	3.5	120281.110	4.5
504.7837	8.00	-2.52	88631.158	2.0	108436.100	1.0
504.7853	20.02	-.88	341349.190	1.0	361154.070	2.0
504.7877	8.00	-3.22	88631.315	0.0	108436.100	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
504.7960	41.00	-.97	14760.326	0.0	34570.309	0.0
504.8040	57.01	-1.00	19115.832	0.0	38925.501	0.0
504.8055	28.00	-.70	30912.838	1.0	50716.927	1.0
504.8065	23.00	-4.25	18302.270	3.5	38106.320	2.5
504.8105	27.00	-4.65	23184.230	2.5	42988.120	3.5
504.8119	26.00	-4.91	24118.815	4.0	43922.652	3.0
504.8166	10.01	-4.33	302247.780	3.5	322051.430	2.5
504.8170	26.00	-3.17	34121.623	0.0	53925.260	1.0
504.8232	28.00	-1.88	31031.042	3.0	50834.435	2.0
504.8241	22.00	-1.49	17369.590	1.0	37172.947	1.0
504.8248	25.02	-3.91	94697.850	3.5	114501.180	4.5
504.8258	28.01	-4.28	101247.370	2.5	121050.660	2.5
504.8371	25.00	-1.59	43428.580	4.5	63231.430	4.5
504.8420	26.00	-1.28	31937.308	1.0	51739.964	2.0
504.8572	24.00	-4.24	35884.400	5.0	55686.460	5.0
504.8590	28.01	-4.94	113407.310	2.5	133209.300	2.5
504.8605	26.02	-3.61	182480.720	2.0	202282.650	2.0
504.8612	16.01	-1.98	133399.820	1.5	153201.720	1.5
504.8628	23.00	-5.32	10892.500	3.5	30694.340	3.5
504.8674	24.01	-2.96	64924.300	3.5	84725.960	3.5
504.8722	26.02	-2.92	186378.940	4.0	206180.410	3.0
504.8740	24.00	-2.92	7927.470	2.0	27728.870	2.0
504.8768	28.01	-4.00	115827.120	3.5	135628.410	4.5
504.8803	18.00	-2.21	104102.144	1.0	123903.295	2.0
504.8829	18.01	-4.07	195031.120	2.5	214832.170	3.5
504.8843	28.00	-.30	31031.042	3.0	50832.039	3.0
504.8868	30.02	-3.09	260981.900	3.0	280782.600	3.0
504.8875	28.01	-3.21	97273.830	2.5	117074.700	3.5
504.8898	25.01	-3.28	65567.070	2.0	85367.850	2.0
504.8937	26.00	-2.85	33946.920	2.0	53747.547	3.0
504.8939	23.01	-1.43	30673.140	2.0	50473.760	1.0
504.8947	28.01	-4.97	113408.710	1.5	133209.300	2.5
504.9036	6.00	-3.28	69710.660	2.0	89510.900	3.0
504.9072	24.00	-4.86	37233.500	5.0	57033.600	4.0
504.9090	25.01	-3.30	62587.500	3.0	82387.530	3.0
504.9121	22.00	-3.91	28788.372	4.0	48588.280	3.0
504.9156	6.00	-3.14	69710.660	2.0	89510.430	2.0
504.9235	28.01	.97	115739.150	4.5	135538.610	5.5
504.9330	26.00	-3.13	31805.059	3.0	51604.146	3.0
504.9393	25.01	-3.28	53597.130	2.0	73395.970	2.0
504.9396	26.00	-3.25	38175.332	3.0	57974.160	2.0
504.9403	8.01	-3.38	255812.200	1.5	275611.000	.5
504.9403	8.01	-4.11	255812.200	1.5	275611.000	1.5
504.9429	24.00	-2.60	27223.050	2.0	47021.750	1.0
504.9510	62.00	-1.18	241.973	0.0	20045.875	0.0
504.9606	17.00	-4.29	74865.667	.5	94663.670	1.5
504.9610	25.01	-2.53	53597.130	2.0	73395.120	3.0
504.9633	8.01	-3.95	255813.100	2.5	275611.000	1.5
504.9668	23.00	-6.35	14949.300	4.5	34747.060	3.5
504.9760	23.00	-4.85	20202.490	2.5	39999.890	2.5
504.9796	27.00	-2.29	33173.360	3.5	52970.620	2.5
504.9800	90.01	-1.48	6613.917	0.0	26416.681	0.0
504.9825	26.00	-1.32	18378.187	2.0	38175.332	3.0
504.9880	27.00	-4.16	14399.280	.5	34196.210	1.5
504.9936	28.01	.58	100475.820	3.5	120272.530	4.5
505.0013	28.01	-3.29	101246.160	.5	121042.570	1.5
505.0026	28.01	-.66	101246.160	.5	121042.520	1.5
505.0054	26.02	-4.00	182486.400	1.0	202282.650	2.0
505.0054	25.02	-.54	172569.270	1.5	192365.520	1.5
505.0079	28.01	-.46	100475.820	3.5	120271.970	2.5
505.0089	20.02	-.06	327962.110	1.0	347758.220	2.0
505.0117	26.00	-4.09	31307.235	4.0	51103.237	5.0
505.0143	30.02	-1.09	218540.300	2.0	238336.200	2.0
505.0143	30.02	.51	217846.800	2.0	237642.700	3.0
505.0147	22.00	-3.35	12118.394	4.0	31914.277	5.0
505.0161	24.01	-4.35	66872.120	.5	86667.950	1.5
505.0202	28.01	-1.98	101366.140	2.5	121161.810	1.5
505.0250	28.01	-4.17	115827.120	3.5	135622.600	3.5
505.0334	28.01	-1.46	101247.370	2.5	121042.520	1.5
505.0358	22.00	-4.74	25926.820	4.0	45721.878	4.0
505.0526	30.02	-4.65	260988.400	4.0	280782.800	3.0
505.0566	28.01	-3.03	99132.780	5.5	118927.020	4.5
505.0570	57.00	-.75	2984.328	0.0	22784.073	0.0
505.0587	26.00	-4.74	17726.985	2.0	37521.144	2.0
505.0589	29.01	-4.09	95565.650	4.0	115359.800	4.0
505.0753	28.01	-1.80	93528.440	3.5	113321.950	4.5
505.0794	7.00	-3.59	96787.650	1.5	116581.000	.5
505.0794	7.00	-1.71	96787.650	1.5	116581.000	2.5
505.0800	90.00	-1.98	3629.588	0.0	23428.432	0.0
505.0880	64.01	-.85	12824.546	0.0	32623.076	0.0
505.0885	28.01	.33	100475.820	3.5	120268.810	3.5
505.0933	22.00	-4.46	19421.576	3.0	39214.380	3.0
505.1240	26.02	-1.44	182408.910	3.0	202200.510	3.0
505.1271	24.00	-3.24	27176.220	1.0	46967.700	2.0
505.1275	26.00	-1.37	34039.495	4.0	53830.960	3.0
505.1404	28.01	-4.82	115827.120	3.5	135618.080	2.5
505.1477	22.00	-3.93	22081.198	2.0	41871.870	2.0
505.1506	28.00	-.74	29481.020	4.0	49271.578	3.0
505.1526	22.00	-2.19	18061.540	1.0	37852.021	1.0
505.1579	6.00	-2.48	68856.330	1.0	88646.600	1.0
505.1587	23.00	-4.08	8578.520	2.5	28368.760	1.5
505.1600	23.00	-.44	21646.390	3.5	41436.580	3.5
505.1605	25.00	-3.93	45130.160	4.5	64920.330	3.5
505.1638	26.00	-2.45	7376.762	4.0	27166.804	4.0
505.1648	15.01	-1.20	112607.700	2.0	132397.700	2.0
505.1771	29.01	.83	116371.410	4.0	136160.930	5.0
505.1794	24.00	-2.66	37244.170	4.0	57033.600	4.0
505.1797	28.01	-1.91	115956.710	2.5	135746.130	1.5
505.1827	29.01	-3.94	128853.300	2.0	148642.600	2.0
505.1899	24.00	-5.07	7593.160	2.0	27382.180	2.0
505.1906	29.01	-3.71	117130.360	2.0	136919.350	3.0
505.2065	22.00	-1.24	18911.399	2.0	38699.767	2.0
505.2154	25.01	-4.29	53597.130	2.0	73385.150	1.0
505.2166	6.00	-1.25	61981.820	1.0	81769.790	2.0
505.2195	26.02	-.25	182412.650	4.0	202200.510	3.0
505.2195	28.01	-1.62	99040.750	1.5	118828.610	2.5
505.2230	74.00	-1.16	20890.298	0.0	40683.538	0.0
505.2264	25.01	-2.04	82917.780	2.0	102705.370	3.0
505.2506	26.00	-4.19	26623.726	2.0	46410.366	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
505.2760	62.01	-.57	10969.423	0.0	30760.587	0.0
505.2874	22.00	-.31	17540.205	3.0	37325.407	2.0
505.2938	18.01	-3.64	186470.280	1.5	206255.230	2.5
505.2941	10.00	-2.54	150772.112	1.0	170557.050	1.0
505.2958	26.00	-3.17	26351.049	5.0	46135.920	5.0
505.2997	28.01	.55	99154.810	4.5	118939.530	5.5
505.3050	28.01	-.35	101258.010	1.5	121042.520	1.5
505.3058	18.01	-1.45	194883.000	3.5	214667.480	2.5
505.3063	22.00	-3.58	25926.820	4.0	45711.280	4.0
505.3147	24.00	-3.13	36577.730	4.0	56361.860	5.0
505.3265	18.01	-3.89	189414.960	3.5	209198.630	2.5
505.3300	74.00	-1.95	1613.150	0.0	21402.199	0.0
505.3467	28.01	-4.17	113407.310	2.5	133190.190	1.5
505.3515	6.00	-2.98	68856.330	1.0	88639.020	1.0
505.3525	28.01	-2.37	115870.280	2.5	135652.930	1.5
505.3554	23.00	-3.32	21646.390	3.5	41428.930	2.5
505.3592	24.00	-4.84	42908.570	4.0	62690.960	5.0
505.3597	9.02	-2.22	440359.260	3.5	460141.630	2.5
505.3740	26.02	-.74	182418.700	4.0	202200.510	3.0
505.3804	28.01	-.22	99132.780	5.5	118914.340	4.5
505.3824	28.01	-4.41	113408.710	1.5	133190.190	1.5
505.3942	28.01	-.16	100490.950	1.5	120271.970	2.5
505.3957	23.00	-2.15	17116.920	3.5	36897.880	4.5
505.3988	28.01	-.11	101366.140	2.5	121146.980	2.5
505.4110	22.00	-.41	21588.496	4.0	41368.860	4.0
505.4163	18.00	-2.69	104102.144	1.0	123882.300	1.0
505.4210	22.00	-3.29	22404.690	3.0	42184.660	4.0
505.4226	26.02	-3.72	168329.670	3.0	188109.580	3.0
505.4236	18.01	-2.88	186340.480	1.5	206120.350	2.5
505.4256	24.00	-3.55	37205.880	3.0	56985.670	3.0
505.4333	29.01	-1.64	119039.680	2.0	138819.170	3.0
505.4397	24.00	-2.70	28679.430	1.0	48458.670	2.0
505.4610	74.00	-2.55	1613.150	0.0	21397.070	0.0
505.4619	6.00	-3.69	69744.030	3.0	89522.400	2.0
505.4629	25.02	-1.25	172613.870	2.5	192392.200	3.5
505.4657	26.00	-2.91	29356.780	2.0	49135.003	3.0
505.4722	18.02	-3.67	211563.830	1.0	231341.800	2.0
505.4739	29.01	-4.42	128853.300	2.0	148631.200	3.0
505.4757	29.01	-.77	118484.000	3.0	138261.830	3.0
505.4841	30.02	-1.35	218428.000	0.0	238205.500	1.0
505.4847	26.02	-2.69	105895.350	1.0	125672.830	2.0
505.4867	26.01	-3.82	63948.840	4.5	83726.240	3.5
505.4969	28.01	-4.81	100389.520	2.5	120166.520	1.5
505.4980	56.00	-.25	17905.969	0.0	37688.441	0.0
505.5000	42.00	-1.97	12259.943	0.0	32042.337	0.0
505.5046	25.03	-4.67	152700.500	4.0	172477.200	4.0
505.5072	22.00	-4.07	28896.062	5.0	48672.660	4.0
505.5087	28.01	-2.73	116512.060	3.5	136288.600	2.5
505.5100	24.00	-2.06	28682.180	2.0	48458.670	2.0
505.5120	28.01	-.32	113225.060	.5	133001.470	.5
505.5355	26.01	-3.44	60402.380	2.5	80177.870	1.5
505.5360	90.01	-2.57	1451.835	0.0	21232.820	0.0
505.5384	22.00	-4.11	21739.713	5.0	41515.090	4.0
505.5454	6.00	-3.72	69744.030	3.0	89519.130	3.0
505.5530	74.00	-.88	22342.133	0.0	42122.453	0.0
505.5544	25.00	-3.99	37586.030	1.5	57360.780	1.5
505.5552	28.01	-4.98	116275.810	3.5	136050.530	2.5
505.5572	28.01	-3.44	96052.480	2.5	115827.120	3.5
505.5598	24.00	-2.47	27935.260	4.0	47709.800	5.0
505.5647	28.01	-.15	100475.820	3.5	120250.170	3.5
505.5981	26.00	-2.48	34782.406	5.0	54555.450	4.0
505.5984	14.01	.54	81251.580	1.5	101024.610	2.5
505.6150	24.01	-2.13	55081.700	1.5	74854.080	.5
505.6163	10.01	-1.30	318828.550	3.5	338600.880	4.5
505.6194	28.01	-.06	99154.810	4.5	118927.020	4.5
505.6217	24.00	-3.83	33113.270	4.0	52885.390	5.0
505.6316	14.01	-.42	81251.580	1.5	101023.310	1.5
505.6460	57.00	-.88	2581.041	0.0	22357.723	0.0
505.6522	18.00	-2.98	104102.144	1.0	123873.070	0.0
505.6631	17.01	-2.55	158768.600	2.0	178539.100	2.0
505.6700	20.02	-3.78	363021.270	2.0	382791.500	3.0
505.6721	26.02	-3.14	199701.820	3.0	219471.970	4.0
505.6820	9.02	-2.51	444552.080	3.5	464321.840	2.5
505.6856	26.00	-2.56	34362.860	1.0	54132.480	1.0
505.6890	60.00	-.78	0.000	0.0	19775.000	0.0
505.6905	26.01	-6.14	27620.390	2.5	47389.820	1.5
505.6913	24.00	-2.99	27935.260	4.0	47704.660	4.0
505.6923	25.01	-3.22	82936.010	3.0	102705.370	3.0
505.6969	24.00	-2.97	27816.880	5.0	47586.060	5.0
505.7015	9.01	-3.50	264456.190	2.0	284225.190	1.0
505.7053	24.00	-4.08	25106.340	3.0	44875.190	2.0
505.7120	28.01	-1.54	99040.750	1.5	118809.340	1.5
505.7171	28.01	-.81	99154.810	4.5	118923.200	3.5
505.7217	28.01	-.74	101357.200	4.5	121125.410	4.5
505.7268	24.01	-4.63	67369.330	5.5	87137.340	6.5
505.7273	23.00	-3.58	17054.870	2.5	36822.860	3.5
505.7312	25.01	-3.44	81732.000	1.0	101499.840	2.0
505.7330	44.00	-1.15	6452.602	0.0	26225.882	0.0
505.7336	26.00	-3.59	31937.308	1.0	51705.052	2.0
505.7337	25.02	-4.27	195752.480	2.5	215520.220	2.5
505.7399	25.02	-3.85	124754.800	3.5	144522.300	4.5
505.7434	9.00	-2.35	115917.909	2.5	135685.270	1.5
505.7442	25.01	-2.17	82936.010	3.0	102703.340	4.0
505.7455	26.02	-4.21	179893.560	5.0	199660.840	5.0
505.7467	26.00	-3.02	35611.608	3.0	55378.842	2.0
505.7484	26.00	-1.68	33801.555	2.0	53568.720	2.0
505.7516	24.00	-3.72	27935.260	4.0	47702.300	3.0
505.7560	6.00	-2.59	69744.030	3.0	89510.900	3.0
505.7600	71.00	-1.08	17341.367	0.0	37113.591	0.0
505.7611	26.01	-4.13	65696.110	4.5	85462.780	3.5
505.7629	26.02	-3.68	105906.230	2.0	125672.830	2.0
505.7680	6.00	-4.08	69744.030	3.0	89510.430	2.0
505.7740	62.01	-1.36	8630.355	0.0	28402.032	0.0
505.7777	23.00	-4.63	18174.060	1.5	37940.080	.5
505.7975	28.00	-2.87	29320.782	3.0	49086.030	4.0
505.7977	27.00	-.99	33150.680	1.5	52915.920	.5
505.7987	28.01	-1.52	116824.150	2.5	136589.350	3.5
505.8010	41.00	-2.19	0.000	0.0	19770.621	0.0
505.8010	42.00	-.27	27584.872	0.0	47355.493	0.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
505.8013	28.02	-4.47	97841.400	2.0	117606.500	3.0
505.8374	23.00	-3.60	11100.650	4.5	30864.340	5.5
505.8376	28.01	.95	101357.200	4.5	121120.880	5.5
505.8440	20.02	-3.81	363021.270	2.0	382784.700	3.0
505.8514	26.00	-4.13	29371.860	3.0	49135.003	3.0
505.8532	22.00	-4.11	25926.820	4.0	45689.890	3.0
505.8558	18.01	-1.83	186340.480	1.5	206103.450	1.5
505.8560	75.00	-1.98	13711.778	0.0	33480.250	0.0
505.8581	10.01	-4.24	302307.750	2.5	322070.630	2.5
505.8645	10.01	-4.01	302307.750	2.5	322070.380	3.5
505.8647	28.01	-.75	116191.470	2.5	135954.090	3.5
505.8650	28.01	-3.36	113407.310	2.5	133169.920	3.5
505.8696	24.00	-4.18	42908.570	4.0	62671.000	4.0
505.8700	73.00	-1.44	17260.709	0.0	37028.634	0.0
505.8704	25.00	-2.83	45060.810	3.5	64823.210	2.5
505.8896	29.01	-.37	116371.410	4.0	136133.060	4.0
505.8993	26.02	-1.13	199804.810	4.0	219566.080	3.0
505.9026	23.01	-3.27	32420.040	0.0	52181.180	1.0
505.9029	26.01	-4.34	65109.710	3.5	84870.840	2.5
505.9067	7.00	-2.84	96864.020	2.5	116625.000	1.5
505.9067	7.00	-2.07	96864.020	2.5	116625.000	2.5
505.9163	10.00	-3.24	150772.112	1.0	170532.717	2.0
505.9190	15.00	-2.29	55939.300	.5	75699.800	.5
505.9200	28.01	.88	99132.780	5.5	118893.240	6.5
505.9229	28.01	-4.01	115870.280	2.5	135630.630	2.5
505.9264	28.01	-1.51	99132.780	5.5	118892.990	5.5
505.9336	23.00	-4.91	17054.870	2.5	36814.800	1.5
505.9350	41.00	-1.06	12582.573	0.0	32347.958	0.0
505.9439	28.01	.52	99154.810	4.5	118914.340	4.5
505.9480	78.00	.40	32424.323	0.0	52189.200	0.0
505.9544	28.01	-3.86	115870.280	2.5	135629.400	3.5
505.9566	10.01	-1.44	318841.850	3.5	338600.880	4.5
505.9576	10.01	-1.35	318841.890	4.5	338600.880	4.5
505.9582	10.01	-1.31	318841.890	4.5	338600.860	5.5
505.9651	18.01	-3.11	189654.780	2.5	209413.480	1.5
505.9656	6.00	-2.48	68856.330	1.0	88615.010	1.0
505.9684	28.01	-4.29	101144.630	3.5	120903.200	3.5
505.9769	27.00	-1.20	33945.900	2.5	53704.140	2.5
505.9851	6.00	-4.06	69689.480	1.0	89447.400	2.0
505.9860	90.00	-1.51	7420.492	0.0	27183.685	0.0
505.9871	25.00	-4.04	45130.160	4.5	64888.000	4.5
505.9880	42.00	-.41	20003.065	0.0	39766.380	0.0
505.9902	28.01	-4.38	114052.040	3.5	133809.760	3.5
505.9962	22.00	-4.87	26772.965	5.0	46530.450	4.0
505.9971	28.01	-.68	113225.060	.5	132982.510	1.5
506.0001	22.00	-3.43	26892.926	3.0	46650.260	3.0
506.0035	26.00	-1.41	34692.130	1.0	54449.330	1.0
506.0081	26.00	-6.16	0.000	4.0	19757.020	3.0
506.0107	23.02	-3.02	141270.400	3.5	161027.320	4.5
506.0230	23.00	-2.44	17181.980	4.5	36938.420	5.5
506.0271	26.02	-2.59	179904.560	6.0	199660.640	5.0
506.0284	27.00	-3.67	33945.900	2.5	53702.130	3.5
506.0390	40.00	-.35	15647.559	0.0	35408.882	0.0
506.0391	26.02	-.39	182444.700	3.0	202200.510	3.0
506.0512	25.00	-2.34	34463.370	1.5	54218.710	1.5
506.0742	29.01	-4.82	116080.460	3.0	135834.900	4.0
506.0758	24.01	-4.48	44307.440	.5	64061.820	1.5
506.0834	24.00	-4.85	33423.790	1.0	53177.870	2.0
506.0896	16.01	-1.99	133399.820	1.5	153153.660	.5
506.0900	69.00	-2.01	0.000	0.0	19759.331	0.0
506.0930	62.00	-.81	1451.835	0.0	21211.049	0.0
506.0934	9.02	-2.56	444470.240	1.5	464223.930	1.5
506.1011	24.00	-4.11	42908.570	4.0	62661.960	3.0
506.1032	28.01	-4.69	115870.280	2.5	135623.590	1.5
506.1078	28.01	.54	115827.120	3.5	135580.250	4.5
506.1188	17.01	-3.30	158786.400	3.0	178539.100	2.0
506.1230	90.01	-1.25	14679.669	0.0	34437.712	0.0
506.1255	24.00	-2.69	35934.020	6.0	55686.460	5.0
506.1406	20.02	-.42	341601.460	2.0	361353.310	1.0
506.1444	23.02	-2.25	141488.320	4.5	161240.020	5.5
506.1457	25.02	-1.98	172613.870	2.5	192365.520	1.5
506.1575	7.00	-2.30	96750.810	1.5	116502.000	.5
506.1803	29.01	-2.43	118163.500	2.0	137913.800	1.0
506.1906	15.00	-1.60	55939.300	.5	75689.200	1.5
506.1975	28.01	-4.69	115870.280	2.5	135619.910	1.5
506.2039	18.01	-.45	135601.650	.5	155351.030	1.5
506.2112	22.00	-.47	17423.853	2.0	37172.947	1.0
506.2216	10.01	-2.91	302307.750	2.5	322056.440	3.5
506.2221	27.00	-1.61	33945.900	2.5	53694.570	3.5
506.2267	28.01	-4.73	114858.880	5.5	134607.370	4.5
506.2285	6.00	-4.16	68856.330	1.0	88604.750	2.0
506.2305	23.02	-.41	140933.140	3.5	160681.480	3.5
506.2342	23.03	.06	264591.900	5.0	284340.100	4.0
506.2346	26.01	-4.60	65931.460	3.5	85679.640	2.5
506.2367	25.02	-3.90	115762.600	1.5	135510.700	2.5
506.2444	28.01	-4.73	115870.280	2.5	135618.080	2.5
506.2520	42.00	-1.09	20809.640	0.0	40562.648	0.0
506.2640	44.00	-1.57	13873.093	0.0	33625.633	0.0
506.2780	9.02	-4.95	444575.350	2.5	464321.840	2.5
506.2795	23.00	-4.26	8715.720	3.5	28462.150	2.5
506.2860	64.01	-1.65	9356.272	0.0	29107.954	0.0
506.2903	26.00	-3.10	28604.610	2.0	48350.620	1.0
506.2920	57.01	-2.35	6129.972	0.0	25881.420	0.0
506.3151	23.00	-4.08	18258.890	2.5	38003.930	1.5
506.3162	30.02	-4.15	260981.900	3.0	280726.900	2.0
506.3182	18.01	-3.29	183985.940	1.5	203730.860	1.5
506.3190	24.01	-3.30	54678.950	4.5	74423.840	3.5
506.3203	28.01	-4.75	116786.420	.5	136531.260	1.5
506.3251	24.00	-1.98	27223.050	2.0	46967.700	2.0
506.3334	26.00	-3.66	33801.555	2.0	53545.882	3.0
506.3421	26.02	-3.17	69747.400	0.0	89491.390	1.0
506.3443	23.03	-2.51	264482.800	2.0	284226.700	3.0
506.3444	23.00	-2.80	17181.980	4.5	36925.880	3.5
506.3462	26.01	-3.37	66672.390	3.5	86416.220	3.5
506.3500	10.01	-4.94	302307.750	2.5	322051.430	2.5
506.3580	23.00	-5.36	2220.130	2.5	21963.500	3.5
506.3649	23.00	-3.83	10892.500	3.5	30635.600	2.5
506.3718	22.00	-2.47	18911.399	2.0	38654.230	1.0
506.3721	20.02	-.19	339198.090	1.0	358940.910	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
506.3770	92.00	-1.40	3710.246	0.0	23458.378	0.0
506.3805	23.00	-3.16	15270.420	1.5	35012.910	.5
506.3931	6.00	-3.67	69689.480	1.0	89431.480	2.0
506.4081	22.00	-.25	21739.713	5.0	41481.130	5.0
506.4240	62.01	-2.44	2661.698	0.0	22407.998	0.0
506.4259	18.01	-2.30	186890.950	2.5	206631.670	2.5
506.4298	21.00	-.52	11610.240	3.5	31350.810	4.5
506.4549	24.01	-3.86	50687.630	2.5	70427.220	3.5
506.4586	26.00	-2.11	32873.623	4.0	52613.072	5.0
506.4610	90.00	-1.92	4920.109	0.0	24664.966	0.0
506.4640	42.01	-1.47	18147.942	0.0	37892.682	0.0
506.4654	22.00	-.62	386.874	4.0	20126.055	3.0
506.4737	24.01	-4.64	70852.240	3.5	90591.100	2.5
506.4816	28.01	-4.07	114858.880	5.5	134597.430	5.5
506.4840	59.01	-2.38	3387.616	0.0	23131.576	0.0
506.4852	27.00	-2.37	25937.590	4.5	45676.000	5.5
506.4910	40.00	-.20	11856.655	0.0	31600.342	0.0
506.4911	28.01	.23	99154.810	4.5	118892.990	5.5
506.4935	26.00	-1.49	34328.733	3.0	54066.821	2.0
506.4999	26.00	-.63	34328.733	3.0	54066.570	4.0
506.5024	6.00	-4.00	69710.660	2.0	89448.400	3.0
506.5083	26.01	-2.21	83871.310	4.5	103608.820	4.5
506.5127	24.00	-2.52	26787.500	3.0	46524.840	2.0
506.5135	26.00	-3.06	37046.000	4.0	56783.306	3.0
506.5210	26.00	-1.66	29371.860	3.0	49108.876	4.0
506.5220	40.00	.12	18631.887	0.0	38374.366	0.0
506.5250	41.00	-2.23	645.260	0.0	20367.622	0.0
506.5281	6.00	-3.38	69710.660	2.0	89447.400	2.0
506.5291	25.02	-3.74	115774.000	3.5	135510.700	2.5
506.5317	27.01	-6.81	28111.900	2.0	47848.500	1.0
506.5381	26.01	-3.46	54870.620	2.5	74606.970	2.5
506.5453	29.01	.76	118484.000	3.0	138220.070	4.0
506.5472	18.00	-3.34	105617.315	2.0	125353.310	1.0
506.5519	23.02	-.38	141144.170	4.5	160879.980	4.5
506.5717	9.02	-3.22	440069.510	1.5	459804.550	1.5
506.5845	28.01	-3.23	113177.610	3.5	132912.150	2.5
506.5848	9.02	-2.79	444489.400	2.5	464223.930	1.5
506.5981	28.01	.15	99040.750	1.5	118774.760	.5
506.5985	22.00	-.86	11639.804	3.0	31373.801	3.0
506.5994	25.00	-4.56	44978.980	1.5	64712.940	2.5
506.6020	23.00	-3.77	18372.460	3.5	38106.320	2.5
506.6056	28.01	-.71	116145.690	3.5	135879.410	3.5
506.6100	20.02	-4.64	363118.750	3.0	382852.300	2.0
506.6280	18.01	-.98	186890.950	2.5	206623.800	3.5
506.6328	28.01	-2.13	51045.460	4.5	70778.120	3.5
506.6513	28.01	-.20	100490.950	1.5	120222.890	1.5
506.6549	8.02	-.54	373046.200	0.0	392778.000	1.0
506.6562	26.02	-2.54	105906.230	2.0	125637.980	3.0
506.6580	28.01	.58	115827.120	3.5	135558.800	4.5
506.6811	28.01	-4.62	116786.420	.5	136517.200	.5
506.6860	62.01	-1.45	11695.340	0.0	31431.429	0.0
506.6890	25.02	-3.43	115780.230	2.5	135510.700	2.5
506.6919	26.02	-4.41	179904.560	6.0	199634.920	6.0
506.6919	26.02	-2.73	179904.560	7.0	199634.920	6.0
506.7000	7.04	-.01	713289.000	0.0	733024.544	0.0
506.7093	29.01	.60	118532.150	2.0	138261.830	3.0
506.7133	26.00	-1.02	34039.495	4.0	53769.020	4.0
506.7268	26.00	-3.36	27543.000	1.0	47271.999	1.0
506.7268	23.00	-3.71	18513.460	4.5	38242.460	3.5
506.7310	70.01	-.92	34360.104	0.0	54094.440	0.0
506.7381	24.00	-2.36	26796.280	2.0	46524.840	2.0
506.7424	22.00	-4.48	19573.968	4.0	39302.360	4.0
506.7512	27.00	-1.29	27497.060	2.5	47225.110	3.5
506.7558	29.01	-4.36	114000.000	3.0	133727.870	2.0
506.7610	28.01	-.44	100475.820	3.5	120203.490	2.5
506.7610	25.01	-3.67	44745.460	2.0	64473.130	3.0
506.7671	24.00	-3.09	36552.130	3.0	56279.560	4.0
506.7725	24.00	-1.30	21847.880	2.0	41575.100	3.0
506.7774	27.00	-1.55	32733.070	3.5	52460.100	2.5
506.7805	25.00	-3.32	41230.300	3.5	60957.210	3.5
506.7807	26.02	-4.82	179876.710	4.0	199603.610	4.0
506.7870	73.00	-1.47	12179.286	0.0	31911.442	0.0
506.7900	57.00	-1.35	3468.273	0.0	23200.312	0.0
506.7925	18.01	-3.97	184191.710	.5	203918.150	1.5
506.7950	63.00	-.35	13147.176	0.0	32879.020	0.0
506.7995	23.02	-3.22	161923.280	2.5	181649.450	3.5
506.8010	23.00	-4.34	13801.530	1.5	33527.640	2.5
506.8072	27.00	-3.56	32430.590	5.5	52156.460	4.5
506.8113	28.01	-2.62	115739.150	4.5	135464.860	3.5
506.8116	17.01	-1.22	126743.300	2.0	146469.000	3.0
506.8147	25.00	-3.04	41230.300	3.5	60955.880	4.5
506.8290	24.00	-3.36	8095.210	3.0	27820.230	3.0
506.8315	22.00	-.59	21469.494	3.0	41194.420	3.0
506.8321	18.01	-2.35	189040.870	1.5	208765.770	.5
506.8504	28.01	-3.61	114858.880	5.5	134583.070	6.5
506.8606	21.00	-3.29	16021.780	1.5	35745.570	2.5
506.8773	26.00	-1.31	23711.443	4.0	43434.585	3.0
506.8785	28.00	-1.11	31031.042	3.0	50754.137	2.0
506.8833	24.00	-3.38	26801.930	1.0	46524.840	2.0
506.8848	21.00	-2.26	16022.720	2.5	35745.570	2.5
506.8938	12.01	-2.19	93310.590	2.5	113033.090	1.5
506.8966	18.01	-4.28	189654.780	2.5	209377.170	2.5
506.9072	12.01	-3.14	93311.110	1.5	113033.090	1.5
506.9128	22.01	-1.64	25193.040	2.5	44914.800	1.5
506.9150	74.00	-2.35	3306.958	0.0	23034.131	0.0
506.9154	25.02	-2.27	172451.230	1.5	192172.890	2.5
506.9156	26.02	-3.29	168420.990	2.0	188142.640	2.0
506.9308	22.00	-.79	17369.590	1.0	37090.650	0.0
506.9370	6.00	-3.14	69710.660	2.0	89431.480	2.0
506.9396	25.02	-4.56	195752.480	2.5	215473.200	1.5
506.9421	29.01	-3.82	117928.480	1.0	137649.100	2.0
506.9426	25.01	-2.33	81780.700	3.0	101501.300	3.0
506.9460	62.01	-.75	10162.848	0.0	29888.615	0.0
506.9635	26.02	-2.54	182480.720	2.0	202200.510	3.0
506.9761	28.01	.10	99154.810	4.5	118874.110	3.5
506.9802	25.01	-3.11	81780.700	3.0	101499.840	2.0
506.9802	12.01	-2.44	93311.110	1.5	113030.250	.5
506.9869	26.01	-5.49	22939.350	2.5	42658.230	3.5
506.9967	17.02	-3.90	186220.000	.5	205938.500	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
506.9982	23.01	-4.54	44098.460	3.0	63816.900	3.0
506.9994	28.00	-5.00	43089.636	5.0	62808.030	6.0
507.0010	25.01	-3.30	81780.700	3.0	101499.030	4.0
507.0043	28.01	-3.87	100078.780	1.5	119796.980	2.5
507.0054	24.00	-1.19	21856.940	3.0	41575.100	3.0
507.0149	24.01	-3.43	69903.460	3.5	89621.250	3.5
507.0177	21.00	-.42	11557.640	2.5	31275.320	3.5
507.0210	39.00	-.20	19035.175	0.0	38758.224	0.0
507.0260	40.00	-.39	14921.641	0.0	34644.495	0.0
507.0357	7.00	-2.74	96864.020	2.5	116581.000	2.5
507.0388	21.00	.42	18000.250	2.5	37717.110	3.5
507.0635	23.00	-1.71	17181.980	4.5	36897.880	4.5
507.0648	24.01	-3.51	47354.630	2.5	67070.480	1.5
507.0961	22.00	-1.75	27480.047	3.0	47194.680	4.0
507.1020	64.01	-1.04	12663.231	0.0	32383.130	0.0
507.1033	7.00	-3.42	96787.650	1.5	116502.000	.5
507.1033	7.00	-2.82	96787.650	1.5	116502.000	1.5
507.1281	18.00	-3.70	104102.144	1.0	123815.530	1.0
507.1391	27.00	-8.05	4142.660	3.5	23855.620	4.5
507.1472	22.00	-.87	11776.806	4.0	31489.451	4.0
507.1499	28.01	-.24	100490.950	1.5	120203.490	2.5
507.1747	22.00	-3.78	12118.394	4.0	31829.972	4.0
507.1870	60.00	-.80	1048.548	0.0	20765.142	0.0
507.1929	25.01	-3.54	44745.460	2.0	64456.330	2.0
507.1970	26.02	-4.11	168420.990	2.0	188131.700	1.0
507.2068	26.00	-1.29	34547.192	2.0	54257.520	2.0
507.2096	28.01	-4.65	116838.330	1.5	136548.550	2.5
507.2099	26.01	-4.33	67000.630	2.5	86710.840	1.5
507.2140	26.02	-3.44	179893.560	5.0	199603.610	4.0
507.2227	22.01	-4.84	10024.740	2.5	29734.450	3.5
507.2266	25.02	-1.01	172682.640	3.5	192392.200	3.5
507.2281	17.02	-3.68	221862.900	.5	241572.400	1.5
507.2287	23.00	-6.58	14910.040	3.5	34619.520	2.5
507.2287	29.01	.20	116326.160	3.0	136035.640	3.0
507.2312	22.01	-1.20	25193.040	2.5	44902.420	2.5
507.2456	26.02	-3.87	105929.160	3.0	125637.980	3.0
507.2495	25.00	-4.15	41230.300	3.5	60938.970	4.5
507.2528	23.00	-1.87	17054.870	2.5	36763.410	2.5
507.2541	25.00	-3.27	25285.430	4.5	44993.920	3.5
507.2608	28.01	-.38	100490.950	1.5	120199.180	1.5
507.2654	26.00	-1.23	34039.495	4.0	53747.547	3.0
507.2683	25.00	-1.50	41031.480	4.5	60739.420	3.5
507.2734	24.01	-3.98	69348.360	1.5	89056.100	2.5
507.2758	24.00	-1.97	25038.610	5.0	44746.260	6.0
507.2822	19.02	-.27	243120.600	2.5	262828.000	1.5
507.2835	25.00	-2.03	43524.080	3.5	63231.430	4.5
507.2880	76.00	-1.40	16131.504	0.0	35844.172	0.0
507.2917	24.00	-3.55	7593.160	2.0	27300.190	1.0
507.2970	44.00	-1.52	9114.300	0.0	28826.618	0.0
507.3000	22.00	-3.10	18037.225	4.0	37743.933	3.0
507.3000	7.03	-1.83	499708.000	0.0	519420.202	0.0
507.3022	22.00	-3.25	18145.400	2.0	37852.021	1.0
507.3065	18.00	-1.91	104102.144	1.0	123808.600	2.0
507.3136	25.00	-4.26	25287.740	3.5	44993.920	3.5
507.3146	24.00	-4.12	35501.260	3.0	55207.400	4.0
507.3198	23.00	-1.79	17116.920	3.5	36822.860	3.5
507.3218	24.00	-3.79	33934.880	3.0	53640.740	3.0
507.3357	28.01	-2.06	115739.150	4.5	135444.470	3.5
507.3417	24.00	-4.17	33935.650	2.0	53640.740	3.0
507.3447	25.00	-2.49	44978.980	1.5	64683.950	1.5
507.3556	26.01	-2.93	54902.420	1.5	74606.970	2.5
507.3584	18.01	-3.18	183797.360	2.5	203501.800	2.5
507.3592	7.01	-1.28	149187.800	1.0	168892.210	1.0
507.3602	6.00	-3.33	69744.030	3.0	89448.400	3.0
507.3620	24.02	-4.85	138362.400	2.0	158066.700	3.0
507.3700	22.01	-2.76	43740.770	3.5	63444.760	3.5
507.3707	26.00	-3.24	34362.860	1.0	54066.821	2.0
507.3723	18.01	-2.86	195128.270	4.5	214832.170	3.5
507.3769	28.01	-4.19	116145.690	3.5	135849.410	2.5
507.3860	6.00	-4.16	69744.030	3.0	89447.400	2.0
507.3870	60.00	-.73	3629.588	0.0	23338.410	0.0
507.3903	26.02	-2.77	69788.190	1.0	89491.390	1.0
507.3978	28.01	.16	113225.060	.5	132927.970	1.5
507.3980	40.00	-1.84	4113.534	0.0	23821.929	0.0
507.4091	26.01	-2.11	54904.500	3.5	74606.970	2.5
507.4117	22.00	-3.61	22404.690	3.0	42107.060	4.0
507.4142	6.00	-2.89	68856.330	1.0	88558.600	1.0
507.4187	27.02	-4.81	83799.600	2.5	103501.700	3.5
507.4256	24.00	-3.56	36577.730	4.0	56279.560	4.0
507.4330	70.00	.10	24600.544	0.0	44307.579	0.0
507.4341	28.01	-4.46	116275.810	3.5	135977.310	4.5
507.4573	24.00	-4.07	24833.860	3.0	44534.460	4.0
507.4724	26.00	-3.00	28604.610	2.0	48304.623	2.0
507.4729	26.00	-.44	34039.495	4.0	53739.488	5.0
507.4770	76.00	-1.50	15324.929	0.0	35030.256	0.0
507.4833	25.00	-1.25	27201.540	2.5	46901.130	2.5
507.4885	25.00	-2.62	45013.550	2.5	64712.940	2.5
507.4933	23.03	-.13	264401.900	4.0	284101.100	3.0
507.4962	23.02	-2.03	162335.880	3.5	182034.970	4.5
507.5003	24.01	-2.57	69638.770	1.5	89337.700	1.5
507.5088	28.01	-.86	100490.950	1.5	120189.550	.5
507.5103	10.00	-3.82	150858.508	2.0	170557.050	1.0
507.5140	25.02	-3.91	124823.900	4.5	144522.300	4.5
507.5140	23.01	-4.60	34228.790	3.0	53927.190	3.0
507.5156	26.00	-1.58	33695.378	5.0	53393.715	4.0
507.5243	30.02	.63	214878.000	3.0	234576.000	4.0
507.5243	8.01	-3.49	255913.000	1.5	275611.000	.5
507.5243	8.01	-4.82	255913.000	1.5	275611.000	1.5
507.5299	28.01	-4.41	115085.360	3.5	134783.140	2.5
507.5300	58.01	-.55	7097.862	0.0	26801.131	0.0
507.5312	24.01	-2.97	47372.750	1.5	67070.480	1.5
507.5426	27.00	-1.55	32464.730	4.5	52162.020	3.5
507.5431	25.01	-3.31	53698.700	2.0	73395.970	2.0
507.5574	22.00	-2.60	27750.124	5.0	47446.840	6.0
507.5629	17.02	-4.58	221862.900	.5	241559.400	.5
507.5650	25.01	-4.09	53698.700	2.0	73395.120	3.0
507.5663	23.00	-1.43	17242.050	5.5	36938.420	5.5
507.5686	23.00	-5.23	2424.890	4.5	22121.170	4.5
507.5701	28.01	-1.66	115956.710	2.5	135652.930	1.5

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
507.5707	28.01	-1.26	113172.960	4.5	132869.160	3.5
507.5730	28.01	.06	115739.150	4.5	135435.260	4.5
507.5748	24.01	-3.40	69478.060	2.5	89174.100	3.5
507.5834	22.00	-4.75	27498.975	3.0	47194.680	4.0
507.5859	21.00	-.55	11520.150	1.5	31215.760	2.5
507.5897	24.00	-2.97	31364.330	3.0	51059.790	4.0
507.5920	28.01	-1.75	116893.980	2.5	136589.350	3.5
507.6080	24.01	-2.09	55023.300	2.5	74718.050	1.5
507.6168	26.00	-4.92	22838.320	2.0	42532.729	3.0
507.6173	29.00	-.55	44926.239	0.0	64626.119	0.0
507.6266	26.00	-1.74	34692.130	1.0	54386.160	1.0
507.6297	24.00	-3.18	24897.550	4.0	44591.460	5.0
507.6320	44.00	-1.23	10566.135	0.0	30265.445	0.0
507.6327	28.00	-.76	29481.020	4.0	49174.811	4.0
507.6370	73.00	-1.20	17260.709	0.0	36959.825	0.0
507.6470	58.01	-.60	11372.710	0.0	31071.438	0.0
507.6475	29.01	-1.24	118484.000	3.0	138177.220	2.0
507.6549	28.01	-4.72	116838.330	1.5	136531.260	1.5
507.6549	27.00	-3.58	26232.050	3.5	45924.980	3.5
507.6601	6.00	-3.22	68856.330	1.0	88549.060	1.0
507.6750	70.00	-.50	24923.174	0.0	44620.815	0.0
507.6859	27.00	-1.03	32464.730	4.5	52156.460	4.5
507.6905	28.01	-.79	113177.610	3.5	132869.160	3.5
507.6993	23.00	-4.58	26122.040	3.5	45813.250	4.5
507.7034	27.00	-1.96	33173.360	3.5	52864.410	4.5
507.7225	23.00	-4.99	15688.800	2.5	35379.110	3.5
507.7256	7.00	-2.11	96750.810	1.5	116441.000	.5
507.7256	7.00	-1.41	96750.810	1.5	116441.000	1.5
507.7256	7.00	-1.50	96750.810	1.5	116441.000	2.5
507.7325	22.01	-3.86	20891.880	3.5	40581.800	2.5
507.7335	26.00	-4.50	26623.726	2.0	46313.610	2.0
507.7400	41.00	-1.33	11937.313	0.0	31632.433	0.0
507.7405	27.00	-.95	31871.150	3.5	51560.760	2.5
507.7460	28.01	-1.97	116512.060	3.5	136201.460	3.5
507.7467	25.00	-3.37	45130.160	4.5	64819.530	5.5
507.7470	7.01	-2.05	203189.030	1.0	222878.390	2.0
507.7668	26.02	-2.94	168420.990	2.0	188109.580	3.0
507.7756	23.00	-6.28	2153.200	1.5	21841.450	2.5
507.7787	28.01	.55	100592.980	3.5	120281.110	4.5
507.7795	29.01	-.73	116326.160	3.0	136014.260	2.0
507.7836	28.01	.66	116191.470	2.5	135879.410	3.5
507.7929	25.01	-3.84	85367.850	2.0	105055.430	2.0
507.7962	6.00	-3.47	69744.030	3.0	89431.480	2.0
507.7967	6.00	-4.57	68856.330	1.0	88543.760	0.0
507.8028	18.00	-3.71	105462.804	3.0	125150.000	3.0
507.8094	26.00	-4.25	24772.019	1.0	44458.960	0.0
507.8094	25.01	-2.58	81812.900	2.0	101499.840	2.0
507.8220	25.01	-2.83	53698.700	2.0	73385.150	1.0
507.8238	24.00	-4.75	33542.110	2.0	53228.490	3.0
507.8250	40.00	-.12	11534.025	0.0	31225.848	0.0
507.8285	23.03	-2.80	266600.300	5.0	286286.500	4.0
507.8285	17.01	.36	126782.800	3.0	146469.000	3.0
507.8351	9.00	-1.61	115917.909	2.5	135603.850	2.5
507.8388	28.01	-3.28	115827.120	3.5	135512.920	2.5
507.8408	10.01	-1.49	294333.220	.5	314018.940	.5
507.8522	26.01	-4.25	64040.960	3.5	83726.240	3.5
507.8532	26.00	-3.81	28604.610	2.0	48289.852	1.0
507.8545	7.00	-2.44	96750.810	1.5	116436.000	1.5
507.8545	7.00	-3.10	96750.810	1.5	116436.000	2.5
507.8576	6.00	-4.51	68856.330	1.0	88541.400	2.0
507.8718	28.01	-4.15	101366.140	2.5	121050.660	2.5
507.8783	28.01	-4.47	116275.810	3.5	135960.080	4.5
507.8922	26.02	-2.77	168329.670	3.0	188013.400	4.0
507.8959	26.00	-.84	34692.130	1.0	54375.719	2.0
507.8960	41.00	-1.42	967.890	0.0	20656.960	0.0
507.9028	27.00	-.93	33173.360	3.5	52856.680	3.5
507.9028	27.00	-3.39	32430.590	5.5	52113.910	5.5
507.9090	76.00	-1.83	12663.231	0.0	32351.797	0.0
507.9126	28.01	-3.88	114052.040	3.5	133734.980	3.5
507.9214	25.02	.55	173306.450	6.5	192989.050	5.5
507.9228	26.00	-2.20	17726.985	2.0	37409.530	1.0
507.9353	15.00	-1.34	56339.540	2.5	76021.600	1.5
507.9384	23.00	-4.97	20202.490	2.5	39884.430	1.5
507.9412	24.00	-2.72	31377.960	4.0	51059.790	4.0
507.9459	28.01	-2.64	116167.760	1.5	135849.410	2.5
507.9565	16.01	-1.72	110176.830	1.5	129858.070	1.5
507.9570	20.02	.18	373880.370	3.0	393561.590	4.0
507.9650	72.01	-1.21	18793.202	0.0	38479.598	0.0
507.9680	58.01	.22	11050.080	0.0	30736.359	0.0
507.9743	26.00	-2.98	7985.783	2.0	27666.334	1.0
507.9870	42.00	-.46	26052.379	0.0	45737.922	0.0
507.9949	20.02	-3.41	363118.750	3.0	382798.500	4.0
507.9955	28.00	-2.77	14728.847	0.0	34408.574	1.0
508.0001	28.01	.20	100592.980	3.5	120272.530	4.5
508.0001	25.00	-4.13	30419.610	2.5	50099.160	1.5
508.0020	42.00	-.70	20164.380	0.0	39849.342	0.0
508.0053	7.00	-1.95	96787.650	1.5	116467.000	.5
508.0053	7.00	-2.64	96787.650	1.5	116467.000	1.5
508.0145	28.01	-1.69	100592.980	3.5	120271.970	2.5
508.0163	22.00	-4.44	13981.750	1.0	33660.671	1.0
508.0210	57.01	-1.33	15647.559	0.0	35331.785	0.0
508.0300	27.00	-1.41	32781.710	2.5	52460.100	2.5
508.0352	25.02	-3.83	176270.250	2.5	195948.440	3.5
508.0528	28.00	.50	29481.020	4.0	49158.529	5.0
508.0807	15.01	-3.81	107923.570	2.0	127600.000	1.0
508.0819	28.01	-1.29	101366.140	2.5	121042.520	1.5
508.0935	26.00	-2.83	26351.049	5.0	46026.980	6.0
508.0961	24.01	-5.00	69498.270	4.5	89174.100	3.5
508.0961	28.01	-.79	100592.980	3.5	120268.810	3.5
508.1029	28.01	-4.08	100490.950	1.5	120166.520	1.5
508.1096	29.01	-3.50	110084.290	1.0	129759.600	1.0
508.1107	28.00	.41	31031.042	3.0	50706.310	4.0
508.1260	42.00	-2.21	11775.998	0.0	31456.156	0.0
508.1376	22.00	-5.00	11531.760	2.0	31205.985	3.0
508.1380	10.00	-2.35	150858.508	2.0	170532.717	2.0
508.1407	22.00	-5.82	13981.750	1.0	33655.853	2.0
508.1502	22.00	-1.59	28788.372	4.0	48462.110	5.0
508.1509	28.00	-3.61	36600.805	2.0	56274.516	2.0
508.1540	25.02	-1.01	175918.500	.5	195592.090	1.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
508.1545	28.01	-1.22	113172.960	4.5	132846.530	3.5
508.1563	21.00	.49	11677.310	4.5	31350.810	4.5
508.1576	25.00	-4.73	30425.710	1.5	50099.160	1.5
508.1756	20.02	-3.84	363118.750	3.0	382791.500	3.0
508.1821	25.00	-3.41	41230.300	3.5	60902.800	3.5
508.1837	20.02	-1.25	373880.370	3.0	393552.810	3.0
508.1849	26.00	-2.98	31307.235	4.0	50979.627	4.0
508.2119	27.00	-3.44	13795.520	2.5	33466.870	3.5
508.2191	23.00	-4.77	11100.650	4.5	30771.720	4.5
508.2199	28.01	.22	99132.780	5.5	118803.820	6.5
508.2250	73.00	-2.17	10566.135	0.0	30242.459	0.0
508.2339	28.00	-.40	29500.690	1.0	49171.187	1.0
508.2364	25.00	-1.85	45013.550	2.5	64683.950	1.5
508.2369	27.00	-3.25	36875.130	1.5	56545.510	2.5
508.2392	24.01	-4.23	54444.190	3.5	74114.480	3.5
508.2470	29.01	-1.55	120919.410	1.0	140589.400	0.0
508.2735	18.00	-3.09	105617.315	2.0	125286.280	1.0
508.2746	28.01	-.10	113177.610	3.5	132846.530	3.5
508.2754	27.00	-1.80	33674.380	2.5	53343.270	1.5
508.2832	28.01	-4.70	116275.810	3.5	135944.400	3.5
508.2855	29.01	-4.81	128853.300	2.0	148521.800	1.0
508.3000	24.01	-3.39	69506.160	3.5	89174.100	3.5
508.3163	27.00	-4.54	13795.520	2.5	33462.830	2.5
508.3183	20.02	-.73	328090.990	2.0	347758.220	2.0
508.3201	26.02	-2.02	199804.810	4.0	219471.970	4.0
508.3230	24.01	-3.94	69954.200	2.5	89621.250	3.5
508.3341	26.00	-2.64	7728.058	3.0	27394.676	3.0
508.3400	24.00	-2.92	31393.400	5.0	51059.790	4.0
508.3495	22.00	-3.11	27614.667	4.0	47280.690	5.0
508.3514	20.02	-3.80	363118.750	3.0	382784.700	3.0
508.3687	26.02	-3.34	168477.360	1.0	188142.640	2.0
508.3708	30.02	-2.30	218540.300	2.0	238205.500	1.0
508.3739	21.00	.30	11610.240	3.5	31275.320	3.5
508.3760	25.01	-3.76	81802.580	6.0	101467.580	6.0
508.3837	30.02	-2.89	216895.300	1.0	236560.000	0.0
508.3959	29.01	-1.46	116371.410	4.0	136035.640	3.0
508.4021	29.01	-1.65	116326.160	3.0	135990.150	3.0
508.4078	22.01	-1.32	43780.990	4.5	63444.760	3.5
508.4089	28.00	.12	29668.918	3.0	49332.643	4.0
508.4230	19.00	-2.54	12985.170	.5	32648.350	.5
508.4253	28.01	-3.88	114052.040	3.5	133715.130	4.5
508.4303	28.01	-2.83	110573.360	2.5	130236.260	2.5
508.4506	28.00	-2.56	36600.805	2.0	56262.920	3.0
508.4557	26.00	-3.70	29798.960	4.0	49460.876	5.0
508.4574	28.01	.37	100619.260	4.5	120281.110	4.5
508.4659	28.01	-1.00	115739.150	4.5	135400.670	3.5
508.4719	21.00	-3.99	16009.710	.5	35671.000	1.5
508.4910	26.01	-4.48	66463.590	5.5	86124.140	4.5
508.5040	22.00	-3.19	24921.110	1.0	44581.160	2.0
508.5053	30.02	-.12	217846.800	2.0	237506.800	1.0
508.5082	22.00	-2.44	20126.055	3.0	39785.940	4.0
508.5101	22.00	-3.97	27480.047	3.0	47139.860	4.0
508.5130	25.00	-1.99	44978.980	1.5	64638.680	.5
508.5190	23.00	-7.73	9636.960	1.5	29296.430	2.5
508.5226	24.00	-3.19	33060.740	3.0	52720.070	4.0
508.5260	40.00	-.47	14679.669	0.0	34344.347	0.0
508.5330	28.00	-.67	29668.918	3.0	49327.845	2.0
508.5345	22.00	-2.21	11531.760	2.0	31190.631	2.0
508.5345	27.00	-4.38	23152.570	3.5	42811.440	3.5
508.5399	23.01	-5.55	20343.000	2.0	40001.660	2.0
508.5474	28.00	-.73	29500.690	1.0	49159.060	2.0
508.5487	25.00	-3.70	30354.210	3.5	50012.530	2.5
508.5503	23.00	-4.59	9544.540	.5	29202.800	1.5
508.5539	21.00	.13	11557.640	2.5	31215.760	2.5
508.5541	23.02	-2.09	141507.700	3.5	161165.810	2.5
508.5585	28.01	-.28	116191.470	2.5	135849.410	2.5
508.5653	24.00	-4.58	36552.130	3.0	56209.810	3.0
508.5660	24.01	-3.01	47354.630	2.5	67012.280	2.5
508.5663	26.00	-3.14	33695.378	5.0	53353.020	6.0
508.5712	27.00	-4.83	5075.830	1.5	24733.280	2.5
508.5767	28.01	-2.85	109846.000	3.5	129503.240	4.5
508.5779	28.01	.29	100592.980	3.5	120250.170	3.5
508.5820	48.00	1.07	31617.748	0.0	51280.261	0.0
508.5822	26.00	-4.46	31322.603	3.0	50979.627	4.0
508.5860	92.01	-2.65	887.233	0.0	20549.591	0.0
508.5920	26.00	-3.59	31805.059	3.0	51461.707	4.0
508.5963	27.00	-3.41	32464.730	4.5	52121.210	4.5
508.6131	23.00	-2.48	17242.050	5.5	36897.880	4.5
508.6131	28.01	-4.24	101247.370	2.5	120903.200	3.5
508.6173	24.01	-4.10	67012.280	2.5	86667.950	1.5
508.6191	28.01	-4.35	96535.870	3.5	116191.470	2.5
508.6201	24.00	-2.65	27223.050	2.0	46878.610	3.0
508.6297	27.00	-4.40	34133.590	3.5	53788.780	4.5
508.6375	23.00	-4.29	15724.220	3.5	35379.110	3.5
508.6517	26.02	-3.31	168477.360	1.0	188131.700	1.0
508.6551	28.01	-.49	116468.400	1.5	136122.610	2.5
508.6553	18.01	-.98	189040.870	1.5	208695.070	1.5
508.6605	26.00	-4.05	27543.000	1.0	47197.000	2.0
508.6701	26.02	-2.78	69837.760	2.0	89491.390	1.0
508.6753	26.00	-1.57	33507.102	3.0	53160.530	3.0
508.6773	7.00	-4.51	96787.650	1.5	116441.000	.5
508.6773	7.00	-2.51	96787.650	1.5	116441.000	1.5
508.6794	28.01	-.42	100619.260	4.5	120272.530	4.5
508.6828	23.00	-2.35	15571.900	2.5	35225.040	2.5
508.6828	29.01	-2.03	116080.460	3.0	135733.600	3.0
508.6830	25.00	-1.73	27248.000	1.5	46901.130	2.5
508.6839	22.00	-2.96	18037.225	4.0	37690.320	5.0
508.6840	23.00	-3.21	14514.750	1.5	34167.840	2.5
508.6983	26.01	-8.80	27314.930	3.5	46967.470	2.5
508.7001	21.00	.03	11520.150	1.5	31172.620	1.5
508.7040	24.00	-2.23	26796.280	2.0	46448.600	1.0
508.7055	22.00	-1.50	11531.760	2.0	31184.021	1.0
508.7080	62.01	-2.53	1935.780	0.0	21593.422	0.0
508.7089	23.00	-5.55	2311.370	3.5	21963.500	3.5
508.7089	25.00	-1.83	45060.810	3.5	64712.940	2.5
508.7156	24.00	-2.08	28679.430	1.0	48331.300	1.0
508.7211	22.00	-4.75	14028.470	2.0	33680.130	3.0
508.7286	24.00	-4.51	35501.260	3.0	55152.630	2.0
508.7286	24.00	-3.43	28637.000	3.0	48288.370	4.0
508.7314	24.00	-3.38	36558.550	2.0	56209.810	3.0
508.7335	28.01	.84	100619.260	4.5	120270.440	5.5
508.7366	26.02	-.99	179676.890	2.0	199327.950	1.0
508.7370	73.00	-1.80	11130.738	0.0	30787.260	0.0
508.7420	39.01	-.87	8630.355	0.0	28286.684	0.0
508.7465	18.00	-4.17	105462.804	3.0	125113.480	2.0
508.7622	18.01	-1.16	186470.280	1.5	206120.350	2.5
508.7677	23.02	-2.24	162385.110	3.5	182034.970	4.5
508.7716	24.01	-4.55	50667.330	3.5	70317.040	2.5
508.7757	28.01	-.90	100619.260	4.5	120268.810	3.5
508.7842	21.00	-2.89	16021.780	1.5	35671.000	1.5
508.7853	27.00	-.46	32464.730	4.5	52113.910	5.5
508.7868	24.00	-2.16	28682.180	2.0	48331.300	1.0
508.7974	21.00	-1.59	16096.860	1.5	35745.570	2.5
508.8008	9.02	-4.72	444575.350	2.5	464223.930	1.5
508.8068	7.00	-2.14	96787.650	1.5	116436.000	1.5
508.8068	7.00	-4.71	96787.650	1.5	116436.000	2.5
508.8086	21.00	-3.27	16022.720	2.5	35671.000	1.5
508.8107	24.02	-3.40	138975.500	3.0	158623.700	4.0
508.8151	26.00	-2.05	33507.102	3.0	53155.130	4.0
508.8151	27.00	-5.00	22404.690	3.0	42052.720	3.0
508.8180	39.00	-.62	18873.860	0.0	38527.253	0.0
508.8252	29.01	.49	116388.000	2.0	136035.640	3.0
508.8290	92.00	-2.09	0.000	0.0	19652.968	0.0
508.8320	62.00	-1.00	806.575	0.0	20459.427	0.0
508.8466	29.01	.10	118484.000	3.0	138130.810	3.0
508.8503	24.00	-3.70	26801.930	1.0	46448.600	1.0
508.8532	28.00	-.71	31031.042	3.0	50677.599	3.0
508.8549	23.00	-2.60	17116.920	3.5	36763.410	2.5
508.8700	23.00	-4.65	17054.870	2.5	36700.780	2.5
508.8738	24.00	-3.37	31009.000	3.0	50654.760	2.0
508.8884	28.01	.10	113172.960	4.5	132816.160	4.5
508.8917	29.01	.02	118532.150	2.0	138177.220	2.0
508.8933	26.02	-.57	179682.940	1.0	199327.950	1.0
508.8953	28.00	-.77	29668.918	3.0	49313.851	3.0
508.8970	62.01	-1.34	12663.231	0.0	32313.573	0.0
508.8998	10.01	-1.76	302425.870	1.5	322070.630	2.5
508.9057	27.00	-3.00	26232.050	3.5	45876.580	2.5
508.9089	15.01	-2.38	105303.190	1.0	124947.600	2.0
508.9095	9.00	-2.59	116040.883	1.5	135685.270	1.5
508.9194	11.02	-2.58	444748.100	1.5	464392.100	2.5
508.9262	24.00	-1.98	35807.900	2.0	55451.640	3.0
508.9329	23.02	-.59	140933.140	3.5	160576.620	3.5
508.9495	29.01	-2.27	117130.360	2.0	136773.200	1.0
508.9547	28.01	-.61	115870.280	2.5	135512.920	2.5
508.9637	6.00	-3.95	68856.330	1.0	88498.620	2.0
508.9643	25.00	-3.37	37586.030	1.5	57228.300	.5
508.9840	60.01	-1.79	1613.150	0.0	21260.133	0.0
508.9863	7.01	-3.52	210301.680	3.0	229943.100	4.0
508.9897	23.00	-4.73	26171.960	4.5	45813.250	4.5
509.0002	22.00	-3.78	27498.975	3.0	47139.860	4.0
509.0003	23.00	-2.67	17181.980	4.5	36822.860	3.5
509.0088	28.01	-1.04	113177.610	3.5	132818.160	4.5
509.0241	20.02	-.65	340748.720	2.0	360388.680	3.0
509.0283	17.01	-1.13	158177.100	1.0	177816.900	2.0
509.0329	10.00	-3.01	150917.431	0.0	170557.050	1.0
509.0353	24.01	-3.65	47372.750	1.5	67012.280	2.5
509.0460	26.00	-4.24	24772.019	1.0	44411.137	1.0
509.0487	18.01	-.58	172335.520	2.5	191974.530	1.5
509.0576	26.02	-.88	179661.480	3.0	199300.150	2.0
509.0584	26.00	-3.28	38175.332	3.0	57813.970	3.0
509.0630	25.01	-2.83	81862.840	4.0	101501.300	3.0
509.0630	45.00	-1.72	9114.300	0.0	28758.234	0.0
509.0697	24.00	-4.70	45113.220	3.0	64751.420	4.0
509.0710	73.00	-1.84	9598.245	0.0	29241.870	0.0
509.0723	27.00	-4.03	14036.280	1.5	33674.380	2.5
509.0750	90.01	-2.25	8549.697	0.0	28193.168	0.0
509.0753	26.00	-1.50	34328.733	3.0	53966.720	2.0
509.0754	7.00	-3.78	96864.020	2.5	116502.000	1.5
509.0773	24.00	-2.44	35813.730	3.0	55451.640	3.0
509.0780	26.00	-3.22	40534.180	3.0	60172.060	4.0
509.0817	28.01	-.58	115827.120	3.5	135464.860	3.5
509.0864	22.00	-3.75	7255.369	2.0	26892.926	3.0
509.0873	22.00	-3.22	26892.926	3.0	46530.450	4.0
509.0970	42.01	-.38	25810.406	0.0	45453.028	0.0
509.1006	25.00	-1.02	41031.480	4.5	60668.490	4.5
509.1009	23.03	-.95	263822.400	4.0	283459.400	3.0
509.1032	24.00	-4.26	24897.550	4.0	44534.460	4.0
509.1112	26.00	-4.89	32133.977	2.0	51770.577	3.0
509.1175	18.01	-1.94	195031.120	2.5	214667.480	2.5
509.1177	24.01	-2.50	55081.700	1.5	74718.050	1.5
509.1203	25.02	-.57	172755.950	3.5	192392.200	3.5
509.1219	25.01	-2.19	81862.840	4.0	101499.030	4.0
509.1250	14.02	.17	230301.220	3.0	249937.290	4.0
509.1286	27.00	-4.86	4690.180	2.5	24326.110	3.5
509.1330	24.00	-5.00	33542.110	2.0	53177.870	2.0
509.1340	42.01	-1.10	20809.640	0.0	40450.835	0.0
509.1359	25.00	-3.22	45013.550	2.5	64649.200	3.5
509.1364	14.02	-1.37	230301.660	4.0	249937.290	4.0
509.1364	14.02	.27	230301.660	4.0	249937.290	5.0
509.1364	14.02	-3.48	230301.660	4.0	249937.290	5.0
509.1455	14.02	-4.05	230302.010	4.0	249937.290	5.0
509.1455	14.02	.27	230302.010	4.0	249937.290	5.0
509.1455	14.02	-1.48	230302.010	4.0	249937.290	4.0
509.1541	22.00	-2.53	20006.032	2.0	39640.980	3.0
509.1543	14.02	-1.37	230302.350	5.0	249937.290	5.0
509.1543	14.02	-1.48	230302.350	5.0	249937.290	5.0
509.1543	14.02	.35	230302.350	5.0	249937.290	6.0
509.1543	14.02	-3.12	230302.350	5.0	249937.290	4.0
509.1620	23.02	-1.57	141531.170	1.5	161165.810	2.5
509.1631	24.00	-4.27	33906.650	1.0	53541.250	2.0
509.1672	24.00	-2.94	31028.330	2.0	50662.770	1.0
509.1675	28.01	-.98	115827.120	3.5	135461.550	2.5
509.1683	25.01	-4.69	83070.970	2.0	102705.370	3.0
509.1711	26.00	-3.07	34636.820	2.0	54271.110	1.0
509.1729	26.00	-3.61	28604.610	2.0	48238.832	2.0
509.1875	24.00	-2.78	8095.210	3.0	27728.870	2.0
509.2002	18.01	-1.99	186470.280	1.5	206103.450	1.5
509.2006	22.00	-4.41	22081.198	2.0	41714.350	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
509.2051	22.00	-2.44	18911.399	2.0	38544.380	3.0
509.2074	26.02	-1.30	179579.830	5.0	199212.720	4.0
509.2189	18.01	-3.59	189040.870	1.5	208673.320	2.5
509.2230	24.00	-2.60	35884.400	5.0	55516.690	6.0
509.2250	64.01	-.55	13792.436	0.0	33430.121	0.0
509.2253	22.00	-6.31	14028.470	2.0	33660.671	1.0
509.2284	24.00	-3.78	36577.730	4.0	56209.810	3.0
509.2316	26.02	-3.73	168477.360	1.0	188109.320	0.0
509.2329	26.02	-1.05	179216.470	6.0	198848.380	7.0
509.2331	27.00	-2.41	27497.060	2.5	47128.960	2.5
509.2391	26.02	-.95	179630.770	4.0	199262.440	3.0
509.2536	24.01	-2.26	69638.770	1.5	89269.880	.5
509.2588	28.01	-.47	100619.260	4.5	120250.170	3.5
509.2627	23.01	-3.51	30267.460	2.0	49898.220	2.0
509.2690	63.00	.06	16534.792	0.0	36170.780	0.0
509.2754	27.00	-2.19	32464.730	4.5	52095.000	3.5
509.2770	24.00	-2.14	38537.680	5.0	58167.890	4.0
509.2800	60.01	-1.22	2984.328	0.0	22619.892	0.0
509.2816	22.01	-3.72	20951.770	2.5	40581.800	2.5
509.2887	14.00	-3.28	40991.884	1.0	60621.640	0.0
509.2977	24.01	-3.11	50687.630	2.5	70317.040	2.5
509.3045	22.00	-1.36	21739.713	5.0	41368.860	4.0
509.3130	23.02	-.72	140750.820	2.5	160379.640	2.5
509.3161	29.01	-3.61	128853.300	2.0	148482.000	3.0
509.3208	26.00	-4.80	27543.000	1.0	47171.520	0.0
509.3255	25.01	-3.91	62564.700	1.0	82193.040	2.0
509.3273	28.01	-2.79	109846.000	3.5	129474.270	3.5
509.3423	24.00	-4.06	8307.570	4.0	27935.260	4.0
509.3465	26.01	-2.27	54870.620	2.5	74498.150	1.5
509.3503	22.00	-7.93	14028.470	2.0	33655.853	2.0
509.3512	24.00	-4.79	33671.550	3.0	53298.900	4.0
509.3548	27.00	-4.43	23184.230	2.5	42811.440	3.5
509.3595	25.01	-4.71	52383.720	4.0	72010.750	4.0
509.3600	20.02	-1.10	340580.150	3.0	360207.160	2.0
509.3621	26.02	.15	179221.450	7.0	198848.380	7.0
509.3740	25.01	-3.79	81862.840	4.0	101489.310	5.0
509.3750	24.00	-4.49	31028.330	2.0	50654.760	2.0
509.3795	29.01	.13	116388.000	2.0	136014.260	2.0
509.3830	44.00	-1.15	9436.930	0.0	29068.524	0.0
509.3851	22.00	-1.45	28702.768	3.0	48328.810	4.0
509.3966	16.01	-.68	110508.480	3.5	130134.080	2.5
509.3976	10.01	-2.62	302425.870	1.5	322051.430	2.5
509.4016	22.00	-2.77	18825.890	1.0	38451.298	2.0
509.4101	10.01	-4.19	302425.870	1.5	322050.950	1.5
509.4111	25.02	-1.20	172547.850	2.5	192172.890	2.5
509.4223	22.00	-1.75	27025.652	4.0	46650.260	3.0
509.4270	23.00	-3.92	20812.990	1.5	40437.420	1.5
509.4406	28.00	-1.39	30912.838	1.0	50536.742	1.0
509.4410	41.00	-2.80	0.000	0.0	19629.358	0.0
509.4446	29.01	-2.53	117130.360	2.0	136754.110	2.0
509.4454	24.00	-3.34	27223.050	2.0	46846.770	3.0
509.4573	26.02	-.46	179676.890	2.0	199300.150	2.0
509.4610	22.00	-2.12	20062.980	1.0	39686.100	2.0
509.4646	28.01	-1.20	115870.280	2.5	135493.260	1.5
509.4662	10.01	-3.01	301801.090	3.5	321424.010	4.5
509.4843	23.02	.07	141405.100	5.5	161027.320	4.5
509.4942	27.00	-3.01	16470.600	1.5	36092.440	2.5
509.4952	26.00	-3.06	33946.920	2.0	53568.720	2.0
509.4999	27.00	-.82	33150.680	1.5	52772.300	2.5
509.5009	23.00	-4.94	26122.040	3.5	45743.620	3.5
509.5060	90.01	-1.94	9114.300	0.0	28741.154	0.0
509.5077	23.00	-6.22	2220.130	2.5	21841.450	2.5
509.5202	25.01	-3.88	62572.200	2.0	82193.040	2.0
509.5270	73.00	-1.83	12743.888	0.0	32369.933	0.0
509.5275	26.00	-4.06	32133.977	2.0	51754.534	1.0
509.5300	41.00	-1.72	645.260	0.0	20271.190	0.0
509.5369	26.00	-4.35	26105.908	6.0	45726.104	5.0
509.5382	22.00	-1.76	27418.015	2.0	47038.160	3.0
509.5391	23.01	-5.85	17910.980	4.0	37531.090	4.0
509.5464	28.01	-4.68	79823.030	3.5	99442.860	4.5
509.5480	23.00	-9.38	14910.040	3.5	34529.810	4.5
509.5524	10.01	-2.33	301801.090	3.5	321420.690	2.5
509.5573	7.01	-.87	203258.980	2.0	222878.390	2.0
509.5651	24.00	-3.43	31009.000	3.0	50628.110	3.0
509.5677	23.00	-2.24	14548.830	2.5	34167.840	2.5
509.5680	25.03	-4.60	152858.200	3.0	172477.200	4.0
509.5747	29.01	-.55	116371.410	4.0	135990.150	3.0
509.5851	18.01	-1.83	190507.360	1.5	210125.700	2.5
509.5862	23.03	-2.65	264482.800	2.0	284101.100	3.0
509.5890	42.00	-1.00	20809.640	0.0	40433.297	0.0
509.5987	22.00	-2.63	21469.494	3.0	41087.310	3.0
509.6060	64.01	-1.35	8791.670	0.0	28414.673	0.0
509.6108	28.01	-1.51	115827.120	3.5	135444.470	3.5
509.6144	26.02	-.80	179682.940	1.0	199300.150	2.0
509.6249	20.01	-3.48	68056.910	2.5	87673.720	2.5
509.6249	20.01	-2.18	68056.910	3.5	87673.720	2.5
509.6366	14.02	-1.54	234387.640	1.0	254004.000	2.0
509.6410	7.00	-2.57	96750.810	1.5	116367.000	.5
509.6410	7.00	-2.61	96750.810	1.5	116367.000	2.5
509.6430	28.01	-2.99	117662.110	1.5	137278.220	1.5
509.6440	63.00	.48	19357.805	0.0	38979.345	0.0
509.6500	75.00	-1.44	16212.162	0.0	35833.471	0.0
509.6520	60.01	-1.81	4355.506	0.0	23976.738	0.0
509.6650	42.00	-.62	20809.640	0.0	40430.371	0.0
509.6713	20.01	-2.33	68056.910	2.5	87671.930	1.5
509.6724	21.00	-.55	11557.640	2.5	31172.620	1.5
509.6742	24.00	-2.45	28637.000	3.0	48251.910	3.0
509.6846	18.01	-2.05	190511.190	2.5	210125.700	2.5
509.6854	28.00	-1.09	30163.140	2.0	49777.619	3.0
509.6885	14.02	-2.02	234387.640	1.0	254002.000	1.0
509.6908	25.01	-2.96	53781.700	3.0	73395.970	2.0
509.6981	26.00	-.58	34547.192	2.0	54161.182	3.0
509.6999	24.00	-3.83	31048.850	1.0	50662.770	1.0
509.7025	26.02	-.95	179207.570	5.0	198821.390	6.0
509.7075	22.01	-5.32	9930.740	1.5	29544.370	2.5
509.7100	18.01	-2.85	189654.780	2.5	209268.310	1.5
509.7129	25.01	-3.14	53781.700	3.0	73395.120	3.0
509.7170	19.00	-2.43	12985.170	.5	32598.430	1.5
509.7270	24.00	-3.25	23512.000	1.0	43124.880	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
509.7272	26.02	-3.31	186712.020	1.0	206324.890	2.0
509.7311	24.01	-2.84	29952.080	.5	49564.800	1.5
509.7316	25.01	-3.14	81886.330	5.0	101499.030	4.0
509.7384	27.00	-4.87	23184.230	2.5	42796.670	1.5
509.7407	24.00	-2.76	31048.850	1.0	50661.200	0.0
509.7429	22.00	-3.69	27418.015	2.0	47030.280	3.0
509.7520	42.00	-.82	18228.600	0.0	37845.983	0.0
509.7532	27.00	-4.41	21215.900	.5	40827.770	1.5
509.7789	16.01	-1.40	110176.830	1.5	129787.710	.5
509.7810	26.02	-4.14	199804.810	4.0	219415.610	5.0
509.7886	28.01	-.44	100592.980	3.5	120203.490	2.5
509.7966	28.02	-4.14	97996.300	3.0	117606.500	3.0
509.8021	27.00	-.95	32654.500	2.5	52264.490	1.5
509.8021	28.01	-3.51	111120.540	1.5	130730.530	2.5
509.8030	42.00	-1.17	20245.038	0.0	39860.458	0.0
509.8047	28.01	-4.55	95332.530	2.5	114942.420	1.5
509.8065	28.01	-4.16	96535.870	3.5	116145.690	3.5
509.8114	23.01	-5.88	17910.980	4.0	37520.610	3.0
509.8127	23.02	-2.29	141270.400	3.5	160879.980	4.5
509.8187	15.00	-1.61	56090.450	1.5	75699.800	.5
509.8190	7.00	-3.52	95493.660	1.5	115103.000	2.5
509.8278	27.01	-6.87	27469.200	5.0	47078.200	6.0
509.8356	17.01	-.98	126725.100	1.0	146333.800	2.0
509.8380	64.01	-.53	12985.861	0.0	32599.934	0.0
509.8437	23.00	-4.92	15770.720	4.5	35379.110	3.5
509.8489	7.00	-1.38	96750.810	1.5	116359.000	2.5
509.8502	28.01	-1.42	115827.120	3.5	135435.260	4.5
509.8559	26.00	-1.17	31686.342	2.0	51294.262	3.0
509.8577	23.00	-4.90	31268.150	3.5	50876.000	4.5
509.8660	10.01	-1.94	301801.090	3.5	321408.620	2.5
509.8703	26.00	-2.10	17550.180	3.0	37157.546	2.0
509.8707	10.01	-1.06	301801.090	3.5	321408.440	3.5
509.8741	23.00	-4.61	20830.200	.5	40437.420	1.5
509.8767	28.01	-4.28	115000.250	3.5	134607.370	4.5
509.8850	24.00	-4.04	33113.270	4.0	52720.070	4.0
509.8944	7.00	-3.47	95493.660	1.5	115100.100	2.5
509.8962	24.00	-3.98	33934.880	3.0	53541.250	2.0
509.9049	10.00	-2.63	150121.592	1.0	169727.630	1.0
509.9062	26.00	-1.46	32133.977	2.0	51739.964	2.0
509.9078	22.00	-1.44	21588.496	4.0	41194.420	3.0
509.9105	7.01	-.67	210301.680	3.0	229907.500	4.0
509.9162	24.00	-3.67	33935.650	2.0	53541.250	2.0
509.9178	25.01	-4.28	62587.500	3.0	82193.040	2.0
509.9183	21.00	-.42	11610.240	3.5	31215.760	2.5
509.9196	19.00	-2.24	13042.880	1.5	32648.350	.5
509.9225	21.00	.13	179473.980	1.5	37553.340	2.5
509.9316	28.00	-1.50	29481.020	4.0	49086.030	4.0
509.9339	26.02	-.00	179216.470	6.0	198821.390	6.0
509.9345	17.01	-.13	126725.100	1.0	146330.000	1.0
509.9355	10.01	-1.36	301801.090	3.5	321405.950	3.5
509.9422	26.01	-4.94	65580.090	5.5	85184.690	4.5
509.9441	21.00	-.45	16141.040	2.5	35745.570	2.5
509.9537	10.01	-.38	301801.090	3.5	321405.250	4.5
509.9615	26.00	-4.01	34362.860	1.0	53966.720	2.0
509.9658	18.00	-4.90	105462.804	3.0	125066.501	2.0
509.9677	25.02	-2.49	172569.270	1.5	192172.890	2.5
509.9790	17.00	-1.85	74865.667	.5	94468.857	.5
509.9841	24.00	-3.97	36552.130	3.0	56155.120	2.0
509.9844	25.01	-2.33	81886.330	5.0	101489.310	5.0
509.9844	7.00	-1.69	96864.020	2.5	116467.000	1.5
509.9927	28.00	-.21	29668.918	3.0	49271.578	3.0
510.0034	25.02	-.23	173063.550	5.5	192665.800	4.5
510.0047	30.02	-2.58	218040.500	3.0	237642.700	3.0
510.0060	29.01	-.46	116388.000	2.0	135990.150	3.0
510.0070	27.00	-.41	33173.360	3.5	52775.470	4.5
510.0081	9.02	-2.52	440202.480	2.5	459804.550	1.5
510.0160	41.00	-2.15	322.630	0.0	19929.858	0.0
510.0220	62.01	-.53	11937.313	0.0	31544.310	0.0
510.0281	26.01	-4.79	66078.340	2.5	85679.640	2.5
510.0307	30.02	-.61	218041.500	4.0	237642.700	3.0
510.0369	26.02	-.25	179661.480	3.0	199262.440	3.0
510.0432	23.02	-.08	141987.320	3.5	161588.040	3.5
510.0444	18.01	-1.55	189414.960	3.5	209015.630	3.5
510.0461	24.00	-4.20	35501.260	3.0	55101.870	3.0
510.0569	7.00	-1.68	96750.810	1.5	116351.000	.5
510.0569	7.00	-1.74	96750.810	1.5	116351.000	1.5
510.0620	90.00	-1.88	4920.109	0.0	24525.569	0.0
510.0635	26.02	-1.05	179221.450	7.0	198821.390	6.0
510.0656	26.01	-4.53	22637.190	4.5	42237.050	3.5
510.0677	24.00	-4.82	31028.330	2.0	50628.110	3.0
510.0835	22.00	-3.04	20062.980	1.0	39662.150	1.0
510.0859	26.01	-2.28	47674.780	1.5	67273.860	1.5
510.0872	26.01	-3.93	67000.630	2.5	86599.660	2.5
510.0895	28.01	-2.68	117074.700	3.5	136673.640	4.5
510.0895	27.00	-2.93	33173.360	3.5	52772.300	2.5
510.0940	64.01	-.94	12824.546	0.0	32428.776	0.0
510.0944	15.00	-2.12	56090.450	1.5	75689.200	1.5
510.0968	29.01	-.92	118532.150	2.0	138130.810	3.0
510.0983	12.02	-.82	562136.100	2.0	581734.700	1.0
510.0983	12.02	-.82	562136.100	2.0	581734.700	1.0
510.1001	22.00	-2.38	18145.400	2.0	37743.933	3.0
510.1090	24.00	-1.74	21810.840	1.0	41409.030	2.0
510.1137	21.00	-.52	11677.310	4.5	31275.320	3.5
510.1385	9.00	-3.41	116987.394	3.5	136584.450	2.5
510.1401	22.00	-2.67	11776.806	4.0	31373.801	3.0
510.1512	24.00	-4.24	36558.550	2.0	56155.120	2.0
510.1673	24.00	-2.99	39158.630	4.0	58754.580	5.0
510.1866	24.00	-3.06	31355.210	2.0	50950.420	3.0
510.1870	22.00	-4.11	14105.680	3.0	33700.874	4.0
510.2030	28.01	.40	115870.280	2.5	135464.860	3.5
510.2179	25.01	-3.90	44899.820	3.0	64493.830	4.0
510.2242	26.00	-4.91	17927.378	1.0	37521.144	2.0
510.2262	23.00	-4.04	11100.650	4.5	30694.340	3.5
510.2288	23.00	-4.27	9824.580	2.5	29418.170	3.5
510.2382	22.00	-1.79	18061.540	1.0	37654.770	2.0
510.2390	60.01	-1.23	5404.054	0.0	25002.713	0.0
510.2426	26.00	-4.00	27543.000	1.0	47136.058	2.0
510.2504	28.01	-.59	113408.710	1.5	133001.470	.5
510.2533	24.00	-2.15	27597.220	3.0	47189.870	4.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
510.2595	25.01	-2.22	48317.850	4.0	67910.260	4.0
510.2692	28.01	-1.28	100619.260	4.5	120211.300	5.5
510.2749	23.01	-4.11	30306.400	3.0	49898.220	2.0
510.2819	24.00	-2.48	45348.730	6.0	64940.280	7.0
510.2892	28.01	-.28	115870.280	2.5	135461.550	2.5
510.2910	28.01	-3.46	99040.750	1.5	118631.950	.5
510.2958	28.00	-2.91	13521.352	2.0	33112.368	3.0
510.3030	28.00	-.93	34163.294	2.0	53754.036	2.0
510.3090	62.01	-.68	9356.272	0.0	28952.242	0.0
510.3093	17.01	.10	126743.300	2.0	146333.600	2.0
510.3140	27.00	-2.47	33173.360	3.5	52763.680	3.5
510.3142	28.01	-3.25	111120.540	1.5	130710.850	.5
510.3207	25.02	-3.60	94697.850	3.5	114287.910	2.5
510.3210	25.00	-4.05	41230.300	3.5	60820.350	2.5
510.3277	9.00	-2.83	117872.916	1.5	137462.710	1.5
510.3291	16.01	-.14	110268.330	2.5	129858.070	1.5
510.3309	29.01	-3.78	118484.000	3.0	138073.670	4.0
510.3400	25.01	-3.20	53805.800	4.0	73395.120	3.0
510.3450	64.00	.47	790.437	0.0	27499.025	0.0
510.3458	15.03	-.11	320053.000	1.0	339642.100	1.0
510.3475	22.00	-2.64	19937.859	1.0	39526.890	2.0
510.3500	76.00	-1.90	8630.355	0.0	28224.751	0.0
510.3507	27.00	-4.30	23207.760	1.5	42796.670	1.5
510.3518	22.00	-3.69	27355.042	1.0	46943.910	2.0
510.3530	24.00	-4.46	35862.820	4.0	55451.640	3.0
510.3642	25.00	-3.81	45060.810	3.5	64649.200	3.5
510.3853	26.02	-1.21	199884.390	5.0	219471.970	4.0
510.3882	23.00	-1.46	19023.470	4.5	38610.940	3.5
510.4023	14.02	-1.72	234415.070	0.0	254002.000	1.0
510.4034	26.00	-2.78	24435.764	2.0	43922.652	3.0
510.4083	17.01	-.56	126743.300	2.0	146330.000	1.0
510.4143	28.01	.64	99340.550	3.5	118927.020	4.5
510.4172	26.00	-2.28	33695.378	5.0	53281.735	5.0
510.4187	15.03	.37	320053.000	1.0	339639.300	2.0
510.4242	24.00	-4.29	31364.330	3.0	50950.420	3.0
510.4382	26.02	-.59	179676.890	2.0	199262.440	3.0
510.4435	22.00	-2.76	18037.225	4.0	37622.573	3.0
510.4445	7.01	-.65	178273.380	0.0	197858.690	1.0
510.4451	26.00	-2.17	34547.192	2.0	54132.480	1.0
510.4480	62.01	-1.10	7985.094	0.0	27575.728	0.0
510.4518	21.00	-3.58	21085.840	3.5	40670.870	4.5
510.4536	25.00	-3.06	38934.940	2.5	58519.900	3.5
510.4570	29.01	-3.14	116326.160	3.0	135910.990	2.0
510.4573	28.01	-3.45	101740.270	3.5	121325.090	2.5
510.4630	23.00	-2.91	19026.340	2.5	38610.940	3.5
510.4682	17.02	-4.03	222100.700	1.5	241685.100	2.5
510.4699	10.00	-2.28	150121.592	1.0	169705.925	0.0
510.4719	27.00	-4.08	34352.420	1.5	53936.680	2.5
510.4823	23.00	-4.50	17116.920	3.5	36700.780	2.5
510.4841	26.02	-2.28	186712.020	1.0	206295.810	1.0
510.5133	24.00	-2.62	35934.020	6.0	55516.690	6.0
510.5138	28.01	.51	99340.550	3.5	118923.200	3.5
510.5250	7.00	-3.56	95475.280	.5	115057.500	1.5
510.5287	10.01	-3.66	319111.700	3.5	338693.780	4.5
510.5289	10.01	-2.03	319111.710	4.5	338693.780	4.5
510.5313	10.01	-2.16	319111.700	3.5	338693.680	3.5
510.5315	10.01	-4.24	319111.710	4.5	338693.680	3.5
510.5321	26.02	-.09	179630.770	4.0	199212.720	4.0
510.5391	7.01	-1.64	203162.480	0.0	222744.160	1.0
510.5540	24.00	-2.50	35870.530	4.0	55451.640	3.0
510.5541	29.00	-1.51	11211.395	0.0	30797.958	0.0
510.5613	24.00	-2.94	28637.000	3.0	48217.830	2.0
510.5662	22.00	-2.71	18037.225	4.0	37617.868	4.0
510.5696	23.00	-8.15	14949.300	4.5	34529.810	4.5
510.5826	22.00	-2.66	27614.667	4.0	47194.680	4.0
510.5850	10.01	-3.92	308738.030	1.5	328317.950	2.5
510.5900	26.02	-.99	179194.220	4.0	198773.950	5.0
510.5910	24.00	-3.78	35672.940	2.0	55152.630	2.0
510.5999	7.00	-4.98	96787.650	1.5	116367.000	.5
510.5999	7.00	-2.16	96787.650	1.5	116367.000	1.5
510.5999	7.00	-2.14	96787.650	1.5	116367.000	2.5
510.6025	15.01	-1.69	105550.450	2.0	125129.700	3.0
510.6035	23.00	-3.57	14548.830	2.5	34128.040	3.5
510.6195	15.03	-.41	320063.500	1.0	339642.100	1.0
510.6228	23.01	-2.85	20617.050	2.0	40195.520	3.0
510.6230	57.00	-.83	2581.041	0.0	22164.961	0.0
510.6240	9.00	-2.11	117872.916	1.5	137451.340	2.5
510.6254	28.01	-1.03	116167.760	1.5	135746.130	1.5
510.6270	10.01	-1.82	301855.710	2.5	321434.020	1.5
510.6341	24.01	-4.60	69478.060	2.5	89056.100	2.5
510.6455	26.02	-3.93	117950.320	4.0	137527.920	4.0
510.6586	17.01	-1.16	158177.100	1.0	177754.200	1.0
510.6600	9.00	-3.19	117872.916	1.5	137449.960	1.5
510.6617	7.00	-3.29	96864.020	2.5	116441.000	1.5
510.6617	7.00	-2.56	96864.020	2.5	116441.000	2.5
510.6639	26.00	-3.47	34555.586	0.0	54132.480	1.0
510.6674	23.00	-5.61	14910.040	3.5	34486.800	2.5
510.6925	15.03	.07	320063.500	1.0	339639.300	2.0
510.6977	14.02	-1.86	234428.400	1.0	254004.000	2.0
510.7045	10.01	-1.90	302475.610	.5	322050.950	1.5
510.7070	44.00	-1.15	12743.888	0.0	32324.587	0.0
510.7081	28.01	-.87	113407.310	2.5	132982.510	1.5
510.7092	25.01	-1.88	59537.400	4.0	79112.560	5.0
510.7240	90.01	-2.35	7743.122	0.0	27323.169	0.0
510.7277	22.00	-5.41	14105.680	3.0	33680.130	3.0
510.7280	26.01	-4.01	50076.100	1.5	69650.540	2.5
510.7345	28.01	.22	115870.280	2.5	135444.470	3.5
510.7358	21.00	-.64	16096.860	1.5	35671.000	1.5
510.7447	28.01	.05	113408.710	1.5	132982.510	1.5
510.7449	28.01	-1.37	99340.550	3.5	118914.340	4.5
510.7451	26.00	-2.79	7985.783	2.0	27559.568	2.0
510.7499	14.02	-2.33	234428.400	1.0	254002.000	1.0
510.7504	28.01	-3.19	109846.000	3.5	129419.580	4.5
510.7512	28.01	-.13	115827.120	3.5	135400.670	3.5
510.7575	25.01	-3.74	44899.820	3.0	64473.130	3.0
510.7590	60.01	-.79	6533.259	0.0	26111.964	0.0
510.7644	26.00	-2.83	12560.933	3.0	32133.977	2.0
510.7681	24.00	-3.62	7927.470	2.0	27500.370	3.0
510.7778	23.01	-3.16	20622.990	3.0	40195.520	3.0
510.7796	24.00	-4.19	31377.960	4.0	50950.420	3.0
510.7921	7.00	-2.91	96864.020	2.5	116436.000	1.5
510.7921	7.00	-1.56	96864.020	2.5	116436.000	2.5
510.8016	24.01	-2.82	69903.460	3.5	89475.080	2.5
510.8083	24.00	-4.12	7810.820	1.0	27382.180	2.0
510.8086	7.00	-3.41	96787.650	1.5	116359.000	2.5
510.8115	21.00	-4.25	21032.780	2.5	40604.020	3.5
510.8158	26.00	-3.67	32133.977	2.0	51705.052	2.0
510.8159	23.02	-.44	140750.820	2.5	160321.890	2.5
510.8208	7.00	-2.21	95532.120	2.5	115103.000	2.5
510.8227	28.01	-4.81	111120.540	1.5	130691.350	1.5
510.8295	27.00	-.88	34133.590	3.5	53704.140	2.5
510.8318	29.01	-.74	116388.000	2.0	135958.460	1.0
510.8406	9.00	-2.35	117872.916	1.5	137443.040	2.5
510.8428	22.00	-1.47	28638.832	2.0	48208.870	3.0
510.8464	24.01	-3.94	64924.300	3.5	84494.200	2.5
510.8509	24.00	-4.19	28682.180	2.0	48251.910	3.0
510.8527	24.00	-2.23	39158.630	4.0	58728.290	4.0
510.8840	26.02	-.57	179759.490	2.0	199327.950	1.0
510.8843	22.01	-9.44	9975.920	1.5	29544.370	2.5
510.8898	27.00	-.08	31699.690	4.5	51267.930	4.5
510.8910	64.01	-.35	13308.491	0.0	32882.138	0.0
510.8966	7.00	-3.35	95532.120	2.5	115100.100	2.5
510.9057	21.00	-.28	17918.850	.5	37486.480	1.5
510.9062	29.01	-3.11	117231.690	1.0	136799.300	2.0
510.9195	9.02	-2.90	425390.010	.5	444957.110	1.5
510.9195	11.02	-1.87	444825.000	2.5	464392.100	2.5
510.9198	28.01	-4.94	113623.100	.5	133190.190	1.5
510.9255	10.01	-2.87	319111.700	3.5	338678.570	3.5
510.9258	10.01	-1.40	319111.710	4.5	338678.570	3.5
510.9370	73.01	-1.48	9598.245	0.0	29170.130	0.0
510.9384	26.02	-.12	179207.570	5.0	198773.950	5.0
510.9435	22.00	-2.19	11639.804	3.0	31205.985	3.0
510.9457	9.01	-3.98	235150.580	2.0	254716.680	2.0
510.9470	22.00	-.65	28896.062	5.0	48462.110	5.0
510.9525	23.00	-4.31	9636.960	1.5	29202.800	1.5
510.9566	10.01	-1.17	294086.490	1.5	313652.170	1.5
510.9598	15.00	-1.09	56339.540	2.5	75905.100	2.5
510.9642	26.00	-.66	34692.130	1.0	54257.520	2.0
510.9666	14.02	-1.10	234442.180	2.0	254007.480	3.0
510.9710	42.01	-.58	20245.038	0.0	39815.620	0.0
510.9711	26.00	-4.41	31805.059	3.0	51370.184	2.0
510.9749	10.01	-1.18	301855.710	2.5	321420.690	2.5
510.9770	73.00	-2.99	5565.369	0.0	25135.721	0.0
510.9775	28.01	-3.14	52205.950	3.5	71770.830	2.5
510.9777	22.00	-3.28	18287.560	4.0	37852.434	4.0
510.9822	10.01	-2.08	301855.710	2.5	321420.410	1.5
510.9875	28.01	-4.83	97273.830	2.5	116838.330	1.5
510.9963	7.01	-2.34	203537.660	1.0	223101.820	1.0
511.0047	7.00	-3.52	95493.660	1.5	115057.500	1.5
511.0057	28.01	-3.13	120270.440	5.5	139834.240	6.5
511.0175	7.00	-4.69	96787.650	1.5	116351.000	.5
511.0175	7.00	-2.33	96787.650	1.5	116351.000	1.5
511.0243	28.01	-2.77	101754.800	2.5	121317.890	3.5
511.0272	27.01	-4.31	65604.400	3.0	85167.380	3.0
511.0275	9.00	-1.95	116040.883	1.5	135603.850	2.5
511.0334	29.01	-.92	116371.410	4.0	135934.150	5.0
511.0360	74.00	-1.65	15002.299	0.0	34570.392	0.0
511.0366	26.00	-1.67	28819.966	5.0	48382.585	5.0
511.0380	59.01	-1.20	4032.876	0.0	23600.892	0.0
511.0414	26.00	-3.74	0.000	4.0	19562.435	4.0
511.0423	26.00	-3.25	34362.860	1.0	53925.260	1.0
511.0520	24.01	-3.21	53923.570	4.5	73485.600	3.5
511.0572	28.01	-3.17	110573.360	2.5	130135.190	1.5
511.0575	14.02	-1.85	234442.180	2.0	254004.000	2.0
511.0653	25.02	-1.33	172451.230	1.5	192012.750	1.5
511.0739	7.00	-4.09	96750.810	1.5	116312.000	.5
511.0739	7.00	-3.39	96750.810	1.5	116312.000	1.5
511.0739	7.00	-3.40	96750.810	1.5	116312.000	2.5
511.0750	24.00	-1.25	21847.880	2.0	41409.030	2.0
511.0770	59.01	-.37	9194.957	0.0	28761.480	0.0
511.0794	27.00	-2.92	34133.590	3.5	53694.570	3.5
511.0810	46.00	.13	35247.336	0.0	54813.706	0.0
511.0810	76.00	-1.82	10969.423	0.0	30535.793	0.0
511.1068	26.02	.16	179579.830	5.0	199139.760	5.0
511.1097	14.02	-3.03	234442.180	2.0	254002.000	1.0
511.1128	28.01	-2.68	116833.150	4.5	136392.850	3.5
511.1306	25.02	-.74	172613.870	2.5	192172.890	2.5
511.1359	26.00	-3.75	28604.610	2.0	48163.427	2.0
511.1434	22.00	-2.94	25926.820	4.0	45485.350	5.0
511.1454	26.00	-4.74	26406.490	1.0	45964.944	2.0
511.1520	23.00	-4.83	20767.570	3.5	40325.770	2.5
511.1543	22.00	-2.84	27480.047	3.0	47038.160	3.0
511.1633	25.02	-4.71	176390.670	2.5	195948.440	3.5
511.1709	26.02	-.93	179216.470	6.0	198773.950	5.0
511.1732	28.01	-.04	99340.550	3.5	118897.940	2.5
511.1808	23.03	-1.30	263902.300	3.0	283459.400	3.0
511.1850	23.00	-2.83	17054.870	2.5	36611.810	2.5
511.1913	29.00	-1.04	44926.239	0.0	64488.387	0.0
511.1938	15.01	-1.16	112607.700	2.0	132164.300	2.0
511.1952	28.00	-4.50	43258.792	4.0	62815.340	5.0
511.1962	25.01	-4.75	44899.820	3.0	64456.330	2.0
511.2041	28.01	-.51	115956.710	2.5	135512.920	2.5
511.2130	72.00	-2.96	5565.369	0.0	25126.687	0.0
511.2140	27.00	-3.09	28470.510	1.5	48026.340	.5
511.2213	19.00	-3.10	13042.880	1.5	32598.430	1.5
511.2247	19.00	-2.15	13042.880	1.5	32598.300	2.5
511.2270	40.01	-1.00	13308.491	0.0	32869.273	0.0
511.2289	18.01	-1.80	199446.540	.5	219001.800	1.5
511.2323	7.01	-1.52	203189.030	1.0	222744.160	1.0
511.2635	27.01	-7.01	27484.300	3.0	47039.000	3.0
511.2646	28.01	-1.49	116191.470	2.5	135746.130	1.5
511.2688	24.00	-4.32	8095.210	3.0	27649.710	4.0
511.2568	7.00	-3.87	96750.810	1.5	116305.000	.5
511.2568	7.00	-4.35	96750.810	1.5	116305.000	1.5
511.2592	17.01	-3.08	138623.000	1.0	158177.100	1.0
511.2665	22.00	-3.37	22404.690	3.0	41958.510	2.0
511.2770	29.01	-3.35	119039.680	2.0	138593.100	1.0
511.2856	21.00	-.21	18000.250	2.5	37553.340	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
511.2903	10.01	-1.15	301855.710	2.5	321408.620	2.5
511.2919	24.00	-3.32	25038.610	5.0	44591.460	5.0
511.2950	10.01	-.64	301855.710	2.5	321408.440	3.5
511.2982	20.02	-.05	341601.460	2.0	361154.070	2.0
511.3118	24.00	-1.87	21856.940	3.0	41409.030	2.0
511.3120	27.00	-1.60	33150.680	1.5	52702.760	1.5
511.3175	28.01	-1.24	113177.610	3.5	132729.480	2.5
511.3220	27.00	-1.92	16778.160	2.5	36329.860	2.5
511.3237	26.00	-4.06	34017.084	1.0	53568.720	2.0
511.3340	26.02	-.83	179661.480	3.0	199212.720	4.0
511.3392	9.01	-3.22	235150.580	2.0	254701.620	3.0
511.3403	17.01	-.49	126782.800	3.0	146333.800	2.0
511.3440	23.00	-3.48	14514.750	1.5	34065.610	2.5
511.3448	22.00	-1.35	11639.804	3.0	31190.631	2.0
511.3471	28.01	-4.31	115565.980	2.5	135116.720	2.5
511.3602	10.01	-1.63	301855.710	2.5	321405.950	3.5
511.3619	22.00	-6.47	14105.680	3.0	33655.853	2.0
511.3646	28.01	-3.73	115120.000	2.5	134670.070	1.5
511.3680	24.01	-4.90	69506.160	3.5	89056.100	2.5
511.3712	28.01	-2.92	117662.110	1.5	137211.930	.5
511.3764	14.02	.05	230267.700	2.0	249817.320	3.0
511.3819	24.00	-3.75	7750.780	0.0	27300.190	1.0
511.3842	14.02	-.42	230268.620	3.0	249817.940	4.0
511.3866	14.02	.03	230268.620	3.0	249817.850	4.0
511.3902	22.00	-2.12	18141.229	5.0	37690.320	5.0
511.3990	69.00	-2.22	0.000	0.0	19554.203	0.0
511.4000	8.04	-.53	547150.000	0.0	566704.165	0.0
511.4005	14.02	-1.03	230268.620	3.0	249817.320	3.0
511.4041	24.00	-2.47	31009.000	3.0	50557.560	4.0
511.4117	14.02	.28	230270.660	4.0	249818.930	5.0
511.4175	22.00	-7.63	7255.369	2.0	26803.417	2.0
511.4245	25.01	-4.10	48317.850	4.0	67865.630	4.0
511.4285	7.01	-3.66	170572.610	2.0	190120.240	1.0
511.4287	18.01	-2.75	183797.360	2.5	203344.980	1.5
511.4370	63.00	-.04	12985.861	0.0	32538.611	0.0
511.4376	14.02	-1.36	230270.660	4.0	249817.940	4.0
511.4400	14.02	-1.26	230270.660	4.0	249817.650	4.0
511.4468	24.00	-2.22	28679.430	1.0	48226.360	0.0
511.4512	26.00	-2.56	37046.000	4.0	56592.760	4.0
511.4539	14.02	-2.81	230270.660	4.0	249817.320	3.0
511.4560	57.01	-1.88	1855.123	0.0	21407.147	0.0
511.4627	26.02	-3.53	69786.190	1.0	89334.510	2.0
511.4711	28.01	-3.99	101357.200	4.5	120903.200	3.5
511.4856	26.00	-4.94	31805.059	3.0	51350.505	4.0
511.4970	42.00	-1.02	18228.600	0.0	37779.057	0.0
511.4989	16.01	-.75	110313.130	2.5	129858.070	1.5
511.5185	28.01	-4.91	114836.630	3.5	134380.820	3.5
511.5240	40.00	-.10	16212.162	0.0	35761.587	0.0
511.5274	18.01	-1.57	189654.780	2.5	209198.630	2.5
511.5297	25.02	-.93	175918.500	.5	195462.260	.5
511.5385	22.00	-3.49	15156.787	4.0	34700.212	5.0
511.5389	28.00	-.09	30922.763	5.0	50466.172	4.0
511.5405	18.02	-3.30	226503.220	3.0	246046.570	4.0
511.5407	27.00	-3.04	33173.360	3.5	52716.700	3.5
511.5410	25.02	-4.92	176209.150	1.5	195752.480	2.5
511.5507	29.01	-2.61	118071.340	1.0	137614.300	0.0
511.5666	28.01	-3.86	95332.530	2.5	114874.880	2.5
511.5770	26.00	-2.91	28819.966	5.0	48361.920	4.0
511.5831	7.00	-3.84	95475.280	.5	115017.000	.5
511.5831	7.00	-4.34	95475.280	.5	115017.000	1.5
511.5838	9.00	-2.15	116143.579	.5	135685.270	1.5
511.6041	24.01	-3.68	29952.080	.5	49493.000	.5
511.6109	26.02	-1.30	179759.490	2.0	199300.150	2.0
511.6123	28.00	-3.56	34163.294	2.0	53703.899	1.0
511.6151	25.03	-3.25	152858.200	3.0	172398.700	2.0
511.6167	22.00	-.83	28788.372	4.0	48328.810	4.0
511.6308	22.00	-3.48	18911.399	2.0	38451.298	2.0
511.6431	26.02	-.42	179760.720	3.0	199300.150	2.0
511.6495	22.00	-2.71	27498.975	3.0	47038.160	3.0
511.6504	18.01	-3.87	184191.710	.5	203730.860	1.5
511.6512	28.01	-3.86	115000.250	3.5	134539.370	2.5
511.6543	23.02	-1.39	141488.320	4.5	161027.320	4.5
511.6549	26.02	-1.26	179178.620	3.0	198717.600	4.0
511.6583	28.01	-3.18	112686.300	2.5	132225.150	1.5
511.6646	23.00	-6.68	2424.890	4.5	21963.500	3.5
511.6674	21.00	-.16	17947.980	1.5	37486.480	1.5
511.6700	62.01	-1.19	7420.492	0.0	26964.339	0.0
511.6701	24.00	-4.18	28679.430	1.0	48217.830	2.0
511.6876	24.00	-2.79	31352.420	1.0	50890.150	2.0
511.6913	24.01	-4.28	67875.680	3.5	87413.270	2.5
511.6970	42.00	-1.11	20809.640	0.0	40352.455	0.0
511.6986	23.02	-.13	141144.170	4.5	160681.480	3.5
511.7020	25.02	-.43	172855.020	4.5	192392.200	3.5
511.7020	46.00	.38	38634.952	0.0	58177.576	0.0
511.7049	28.01	.29	116312.340	1.5	135849.410	2.5
511.7180	58.01	-.24	11211.395	0.0	30753.408	0.0
511.7185	28.01	-2.64	115956.710	2.5	135493.260	1.5
511.7214	26.02	-3.22	186791.780	2.0	206328.220	3.0
511.7250	73.00	0.00	27665.529	0.0	47207.275	0.0
511.7266	23.00	-4.50	15688.800	2.5	35225.040	2.5
511.7421	24.00	-2.38	28682.180	2.0	48217.830	2.0
511.7549	28.01	-4.63	100609.010	2.5	120144.170	2.5
511.7607	24.00	-4.04	31355.210	2.0	50890.150	2.0
511.7651	21.00	-4.17	16210.800	3.5	35745.570	2.5
511.7730	28.01	-4.75	115565.980	2.5	135100.450	3.5
511.7822	24.00	-4.86	35618.510	1.0	55152.630	2.0
511.7887	25.00	-3.82	30354.210	3.5	49888.080	3.5
511.7934	25.00	-1.19	25281.040	2.5	44814.730	1.5
511.7950	58.01	-1.32	10001.532	0.0	29540.605	0.0
511.7968	28.01	-1.94	99340.550	3.5	118874.110	3.5
511.8005	18.02	-4.10	226503.220	3.0	246036.640	3.0
511.8020	59.01	-2.36	4355.506	0.0	23894.312	0.0
511.8047	27.00	-1.75	32027.500	3.5	51560.760	2.5
511.8170	23.00	-3.81	19078.150	3.5	38610.940	3.5
511.8198	18.00	-2.96	105617.315	2.0	125150.000	3.0
511.8482	24.01	-4.91	67448.820	4.5	86980.420	5.5
511.8555	26.01	-4.04	65931.460	3.5	85462.780	3.5
511.8582	26.02	-1.55	199884.390	5.0	219415.610	5.0
511.8741	24.00	-2.50	28679.430	1.0	48210.040	1.0
511.8752	18.02	-4.76	226503.220	3.0	246033.790	2.0
511.8753	22.00	-4.29	27750.124	5.0	47280.690	5.0
511.8799	28.01	-.38	115870.280	2.5	135400.670	3.5
511.8880	23.00	-7.03	2311.370	3.5	21841.450	2.5
511.8912	21.00	-1.61	16141.040	2.5	35671.000	1.5
511.8935	22.01	-4.72	47466.800	3.5	66996.670	3.5
511.8941	24.00	-1.48	45306.450	5.0	64836.300	6.0
511.9059	15.04	.45	391101.700	.5	410631.100	1.5
511.9110	39.01	-1.70	7904.437	0.0	27439.083	0.0
511.9171	23.00	-4.74	15000.840	5.5	34529.810	4.5
511.9182	24.00	-4.41	35572.940	2.0	55101.870	3.0
511.9300	24.00	-1.54	27597.220	3.0	47125.700	3.0
511.9405	25.01	-3.81	48317.850	4.0	67845.930	5.0
511.9462	24.00	-2.74	28682.180	2.0	48210.040	1.0
511.9556	8.01	-4.20	256083.500	1.5	275611.000	.5
511.9556	8.01	-4.91	256083.500	1.5	275611.000	1.5
511.9610	60.01	-1.93	5404.054	0.0	24936.792	0.0
511.9690	28.01	-3.93	115000.250	3.5	134527.240	3.5
511.9769	23.02	-1.47	162760.280	4.5	182286.970	5.5
511.9845	30.02	.11	215340.500	2.0	234866.900	1.0
511.9977	22.00	-4.66	27418.015	2.0	46943.910	2.0
511.9997	24.00	-3.76	31364.330	3.0	50890.150	2.0
512.0081	15.01	-1.54	112607.700	2.0	132133.200	3.0
512.0112	7.00	-4.70	95532.120	2.5	115057.500	1.5
512.0223	24.00	-2.23	27703.840	4.0	47228.800	5.0
512.0300	41.00	-2.16	322.630	0.0	19852.736	0.0
512.0309	25.00	-3.69	45060.810	3.5	64585.440	4.5
512.0320	75.00	-1.00	24277.914	0.0	43807.943	0.0
512.0335	26.01	-4.53	22810.330	3.5	42334.860	2.5
512.0351	28.01	-4.32	115592.250	1.5	135116.720	2.5
512.0382	7.00	-3.12	96787.650	1.5	116312.000	.5
512.0382	7.00	-4.42	96787.650	1.5	116312.000	1.5
512.0420	40.00	-.58	15808.874	0.0	35338.522	0.0
512.0422	22.00	.58	20795.599	5.0	40319.800	6.0
512.0637	26.02	-.29	179194.220	4.0	198717.600	4.0
512.0647	7.00	-3.16	95493.660	1.5	115017.000	.5
512.0647	7.00	-4.23	95493.660	1.5	115017.000	1.5
512.0690	45.00	-1.68	13389.148	0.0	32917.766	0.0
512.0739	29.01	-.77	116388.000	2.0	135910.990	2.0
512.0776	23.00	-4.84	31228.980	2.5	50751.830	3.5
512.0879	26.00	-2.85	35856.386	2.0	55378.842	2.0
512.0880	57.00	-.76	8388.382	0.0	27916.276	0.0
512.0931	26.00	-4.53	38175.332	3.0	57697.590	4.0
512.0975	28.01	-4.03	115120.000	2.5	134642.090	3.5
512.1033	18.01	-4.79	183675.570	3.5	203197.440	3.5
512.1185	26.02	-3.99	186712.020	1.0	206233.310	2.0
512.1288	10.01	-1.83	302816.980	1.5	322337.880	2.5
512.1293	24.01	-2.47	69954.200	2.5	89475.080	2.5
512.1299	22.00	-3.51	20006.032	2.0	39526.890	2.0
512.1351	28.01	-1.58	113407.310	2.5	132927.970	1.5
512.1403	23.00	-3.40	15571.900	2.5	35092.360	1.5
512.1508	18.01	-3.19	192556.840	2.5	212076.900	2.5
512.1556	28.00	-.98	31786.210	3.0	51306.085	3.0
512.1594	26.00	-4.26	35856.386	2.0	55376.117	1.0
512.1621	22.01	-5.70	10024.740	2.5	29544.370	2.5
512.1621	26.00	-1.02	34547.192	2.0	54066.821	2.0
512.1623	23.02	-.37	141507.700	3.5	161027.320	4.5
512.1718	28.01	-.45	113408.710	1.5	132927.970	1.5
512.1734	29.01	-1.14	118484.000	3.0	138003.200	2.0
512.1776	25.00	-3.45	45130.160	4.5	64649.200	3.5
512.1791	28.01	-3.76	79923.880	4.5	99442.860	4.5
512.1799	10.01	-3.23	302829.060	4.5	322348.010	3.5
512.1799	10.01	-2.25	302829.060	4.5	322348.010	4.5
512.1800	41.00	-.92	12905.203	0.0	32429.589	0.0
512.1892	10.00	-3.65	151038.452	1.0	170557.050	1.0
512.1969	26.00	-3.63	28604.610	2.0	48122.913	3.0
512.2080	24.00	-3.04	8307.570	4.0	27825.450	5.0
512.2086	6.01	-.53	168123.740	1.5	187641.600	2.5
512.2102	22.00	-1.91	18037.225	4.0	37555.021	3.0
512.2140	62.00	.06	3064.986	0.0	22588.076	0.0
512.2174	28.01	-3.98	79823.030	3.5	99340.550	3.5
512.2219	7.00	-3.50	96787.650	1.5	116305.000	.5
512.2219	7.00	-3.98	96787.650	1.5	116305.000	1.5
512.2230	76.00	-1.76	14760.326	0.0	34283.073	0.0
512.2272	6.01	-.38	168124.450	2.5	187641.600	3.5
512.2272	6.01	-1.68	168124.450	2.5	187641.600	2.5
512.2353	10.01	-3.67	302831.170	3.5	322348.010	3.5
512.2353	10.01	-2.03	302831.170	3.5	322348.010	4.5
512.2369	23.00	-3.25	14548.830	2.5	34065.610	2.5
512.2443	17.01	-1.45	158177.100	1.0	177693.600	0.0
512.2458	25.02	-4.60	94771.470	2.5	114287.910	2.5
512.2548	15.03	-1.11	320126.000	2.0	339642.100	1.0
512.2573	24.00	-1.78	45286.080	4.0	64802.080	5.0
512.2576	18.01	-4.13	182951.150	.5	202467.140	1.5
512.2611	18.01	-3.65	183985.940	1.5	203501.800	2.5
512.2760	23.00	-2.40	14514.750	1.5	34030.040	1.5
512.2768	27.00	-.61	29563.170	1.5	49078.430	1.5
512.2797	24.00	-1.21	27163.200	0.0	46678.350	1.0
512.2847	18.01	-1.89	192556.840	2.5	212071.800	3.5
512.2856	22.00	-3.56	20126.055	3.0	39640.980	3.0
512.2988	26.02	-2.42	105929.160	3.0	125443.580	4.0
512.2990	57.01	-1.80	2581.041	0.0	22100.892	0.0
512.3017	28.01	-4.20	117763.910	1.5	137278.220	1.5
512.3020	29.01	-4.98	129116.900	3.0	148631.200	3.0
512.3199	9.00	-1.94	118427.823	1.5	137941.440	2.5
512.3210	39.01	-1.37	7904.437	0.0	27423.449	0.0
512.3240	25.02	-.85	174243.330	3.5	193756.790	4.5
512.3251	24.01	-2.46	70107.830	4.5	89621.250	3.5
512.3252	26.00	-4.30	26623.726	2.0	46137.140	3.0
512.3265	26.00	-2.80	35611.608	3.0	55124.974	3.0
512.3282	15.03	.07	320126.000	2.0	339639.300	2.0
512.3393	27.00	-2.54	25269.250	3.5	44782.130	4.5
512.3395	25.01	-2.17	48333.060	5.0	67845.930	5.0
512.3434	7.00	-2.65	95475.280	.5	114988.000	.5
512.3434	7.00	-2.55	95475.280	.5	114988.000	1.5
512.3450	24.00	-3.18	8307.570	4.0	27820.230	3.0
512.3529	22.00	-2.21	22404.690	3.0	41917.050	4.0
512.3531	7.01	-3.53	170607.890	1.0	190120.240	1.0
512.3540	25.01	-4.14	62587.500	3.0	82099.820	4.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
512.3558	28.01	-4.02	115870.280	2.5	135382.530	1.5
512.3660	77.00	-1.86	12824.546	0.0	32341.844	0.0
512.3723	26.00	-2.81	8154.713	1.0	27666.334	1.0
512.3730	44.00	-1.84	11372.710	0.0	30889.742	0.0
512.3830	42.01	-.36	27262.242	0.0	46778.893	0.0
512.3844	25.02	-4.87	94697.850	3.5	114209.010	3.5
512.3853	22.00	-1.66	28596.293	1.0	48107.420	2.0
512.3853	10.00	-3.64	152970.733	0.0	172481.860	1.0
512.4046	26.01	-4.28	44915.070	3.5	64425.460	2.5
512.4059	7.00	-2.30	95493.660	1.5	115004.000	2.5
512.4077	22.00	-.99	12118.394	4.0	31628.668	5.0
512.4141	26.02	-1.00	179207.570	5.0	198717.600	4.0
512.4154	26.00	-3.23	33765.291	2.0	53275.270	2.0
512.4240	74.00	-1.67	14840.984	0.0	34356.073	0.0
512.4259	26.02	-.69	199906.030	6.0	219415.610	5.0
512.4280	15.03	.82	320126.000	2.0	339635.500	3.0
512.4314	22.00	-3.23	18145.400	2.0	37654.770	2.0
512.4380	25.00	-1.07	41230.300	3.5	60739.420	3.5
512.4414	26.02	-.68	179630.770	4.0	199139.760	5.0
512.4569	29.01	-4.77	128853.300	2.0	148361.700	1.0
512.4593	26.00	-3.06	26627.612	4.0	46135.920	5.0
512.4624	7.00	-3.01	96750.810	1.5	116259.000	.5
512.4624	7.00	-2.27	96750.810	1.5	116259.000	1.5
512.4624	7.00	-3.97	96750.810	1.5	116259.000	2.5
512.4635	28.01	.22	115956.710	2.5	135464.860	3.5
512.4729	27.00	-.87	33462.830	2.5	52970.620	2.5
512.4770	63.00	.04	15808.874	0.0	35321.945	0.0
512.4800	27.00	-.97	32654.500	2.5	52162.020	3.5
512.4819	25.01	-3.39	81993.850	4.0	101501.300	3.0
512.4824	27.00	-3.02	28470.510	1.5	47977.940	.5
512.5098	26.00	-1.10	34039.495	4.0	53545.882	3.0
512.5118	23.00	-3.02	19023.470	4.5	38529.780	4.5
512.5173	22.00	-1.05	28702.768	3.0	48208.870	3.0
512.5200	30.02	-.55	214878.000	3.0	234384.000	3.0
512.5201	22.00	-2.12	20209.444	2.0	39715.437	3.0
512.5228	28.00	-1.00	29668.918	3.0	49174.811	4.0
512.5231	26.01	-3.49	58631.650	4.5	78137.530	3.5
512.5386	23.02	-.65	141734.730	5.5	161240.020	5.5
512.5405	28.01	-4.97	98467.250	3.5	117972.470	3.5
512.5415	25.01	-3.26	81993.850	4.0	101499.030	4.0
512.5504	28.01	-3.58	115956.710	2.5	135461.550	2.5
512.5504	28.01	.12	113407.310	2.5	132912.150	2.5
512.5515	22.00	-1.93	27025.652	4.0	46530.450	4.0
512.5560	64.01	-.77	11372.710	0.0	30882.773	0.0
512.5599	10.01	-1.97	302843.530	3.5	322348.010	3.5
512.5599	10.01	-1.34	302843.530	3.5	322348.010	4.5
512.5601	14.00	-2.29	40991.884	1.0	60496.358	2.0
512.5604	26.02	-.29	179757.980	4.0	199262.440	3.0
512.5620	23.03	-1.52	237638.800	2.0	257143.200	2.0
512.5628	23.00	-3.40	14514.750	1.5	34019.120	1.5
512.5699	28.01	-4.32	95332.530	2.5	114836.630	3.5
512.5709	27.00	-.66	31699.690	4.5	51203.750	5.5
512.5717	26.02	-2.88	186791.780	2.0	206295.810	1.0
512.5725	28.02	-4.22	121412.200	2.0	140916.200	2.0
512.5752	10.01	-4.92	302844.110	2.5	322348.010	3.5
512.5754	8.01	-4.04	188888.380	.5	208392.270	1.5
512.5765	18.01	-.85	172829.580	1.5	192333.430	.5
512.5791	27.00	-2.72	33466.870	3.5	52970.620	2.5
512.5838	26.00	-3.03	33412.706	3.0	52916.278	2.0
512.5872	28.01	.37	113408.710	1.5	132912.150	2.5
512.5883	28.01	-2.55	116824.150	2.5	136327.550	1.5
512.5994	7.00	-3.38	96864.020	2.5	116367.000	1.5
512.5994	7.00	-2.20	96864.020	2.5	116367.000	2.5
512.5994	7.00	-2.50	96864.020	2.5	116367.000	3.5
512.6001	26.02	-3.03	179759.490	2.0	199262.440	3.0
512.6059	28.01	-3.23	116167.760	1.5	135670.490	.5
512.6137	26.00	-3.78	26105.908	6.0	45608.341	6.0
512.6157	16.01	-.55	131028.760	1.5	150531.120	1.5
512.6188	26.01	-6.56	25787.600	1.5	45289.840	1.5
512.6191	26.00	-.92	34328.733	3.0	53830.960	3.0
512.6198	27.00	-.48	29216.370	2.5	48718.570	2.5
512.6217	24.00	-1.38	27176.220	1.0	46678.350	1.0
512.6324	26.02	-1.26	179760.720	3.0	199262.440	3.0
512.6556	24.00	-.93	27176.220	1.0	46677.060	2.0
512.6561	23.00	-4.69	15724.220	3.5	35225.040	2.5
512.6806	27.00	-.69	31699.690	4.5	51199.580	3.5
512.6821	28.00	-1.00	29832.810	3.0	49332.643	4.0
512.6913	26.01	-4.10	65363.660	5.5	84863.140	5.5
512.6942	24.01	-2.95	47372.750	1.5	66872.120	.5
512.7088	22.00	-2.29	21588.496	4.0	41087.310	3.0
512.7144	10.01	-2.78	302839.280	2.5	322337.880	2.5
512.7260	44.00	-1.72	9517.587	0.0	29021.182	0.0
512.7276	10.01	-1.48	302839.280	2.5	322337.380	3.5
512.7362	26.00	-3.02	7376.762	4.0	26874.534	5.0
512.7363	23.01	-4.70	44159.430	2.0	63657.200	2.0
512.7370	22.00	-1.91	18192.577	6.0	37690.320	5.0
512.7387	26.02	-2.42	69836.830	3.0	89334.510	2.0
512.7555	7.00	-3.59	94793.460	1.5	114290.500	2.5
512.7631	26.02	-2.80	69837.760	2.0	89334.510	2.0
512.7652	28.01	.27	99442.860	4.5	118939.530	5.5
512.7660	41.00	-1.27	10082.190	0.0	29584.263	0.0
512.7676	29.01	-4.07	115639.020	2.0	135135.600	1.0
512.7683	26.00	-7.68	415.932	3.0	19912.486	2.0
512.7684	29.01	-1.08	118532.150	2.0	138028.700	1.0
512.7785	18.00	-3.42	105617.315	2.0	125113.480	2.0
512.7852	24.00	-2.11	45255.510	3.0	64751.420	4.0
512.7863	26.01	-2.74	44929.590	2.5	64425.460	2.5
512.7868	24.00	-4.97	25038.610	5.0	44534.460	4.0
512.7926	24.00	-2.88	45306.450	5.0	64802.080	5.0
512.7971	25.01	-3.95	81993.850	4.0	101489.310	5.0
512.8082	28.00	-1.94	29832.810	3.0	49327.845	2.0
512.8097	7.00	-2.43	96864.020	2.5	116359.000	2.5
512.8097	7.00	-2.20	96864.020	2.5	116359.000	3.5
512.8099	24.01	-4.55	44307.440	.5	63802.410	.5
512.8120	23.00	-3.78	17116.920	3.5	36611.810	2.5
512.8134	28.01	-4.93	116145.690	3.5	135640.530	4.5
512.8265	7.00	-4.37	95493.660	1.5	114988.000	.5
512.8265	7.00	-3.33	95493.660	1.5	114988.000	1.5
512.8265	7.00	-2.47	95493.660	1.5	114988.000	2.5
512.8285	10.00	-2.91	151038.452	1.0	170532.717	2.0
512.8528	23.00	-.08	18438.070	4.5	37931.410	5.5
512.8530	72.01	-1.62	17260.709	0.0	36759.474	0.0
512.8968	24.00	-4.10	35501.260	3.0	54992.930	2.0
512.9086	18.01	-2.17	190106.230	1.5	209597.450	1.5
512.9100	63.00	.01	13389.148	0.0	32885.746	0.0
512.9152	22.01	-1.39	15257.530	4.5	34748.500	4.5
512.9341	25.02	-.75	172682.640	3.5	192172.890	2.5
512.9370	28.00	-1.34	29668.918	3.0	49159.060	2.0
512.9373	25.00	-3.69	38669.600	3.5	58159.730	2.5
512.9418	23.02	-1.23	162335.880	3.5	181825.840	4.5
512.9520	59.01	-1.01	5162.081	0.0	24657.082	0.0
512.9573	24.00	-3.34	7810.820	1.0	27300.190	1.0
512.9581	20.02	-1.30	324660.470	3.0	344149.810	2.0
512.9617	26.00	-1.56	31805.059	3.0	51294.262	3.0
512.9621	7.00	-4.80	96750.810	1.5	116240.000	1.5
512.9621	7.00	-2.40	96750.810	1.5	116240.000	2.5
512.9623	10.01	-3.72	319111.700	3.5	338600.880	4.5
512.9631	10.01	-3.60	319111.710	4.5	338600.860	5.5
512.9781	26.01	-3.83	65696.110	4.5	85184.690	4.5
512.9894	7.00	-4.01	94770.850	.5	114259.000	1.5
512.9907	24.02	-4.75	138975.500	3.0	158463.600	3.0
512.9918	28.01	-1.31	99340.550	3.5	118828.610	2.5
512.9997	28.01	.27	115956.710	2.5	135444.470	3.5
513.0002	25.00	-.47	43595.500	2.5	63083.240	1.5
513.0047	24.00	-1.09	45348.730	6.0	64836.300	6.0
513.0060	63.00	.04	15808.874	0.0	35301.747	0.0
513.0110	74.00	-.63	23793.968	0.0	43286.727	0.0
513.0118	24.01	-4.70	45669.540	1.5	65156.840	2.5
513.0170	25.02	-3.96	124823.900	4.5	144311.000	5.5
513.0202	7.00	-3.22	96864.020	2.5	116351.000	1.5
513.0239	24.00	-2.61	45225.200	2.0	64712.040	3.0
513.0244	23.00	-4.15	20812.990	1.5	40299.810	.5
513.0276	25.02	-.69	176265.780	1.5	195752.480	2.5
513.0280	64.01	-.88	12663.231	0.0	32155.344	0.0
513.0310	24.01	-4.23	67868.050	2.5	87354.620	1.5
513.0359	28.00	-1.23	30979.789	4.0	50466.172	4.0
513.0400	21.00	-1.15	18000.250	2.5	37486.480	1.5
513.0434	28.01	-3.39	101754.800	2.5	121240.900	3.5
513.0452	24.00	-.82	27703.840	4.0	47189.870	4.0
513.0455	10.01	-1.10	301948.000	1.5	321434.020	1.5
513.0565	29.01	-2.97	118163.500	2.0	137649.100	2.0
513.0600	60.01	-.05	10404.820	0.0	29895.718	0.0
513.0670	8.01	-4.40	256125.800	2.5	275611.000	1.5
513.0676	7.01	-1.74	203258.980	2.0	222744.160	1.0
513.0679	28.01	-1.84	116167.760	1.5	135652.930	1.5
513.0710	23.02	-.61	141196.430	2.5	160681.480	3.5
513.0760	45.00	-1.67	14276.381	0.0	33766.671	0.0
513.0776	23.03	.62	236766.900	3.0	256251.700	4.0
513.0893	26.00	-2.91	34782.406	5.0	54266.760	5.0
513.0902	28.01	-.45	116261.810	.5	135746.130	1.5
513.0945	28.01	.30	99442.860	4.5	118927.020	4.5
513.1003	27.00	-2.17	33150.680	1.5	52634.620	.5
513.1063	28.01	-4.66	116145.690	3.5	135629.400	3.5
513.1076	25.02	-2.22	176464.780	3.5	195948.440	3.5
513.1094	18.01	-2.14	188766.150	2.5	208249.740	1.5
513.1266	26.01	-3.02	60402.380	2.5	79885.320	2.5
513.1276	22.01	-3.16	15265.600	3.5	34748.500	4.5
513.1287	7.01	-.81	210266.040	2.0	229748.900	3.0
513.1308	27.00	-1.64	32781.710	2.5	52264.490	1.5
513.1324	28.01	-4.32	116145.690	3.5	135628.410	4.5
513.1453	25.02	-2.43	176270.250	2.5	195752.480	2.5
513.1463	26.00	-4.54	26351.049	5.0	45833.240	4.0
513.1473	26.00	-2.65	17927.378	1.0	37409.530	1.0
513.1482	24.00	-1.87	45354.180	5.0	64836.300	6.0
513.1508	6.00	-3.96	69689.480	1.0	89171.500	0.0
513.1693	28.01	-3.60	110021.920	4.5	129503.240	4.5
513.1722	23.00	-3.05	14548.830	2.5	34030.040	1.5
513.1766	28.00	-1.11	29832.810	3.0	49313.851	3.0
513.1872	18.01	-2.46	199679.760	2.5	219160.400	2.5
513.1898	7.00	-3.14	94793.460	1.5	114274.000	2.5
513.1903	6.00	-4.53	69689.480	1.0	89170.000	1.0
513.1951	28.01	-.45	99442.860	4.5	118923.200	3.5
513.1993	26.02	-.26	179178.620	3.0	198658.800	3.0
513.2087	22.00	-2.81	15220.390	5.0	34700.212	5.0
513.2148	18.01	-.93	185624.730	3.5	205104.320	4.5
513.2167	23.01	-2.68	20522.140	1.0	40001.660	2.0
513.2391	24.00	-3.94	33113.270	4.0	52591.940	5.0
513.2449	18.01	-1.57	199525.150	1.5	219003.600	2.5
513.2480	24.00	-1.46	21810.840	1.0	41289.170	1.0
513.2493	22.00	-3.74	25102.880	2.0	44581.160	2.0
513.2673	26.01	-4.14	22637.190	4.5	42114.790	4.5
513.2785	22.00	-1.60	18145.400	2.0	37622.573	3.0
513.2855	28.01	-4.57	116145.690	3.5	135622.600	3.5
513.2921	22.00	-3.25	20209.444	2.0	39686.100	2.0
513.2923	18.01	-2.51	199525.150	1.5	219001.800	1.5
513.2926	22.00	-1.99	18141.229	5.0	37617.868	4.0
513.2947	6.01	-.23	166967.130	.5	186443.690	1.5
513.3113	29.01	-3.56	116388.000	2.0	135863.930	1.0
513.3257	26.00	-4.24	34636.820	2.0	54112.203	2.0
513.3282	6.01	-.20	166990.730	1.5	186466.020	2.5
513.3290	6.00	-3.89	69689.480	1.0	89164.740	1.0
513.3340	41.00	-2.16	5242.739	0.0	24723.233	0.0
513.3390	23.02	-.21	141405.100	5.5	160879.980	4.5
513.3400	40.00	-1.78	4113.534	0.0	23593.800	0.0
513.3432	7.00	-3.92	95475.280	.5	114950.000	.5
513.3432	7.00	-3.60	95475.280	.5	114950.000	1.5
513.3466	27.00	.44	31699.690	4.5	51174.280	5.5
513.3520	63.00	.05	12824.546	0.0	32304.357	0.0
513.3614	22.01	-4.04	20951.770	2.5	40425.800	1.5
513.3666	26.00	-.05	33695.378	5.0	53169.210	6.0
513.3685	14.02	-4.91	230301.220	3.0	249774.980	4.0
513.3689	22.00	-3.62	25107.417	2.0	44581.160	2.0
513.3759	14.02	-3.11	230301.220	3.0	249774.700	3.0
513.3801	14.02	-3.37	230301.660	4.0	249774.980	4.0
513.3817	14.02	-2.06	230301.220	3.0	249774.480	2.0
513.3875	14.02	-2.19	230301.660	4.0	249774.700	3.0
513.3885	28.02	-4.09	121412.200	2.0	140885.200	1.0
513.3885	28.01	-2.46	101754.800	2.5	121227.800	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
513.3890	44.00	-1.12	13631.121	0.0	33109.528	0.0
513.3893	14.02	-3.47	230302.010	4.0	249774.980	4.0
513.3959	6.00	-4.25	69689.480	1.0	89162.200	2.0
513.3967	10.01	-.93	301948.000	1.5	321420.690	2.5
513.3967	14.02	-2.29	230302.010	4.0	249774.700	3.0
513.3970	7.01	-4.37	187437.560	1.0	206910.240	0.0
513.3983	14.02	-1.82	230302.350	5.0	249774.980	4.0
513.4041	10.01	-1.88	301948.000	1.5	321420.410	1.5
513.4046	28.01	-4.99	116145.690	3.5	135618.080	2.5
513.4050	71.00	-.72	17341.367	0.0	36819.167	0.0
513.4078	25.02	-4.59	115774.000	3.5	135246.270	2.5
513.4181	7.00	-2.52	95532.120	2.5	115004.000	2.5
513.4181	7.00	-2.63	95532.120	2.5	115004.000	3.5
513.4188	23.00	-4.40	9824.580	2.5	29296.430	2.5
513.4286	28.01	-.09	99442.860	4.5	118914.340	4.5
513.4320	7.00	-4.64	96787.650	1.5	116259.000	.5
513.4320	7.00	-4.21	96787.650	1.5	116259.000	1.5
513.4320	7.00	-3.73	96787.650	1.5	116259.000	2.5
513.4331	28.01	-3.26	99844.130	3.5	119315.440	2.5
513.4368	26.01	-4.62	58666.360	3.5	78137.530	3.5
513.4399	29.01	-1.39	118532.150	2.0	138003.200	2.0
513.4515	28.01	-3.31	100845.410	.5	120316.020	.5
513.4558	27.00	-.86	31699.690	4.5	51170.140	4.5
513.4600	23.00	-3.61	14548.830	2.5	34019.120	1.5
513.4623	29.01	-3.15	115665.400	1.0	135135.600	1.0
513.4632	26.00	-3.86	32133.977	2.0	51604.146	3.0
513.4702	18.01	-3.99	155351.030	1.5	174820.930	.5
513.4703	29.01	-4.98	131312.700	3.0	150782.600	2.0
513.4750	41.00	-2.09	80.658	0.0	19555.803	0.0
513.4758	10.01	-1.93	327774.480	4.5	347244.170	4.5
513.4768	10.01	-.20	327774.480	4.5	347244.130	5.5
513.4779	23.00	-4.29	20830.200	.5	40299.810	.5
513.4850	18.01	-4.93	182951.150	.5	202420.490	.5
513.4900	20.02	-3.04	363118.750	3.0	382587.900	4.0
513.4924	10.01	-.29	327775.110	3.5	347244.170	4.5
513.4958	24.01	-4.43	65257.030	3.5	84725.960	3.5
513.5014	26.02	-2.14	186268.790	2.0	205737.510	2.0
513.5049	22.00	-1.25	28638.832	2.0	48107.420	2.0
513.5080	25.00	-4.57	30419.610	2.5	49888.080	3.5
513.5090	71.00	-1.31	1935.780	0.0	21409.635	0.0
513.5130	59.01	-.89	7581.807	0.0	27055.511	0.0
513.5200	39.00	.08	18389.915	0.0	37863.353	0.0
513.5362	24.02	-4.57	138975.500	3.0	158442.900	4.0
513.5420	22.00	-4.04	22404.690	3.0	41871.870	2.0
513.5444	25.00	-4.96	38669.600	3.5	58136.690	3.5
513.5536	27.00	-1.75	33449.180	.5	52915.920	.5
513.5700	24.00	-4.83	24833.860	3.0	44299.980	2.0
513.5721	25.02	-4.38	115780.230	2.5	135246.270	2.5
513.5853	7.00	-3.22	94793.460	1.5	114259.000	1.5
513.5905	24.00	-3.16	45286.080	4.0	64751.420	4.0
513.5945	24.00	-1.13	27223.050	2.0	46688.240	3.0
513.5971	26.02	-4.13	181828.660	2.0	201293.750	2.0
513.5990	70.01	-.92	32908.268	0.0	52378.711	0.0
513.6022	25.02	-1.16	172547.850	2.5	192012.750	1.5
513.6040	64.00	-.72	7017.204	0.0	26487.457	0.0
513.6056	23.00	-8.00	14910.040	3.5	34374.810	3.5
513.6088	26.00	-1.12	33765.291	2.0	53229.940	1.0
513.6106	26.02	-1.15	179194.220	4.0	198658.800	3.0
513.6114	26.02	-.28	179748.170	5.0	199212.720	4.0
513.6140	28.01	-2.03	116824.150	2.5	136288.600	2.5
513.6206	25.02	-.99	172451.230	1.5	191915.430	.5
513.6234	9.00	-3.82	116987.394	3.5	136451.490	2.5
513.6330	26.02	-3.53	181830.020	3.0	201293.750	2.0
513.6336	26.01	-4.06	50142.930	2.5	69606.640	3.5
513.6370	26.02	-3.15	186268.790	2.0	205732.370	3.0
513.6394	29.01	-4.13	116371.410	4.0	135834.900	4.0
513.6470	73.00	-2.75	5968.656	0.0	25437.279	0.0
513.6497	20.02	-2.17	328588.760	3.0	348051.860	4.0
513.6550	44.00	-.91	7985.094	0.0	27453.414	0.0
513.6557	28.01	-4.75	116167.760	1.5	135630.630	2.5
513.6631	26.01	-4.83	50187.950	3.5	69650.540	2.5
513.6640	22.00	-1.35	28596.293	1.0	48058.850	1.0
513.6642	26.00	-4.89	31686.342	2.0	51148.892	2.0
513.6792	26.01	-4.64	22939.350	2.5	42401.330	1.5
513.6826	28.01	.60	113407.310	2.5	132869.160	3.5
513.6929	28.01	-2.26	116191.470	2.5	135652.930	1.5
513.6980	23.00	-3.01	14514.750	1.5	33976.020	1.5
513.7064	24.01	-1.78	55023.300	2.5	74484.250	2.5
513.7070	28.00	-4.60	13521.352	2.0	32982.280	1.0
513.7151	10.01	-1.71	301948.000	1.5	321408.620	2.5
513.7257	6.01	-.93	166967.130	.5	186427.350	.5
513.7380	26.00	-.42	33695.378	5.0	53155.130	4.0
513.7410	7.00	-3.97	94830.860	2.5	114290.500	2.5
513.7489	6.00	-3.67	69710.660	2.0	89170.000	1.0
513.7589	23.00	-1.74	15078.250	.5	34537.210	1.5
513.7727	20.02	.13	340748.720	2.0	360207.160	2.0
513.7859	28.01	-2.22	92325.850	3.5	111783.790	3.5
513.7899	8.01	-3.70	188888.380	.5	208346.170	.5
513.7925	24.00	-2.02	27597.220	3.0	47054.910	4.0
513.7949	23.03	-2.18	264482.800	2.0	283940.400	2.0
513.8231	24.00	-3.51	45255.510	3.0	64712.040	3.0
513.8273	22.00	-1.76	18287.560	4.0	37743.933	3.0
513.8281	7.00	-3.22	95493.660	1.5	114950.000	.5
513.8281	7.00	-4.10	95493.660	1.5	114950.000	1.5
513.8400	74.00	-.05	28068.817	0.0	47530.128	0.0
513.8402	7.00	-3.77	95532.120	2.5	114988.000	1.5
513.8402	7.00	-3.43	95532.120	2.5	114988.000	2.5
513.8402	7.00	-2.61	95532.120	2.5	114988.000	3.5
513.8416	28.01	-4.71	116167.760	1.5	135623.590	1.5
513.8424	23.00	-.23	18302.270	3.5	37758.070	4.5
513.8556	24.00	-2.72	27223.050	2.0	46678.350	1.0
513.8561	25.00	-4.87	45130.160	4.5	64585.440	4.5
513.8704	26.02	-1.74	179757.980	4.0	199212.720	4.0
513.8712	24.00	-3.21	7927.470	2.0	27382.180	2.0
513.8741	23.00	-4.96	31200.120	1.5	50654.720	2.5
513.8786	27.00	-4.60	35450.560	3.5	54904.990	2.5
513.8809	18.01	-3.11	185624.730	3.5	205079.070	2.5
513.8876	24.01	-4.72	67859.910	.5	87314.000	.5
513.8878	6.00	-4.16	69710.660	2.0	89164.740	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
513.8896	7.01	-2.80	170666.230	0.0	190120.240	1.0
513.8897	24.00	-1.33	27223.050	2.0	46677.060	2.0
513.8934	28.01	-.80	101740.270	3.5	121194.140	2.5
513.9029	18.01	-2.05	183090.810	1.5	202544.320	2.5
513.9071	24.00	-2.05	45348.730	6.0	64802.080	5.0
513.9174	6.01	-.72	166990.730	1.5	186443.690	1.5
513.9241	22.00	-2.07	20209.444	2.0	39662.150	1.0
513.9255	28.00	-.96	29500.690	1.0	48953.344	1.0
513.9258	26.00	-.99	24180.848	3.0	43633.491	2.0
513.9335	7.00	-2.94	96787.650	1.5	116240.000	1.5
513.9335	7.00	-4.02	96787.650	1.5	116240.000	2.5
513.9414	28.01	-.53	101740.270	3.5	121192.320	3.5
513.9428	26.02	-1.48	179760.720	3.0	199212.720	4.0
513.9436	23.00	-5.30	14514.750	1.5	33966.720	.5
513.9451	28.01	-4.28	109846.000	3.5	129297.910	3.5
513.9470	26.00	-.73	23711.443	4.0	43163.282	4.0
513.9525	23.00	-3.24	19078.150	3.5	38529.780	4.5
513.9549	6.00	-3.32	69710.660	2.0	89162.200	2.0
513.9610	23.02	-.18	141714.500	2.5	161165.810	2.5
513.9623	24.00	-.49	27597.220	3.0	47048.480	3.0
513.9890	24.00	-3.84	27597.220	3.0	47047.470	2.0
513.9922	28.01	.68	99442.860	4.5	118892.990	5.5
514.0173	25.02	-.82	174048.890	2.5	193498.070	3.5
514.0213	26.01	-4.48	50157.610	4.5	69606.640	3.5
514.0342	17.00	-2.18	74865.667	.5	94314.206	1.5
514.0350	28.01	-3.22	109846.000	3.5	129294.510	2.5
514.0395	7.00	-2.77	95493.660	1.5	114942.000	2.5
514.0406	17.01	-2.68	149798.300	2.0	169246.600	1.0
514.0479	28.01	-4.15	117763.910	1.5	137211.930	.5
514.0480	7.01	-.70	210301.680	3.0	229749.700	4.0
514.0490	7.00	-3.47	96864.020	2.5	116312.000	1.5
514.0511	24.00	-.93	45354.180	5.0	64802.080	5.0
514.0538	27.02	-4.90	83938.900	3.5	103386.700	4.5
514.0580	41.00	-1.02	12582.573	0.0	32035.631	0.0
514.0581	26.00	-3.34	36975.640	3.0	56423.276	4.0
514.0629	9.00	-3.97	116987.394	3.5	136434.850	2.5
514.0667	10.01	-4.09	302890.570	2.5	322337.880	2.5
514.0691	7.01	-3.67	210301.680	3.0	229748.900	3.0
514.0770	90.00	-1.67	6291.287	0.0	25743.626	0.0
514.0800	10.01	-2.79	302890.570	2.5	322337.380	3.5
514.0840	64.01	-.76	12582.573	0.0	32034.647	0.0
514.0881	23.02	-.12	140933.140	3.5	160379.640	2.5
514.1011	27.00	-4.93	35450.560	3.5	54896.570	3.5
514.1014	11.05	-1.01	951389.000	2.0	970835.000	1.0
514.1043	25.02	-1.70	121117.140	3.5	140563.030	3.5
514.1201	27.00	-4.80	21780.470	5.5	41225.760	4.5
514.1214	26.02	-3.73	186882.980	3.0	206328.220	3.0
514.1268	6.00	-3.63	69710.660	2.0	89155.700	3.0
514.1286	24.00	-4.51	45306.450	5.0	64751.420	4.0
514.1295	22.00	-4.37	27498.975	3.0	46943.910	2.0
514.1395	22.00	-1.04	27750.124	5.0	47194.680	4.0
514.1429	15.01	-1.93	107923.570	2.0	127368.000	2.0
514.1447	10.01	-1.43	302903.650	2.5	322348.010	3.5
514.1500	64.00	-.68	7420.492	0.0	26870.069	0.0
514.1506	7.00	-3.00	94830.860	2.5	114275.000	3.5
514.1553	28.01	-.60	115956.710	2.5	135400.670	3.5
514.1566	26.00	-3.45	29798.960	4.0	49242.872	3.0
514.1620	73.00	-2.24	5968.656	0.0	25417.779	0.0
514.1674	24.01	-4.44	67870.500	1.5	87314.000	.5
514.1680	25.02	-1.57	172569.270	1.5	192012.750	1.5
514.1688	24.00	-1.85	45358.630	4.0	64802.080	5.0
514.1742	26.00	-2.14	19552.474	1.0	38995.717	1.0
514.1754	27.01	-7.40	27902.500	4.0	47345.700	5.0
514.1769	7.00	-2.52	94830.860	2.5	114274.000	2.5
514.1790	18.01	-1.30	151087.250	2.5	170530.310	3.5
514.2095	26.02	-2.85	186882.980	3.0	206324.890	2.0
514.2141	9.00	-2.52	116987.394	3.5	136429.130	3.5
514.2195	26.02	-2.43	186791.780	2.0	206233.310	2.0
514.2227	23.01	-6.66	17910.980	4.0	37352.390	5.0
514.2259	24.00	-1.71	21847.880	2.0	41289.170	1.0
514.2341	7.00	-3.03	96864.020	2.5	116305.000	1.5
514.2391	18.01	-1.19	189040.870	1.5	208481.660	.5
514.2407	23.02	-3.42	162385.110	3.5	181825.840	4.5
514.2431	25.00	-3.69	38669.600	3.5	58110.240	4.5
514.2468	24.01	-2.41	50667.330	3.5	70107.830	4.5
514.2468	27.00	-.70	32654.500	2.5	52095.000	3.5
514.2508	26.00	-.98	34692.130	1.0	54132.480	1.0
514.2516	25.02	-3.32	121117.140	3.5	140557.460	4.5
514.2524	26.00	-.57	34328.733	3.0	53769.020	4.0
514.2529	28.01	.73	101740.270	3.5	121180.540	4.5
514.2547	12.02	-.86	562634.200	1.0	582074.400	2.0
514.2547	12.02	-.86	562634.200	1.0	582074.400	2.0
514.2653	26.01	-4.11	64286.440	3.5	83726.240	3.5
514.2680	64.00	-.68	7339.834	0.0	26784.948	0.0
514.2760	44.00	-1.34	8469.040	0.0	27913.852	0.0
514.2767	20.02	-1.66	328588.760	3.0	348028.130	3.0
514.2775	28.00	-.81	29888.505	2.0	49327.845	2.0
514.2793	18.01	-3.46	186815.960	3.5	206255.230	2.5
514.2807	28.01	-1.22	113407.310	2.5	132846.530	3.5
514.2920	25.00	-.51	43644.450	1.5	63083.240	1.5
514.2926	28.00	-2.18	29832.810	3.0	49271.578	3.0
514.2932	26.00	-2.88	7728.058	3.0	27166.804	4.0
514.2933	7.00	-4.08	94793.460	1.5	114232.200	1.5
514.2997	28.01	-3.33	109846.000	3.5	129284.500	2.5
514.3053	28.01	.21	101740.270	3.5	121178.560	3.5
514.3079	25.00	-2.26	41230.300	3.5	60668.490	4.5
514.3089	7.00	-3.97	94770.850	.5	114209.000	.5
514.3156	23.03	-3.18	264902.200	3.0	284340.100	4.0
514.3251	25.02	-4.63	94771.470	2.5	114209.010	3.5
514.3280	90.01	-2.49	1774.465	0.0	21217.311	0.0
514.3328	25.02	-4.88	94850.660	1.5	114287.910	2.5
514.3330	60.01	-2.08	1451.835	0.0	20894.492	0.0
514.3399	26.01	-3.95	67273.860	1.5	86710.840	1.5
514.3494	6.01	-.23	166990.730	1.5	186427.350	.5
514.3526	17.01	-1.22	126032.000	2.0	145468.500	1.0
514.3592	23.00	-3.81	20789.130	2.5	40225.380	1.5
514.3690	73.00	-1.85	9194.957	0.0	28636.253	0.0
514.3726	26.00	-3.57	17726.985	2.0	37162.729	3.0
514.3783	24.01	-4.33	54678.950	4.5	74114.480	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
514.3889	28.00	-1.56	31031.042	3.0	50466.172	4.0
514.3934	28.01	-4.21	114836.630	3.5	134271.590	4.5
514.4040	28.01	.57	116145.690	3.5	135580.250	4.5
514.4120	29.00	-.66	43474.403	0.0	62914.074	0.0
514.4135	25.01	-4.72	72648.800	4.0	92083.000	3.0
514.4169	26.02	-1.34	186303.440	3.0	205737.510	2.0
514.4244	28.01	-.61	116312.340	1.5	135746.130	1.5
514.4283	28.00	-2.17	30912.838	1.0	50346.477	2.0
514.4302	28.01	-2.79	116893.980	2.5	136327.550	1.5
514.4373	13.01	-.45	123415.900	2.0	142849.200	3.0
514.4394	27.01	-4.42	65153.900	4.0	84587.120	4.0
514.4485	26.00	-4.39	31937.308	1.0	51370.184	2.0
514.4519	22.00	-1.59	28896.062	5.0	48328.810	4.0
514.4524	24.00	-3.68	24940.610	2.0	44373.340	3.0
514.4537	28.01	-2.54	102742.740	1.5	122175.420	2.5
514.4598	23.02	-.20	141144.170	4.5	160576.620	3.5
514.4718	6.00	-3.21	69710.660	2.0	89142.660	2.0
514.4789	21.00	-4.70	25584.640	2.5	45016.370	3.5
514.4916	28.01	-.79	99442.860	4.5	118874.110	3.5
514.4930	13.01	-1.51	123418.000	3.0	142849.200	3.0
514.4930	13.01	-.54	123418.000	3.0	142849.200	4.0
514.4930	13.01	-.76	123418.000	3.0	142849.200	4.0
514.4948	28.01	-4.65	116191.470	2.5	135622.600	3.5
514.5098	26.00	-3.35	17726.985	2.0	37157.546	2.0
514.5100	92.01	-2.18	6210.629	0.0	25646.597	0.0
514.5136	18.01	-2.63	183914.560	.5	203344.980	1.5
514.5165	6.01	.17	167035.710	2.5	186466.020	2.5
514.5194	29.01	-4.98	131312.700	3.0	150742.900	3.0
514.5308	18.01	-.90	138243.550	1.5	157673.320	2.5
514.5351	18.01	-2.14	186815.960	3.5	206245.570	3.5
514.5380	42.00	-.50	20487.010	0.0	39921.921	0.0
514.5420	57.00	-.44	2984.328	0.0	22419.087	0.0
514.5464	22.00	-1.24	11776.806	4.0	31205.985	3.0
514.5525	27.00	-.45	32733.070	3.5	52162.020	3.5
514.5530	26.02	-1.70	186303.440	3.0	205732.370	3.0
514.5540	76.00	-1.26	18793.202	0.0	38227.508	0.0
514.5670	13.01	-3.31	123420.800	4.0	142849.200	3.0
514.5670	13.01	-1.75	123420.800	4.0	142849.200	4.0
514.5670	13.01	-1.89	123420.800	4.0	142849.200	4.0
514.5670	13.01	-.22	123420.800	4.0	142849.200	5.0
514.5724	26.00	-2.22	29798.960	4.0	49227.160	3.0
514.5739	7.00	-3.72	94830.860	2.5	114259.000	1.5
514.5745	24.00	-2.97	25106.340	3.0	44534.460	4.0
514.5770	74.00	-.88	20890.298	0.0	40323.736	0.0
514.5880	23.00	-4.72	15664.750	1.5	35092.360	1.5
514.5920	22.01	-1.45	43740.770	3.5	63168.230	2.5
514.5991	23.00	-3.40	14548.830	2.5	33976.020	1.5
514.6041	8.00	-2.57	88630.599	1.0	108057.600	1.0
514.6094	30.02	-.96	218909.400	1.0	238336.200	2.0
514.6116	26.01	-4.18	22810.330	3.5	42237.050	3.5
514.6145	28.01	-4.69	116191.470	2.5	135618.080	2.5
514.6158	27.00	-4.01	26450.020	2.5	45876.580	2.5
514.6161	27.00	-3.86	14036.280	1.5	33462.830	2.5
514.6189	8.00	-2.34	88631.158	2.0	108057.600	1.0
514.6231	8.00	-3.04	88631.315	0.0	108057.600	1.0
514.6285	26.00	-2.72	35257.309	4.0	54683.390	4.0
514.6354	28.01	-3.17	115956.710	2.5	135382.530	1.5
514.6375	23.00	-4.99	31228.980	2.5	50654.720	2.5
514.6381	28.01	-2.50	109846.000	3.5	129271.720	3.5
514.6436	23.00	-5.20	14949.300	4.5	34374.810	3.5
514.6455	28.01	-4.05	114836.630	3.5	134262.070	3.5
514.6480	28.00	-.09	29888.505	2.0	49313.851	3.0
514.6492	26.02	-2.04	186268.790	2.0	205694.090	1.0
514.6518	27.01	-5.59	28111.900	2.0	47537.100	2.0
514.6518	23.03	.41	236322.400	2.0	255747.600	3.0
514.6653	27.00	-1.46	33439.720	4.5	52864.410	4.5
514.6749	27.00	-.30	28777.270	3.5	48201.600	3.5
514.6823	27.00	-2.44	29294.520	3.5	48718.570	2.5
514.6840	9.00	-3.52	117164.006	2.5	136587.990	1.5
514.6971	22.00	-1.14	27614.667	4.0	47038.160	3.0
514.6998	27.00	-1.44	32733.070	3.5	52156.460	4.5
514.7030	70.01	-.86	38151.007	0.0	57579.687	0.0
514.7160	26.00	-4.67	34843.980	6.0	54266.760	5.0
514.7240	44.00	-1.23	7985.094	0.0	27412.982	0.0
514.7327	7.00	-2.33	94770.850	.5	114193.000	1.5
514.7329	24.01	-3.14	69903.460	3.5	89325.600	4.5
514.7390	42.00	-.87	18389.915	0.0	37817.236	0.0
514.7403	24.00	-2.85	27703.840	4.0	47125.700	3.0
514.7456	23.00	-2.89	17116.920	3.5	36538.580	4.5
514.7479	22.00	-1.67	0.000	2.0	19421.576	3.0
514.7540	41.00	-.70	15163.614	0.0	34590.369	0.0
514.7550	58.01	-.52	10243.505	0.0	29670.223	0.0
514.7620	73.00	-1.73	11130.738	0.0	30557.191	0.0
514.7674	28.01	-4.38	96535.870	3.5	115956.710	2.5
514.7753	22.01	-4.46	45673.750	4.5	65094.290	4.5
514.7764	22.00	-1.42	28788.372	4.0	48208.870	3.0
514.7779	9.00	-3.42	117164.006	2.5	136584.450	2.5
514.7867	28.01	-4.58	114874.880	2.5	134294.990	2.5
514.7892	22.00	-1.62	28638.832	2.0	48058.850	1.0
514.7899	24.00	-4.23	35572.940	2.0	54992.930	2.0
514.8022	26.00	-1.04	34547.192	2.0	53966.720	2.0
514.8050	28.01	-4.28	114836.630	3.5	134256.050	2.5
514.8056	23.03	-.71	265879.200	1.0	285298.600	1.0
514.8056	23.03	-.40	265879.200	2.0	285298.600	1.0
514.8191	26.01	-5.18	25787.600	1.5	45206.490	.5
514.8211	26.00	-.65	34328.733	3.0	53747.547	3.0
514.8268	17.01	-2.86	139350.000	1.0	158768.600	2.0
514.8382	6.00	-3.19	69744.030	3.0	89162.200	2.0
514.8440	23.00	-.82	18513.460	4.5	37931.410	5.5
514.8459	7.00	-3.57	95532.120	2.5	114950.000	1.5
514.8604	24.01	-2.17	69638.770	1.5	89056.100	2.5
514.8618	23.01	-4.21	30306.400	3.0	49723.680	4.0
514.8655	7.00	-2.31	94830.860	2.5	114248.000	3.5
514.8662	28.00	-1.72	29668.918	3.0	49086.030	4.0
514.8681	24.01	-3.38	69506.160	3.5	88923.200	2.5
514.8702	27.00	-4.88	33439.720	4.5	52856.680	3.5
514.8708	25.02	-.84	172755.950	3.5	192172.890	2.5
514.8721	23.00	-.42	18198.080	2.5	37614.970	3.5
514.8780	73.00	-1.46	17260.709	0.0	36682.786	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
514.8839	11.00	-2.06	16956.172	.5	36372.620	.5
514.8992	8.01	-3.23	189068.370	1.5	208484.240	2.5
514.9060	22.00	-4.40	27614.667	4.0	47030.280	3.0
514.9066	26.01	-4.67	67000.630	2.5	86416.220	3.5
514.9079	7.00	-4.05	94793.460	1.5	114209.000	.5
514.9090	27.00	-.72	32654.500	2.5	52070.000	2.5
514.9156	25.00	-1.98	25281.040	2.5	44696.290	2.5
514.9296	7.00	-2.68	95475.280	.5	114890.000	1.5
514.9327	22.00	-4.24	8492.421	1.0	27907.026	2.0
514.9368	26.02	-.14	179725.310	6.0	199139.760	5.0
514.9380	64.01	-1.48	12985.861	0.0	32405.675	0.0
514.9440	24.00	-2.44	31987.060	4.0	51401.240	5.0
514.9460	15.00	-1.97	55939.300	.5	75353.400	1.5
514.9469	24.00	-2.54	25177.390	4.0	44591.460	5.0
514.9487	26.00	-3.08	31805.059	3.0	51219.059	3.0
514.9498	24.00	-1.74	21810.840	1.0	41224.800	0.0
514.9702	7.00	-3.46	96750.810	1.5	116164.000	.5
514.9702	7.00	-2.79	96750.810	1.5	116164.000	1.5
514.9702	7.00	-2.29	96750.810	1.5	116164.000	2.5
514.9724	28.01	.57	116145.690	3.5	135558.800	4.5
514.9740	76.00	-.92	15324.929	0.0	34743.385	0.0
514.9779	27.00	-2.87	14036.280	1.5	33449.180	.5
514.9795	24.00	-3.45	24833.860	3.0	44246.700	4.0
514.9832	25.03	-4.51	152986.000	2.0	172398.700	2.0
514.9832	10.01	-2.82	302935.310	4.5	322348.010	4.5
514.9837	10.01	-4.00	302935.330	5.5	322348.010	4.5
514.9840	64.01	-1.17	12824.546	0.0	32242.625	0.0
514.9888	28.01	-4.82	115565.980	2.5	134978.470	2.5
514.9915	23.00	-4.89	20812.990	1.5	40225.380	1.5
515.0039	24.00	-.83	27816.880	5.0	47228.800	5.0
515.0060	20.02	.14	371059.950	3.0	390471.790	4.0
515.0079	10.00	-2.10	150315.861	2.0	169727.630	1.0
515.0105	6.00	-3.71	69744.030	3.0	89155.700	3.0
515.0127	26.00	-4.69	24772.019	1.0	44183.607	2.0
515.0187	26.00	-2.80	28819.966	5.0	48231.330	5.0
515.0262	23.02	-1.48	141270.400	3.5	160681.480	3.5
515.0278	25.01	-3.88	48333.060	5.0	67744.080	6.0
515.0381	22.00	-4.38	26657.409	4.0	46068.040	4.0
515.0395	25.00	-1.93	43672.660	.5	63083.240	1.5
515.0440	24.00	-3.71	24897.550	4.0	44307.960	5.0
515.0450	27.00	-3.92	35450.560	3.5	54860.930	4.5
515.0557	25.01	-3.31	48435.960	6.0	67845.930	5.0
515.0580	7.00	-2.40	95532.120	2.5	114942.000	2.5
515.0640	41.00	-1.48	11130.738	0.0	30545.801	0.0
515.0649	22.00	-3.00	18145.400	2.0	37555.021	3.0
515.0655	28.02	-3.84	97841.400	2.0	117251.000	3.0
515.0842	26.00	-2.90	7985.783	2.0	27394.676	3.0
515.0850	73.00	-1.70	15324.929	0.0	34739.200	0.0
515.0891	7.00	-3.23	94881.790	3.5	114290.500	2.5
515.0899	28.01	.02	116261.810	.5	135670.490	.5
515.0926	26.01	-4.77	23031.300	1.5	42439.880	.5
515.0926	28.01	-4.32	99154.810	4.5	118563.390	3.5
515.0933	25.00	-1.09	25287.740	3.5	44696.290	2.5
515.0965	13.02	.14	189876.100	2.5	209284.530	3.5
515.1029	7.00	-3.28	96750.810	1.5	116159.000	2.5
515.1050	13.02	.25	189876.420	3.5	209284.530	4.5
515.1050	13.02	-1.29	189876.420	3.5	209284.530	3.5
515.1070	44.00	-1.49	8952.985	0.0	28366.427	0.0
515.1085	6.01	-.20	167035.710	2.5	186443.690	1.5
515.1223	28.01	-4.33	100389.520	2.5	119796.980	2.5
515.1228	29.01	-4.96	116326.160	3.0	135733.600	3.0
515.1394	18.00	-2.36	104102.144	1.0	123508.960	0.0
515.1422	28.01	-1.07	101740.270	3.5	121146.980	2.5
515.1507	23.00	-2.39	17054.870	2.5	36461.260	2.5
515.1507	23.00	-2.19	17054.870	2.5	36461.260	3.5
515.1517	25.01	-4.26	62587.500	3.0	81993.850	4.0
515.1620	90.01	-1.52	12098.628	0.0	31509.998	0.0
515.1735	28.01	-2.78	98467.250	3.5	117872.780	2.5
515.1759	28.01	-3.77	117872.780	2.5	137278.220	1.5
515.1772	24.00	-3.47	27816.880	5.0	47222.270	6.0
515.1833	24.00	-2.99	8095.210	3.0	27500.370	3.0
515.1863	23.01	-2.40	30318.630	4.0	49723.680	4.0
515.1914	26.00	-3.07	8154.713	1.0	27559.568	2.0
515.1968	22.00	-1.44	28702.768	3.0	48107.420	2.0
515.2010	76.00	.53	36618.514	0.0	56028.414	0.0
515.2022	18.03	-2.35	268151.380	2.5	287555.830	3.5
515.2091	7.00	-2.58	96750.810	1.5	116155.000	.5
515.2091	7.00	-3.57	96750.810	1.5	116155.000	1.5
515.2185	22.00	-1.68	170.132	3.0	19573.968	4.0
515.2224	15.01	-.72	86598.300	0.0	106001.990	1.0
515.2303	18.00	-2.70	104102.144	1.0	123505.536	2.0
515.2471	22.00	-3.24	18287.560	4.0	37690.320	5.0
515.2526	24.01	-2.70	55081.700	1.5	74484.250	2.5
515.2529	7.00	-2.92	94793.460	1.5	114196.000	2.5
515.2606	28.01	-3.61	102742.740	1.5	122144.990	2.5
515.2630	41.00	-1.47	8952.985	0.0	28360.550	0.0
515.2643	28.01	-3.20	110021.920	4.5	129424.030	5.5
515.2656	28.01	-3.88	99040.750	1.5	118442.810	1.5
515.2774	6.00	-4.02	69689.480	1.0	89091.100	1.0
515.2811	25.01	-4.80	82099.820	4.0	101501.300	3.0
515.2848	7.00	-3.03	94830.860	2.5	114232.200	1.5
515.2861	18.01	-1.18	190196.160	.5	209597.450	1.5
515.2978	21.00	-4.04	25724.720	3.5	45125.570	4.5
515.2991	24.01	-2.88	70107.830	4.5	89508.630	5.5
515.3060	24.01	-2.90	55023.300	2.5	74423.840	3.5
515.3200	44.00	-1.46	11695.340	0.0	31100.758	0.0
515.3235	29.00	-.01	30569.200	0.0	49974.486	0.0
515.3238	6.00	-2.60	69744.030	3.0	89143.900	3.0
515.3325	7.00	-2.93	94793.460	1.5	114193.000	1.5
515.3363	23.01	-4.19	44657.990	2.0	64057.390	3.0
515.3402	11.00	-1.76	16973.368	1.5	36372.620	.5
515.3413	25.01	-3.32	82099.820	4.0	101499.030	4.0
515.3420	73.00	-2.63	3871.561	0.0	23276.151	0.0
515.3429	23.00	-1.71	15078.250	.5	34477.400	.5
515.3501	25.02	-.74	172613.870	2.5	192012.750	1.5
515.3504	24.01	-2.58	30307.600	1.5	49706.470	2.5
515.3549	29.01	-4.31	129116.900	3.0	148515.600	4.0
515.3567	6.00	-4.57	69744.030	3.0	89142.660	2.0
515.3578	26.02	-2.86	181808.700	5.0	201207.290	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
515.3805	22.00	-4.36	28788.372	4.0	48186.110	4.0
515.3825	28.01	-2.92	110021.920	4.5	129419.580	4.5
515.3857	27.00	-1.66	33466.870	3.5	52864.410	4.5
515.3902	27.00	-3.11	33945.900	2.5	53343.270	1.5
515.3937	24.00	-1.80	45354.180	5.0	64751.420	4.0
515.3961	15.01	-2.18	105550.450	2.0	124947.600	2.0
515.4059	27.00	-.36	31871.150	3.5	51267.930	4.5
515.4072	22.01	-1.74	12628.770	1.5	32025.500	2.5
515.4086	26.00	-2.20	31307.235	4.0	50703.912	5.0
515.4176	7.00	-3.17	95493.660	1.5	114890.000	1.5
515.4229	25.00	-4.10	45013.550	2.5	64409.690	3.5
515.4381	25.01	-3.83	49820.160	2.0	69215.730	1.0
515.4397	26.01	-4.40	22939.350	2.5	42334.860	2.5
515.4484	23.00	-3.87	20830.200	.5	40225.380	1.5
515.4537	7.00	-4.78	96864.020	2.5	116259.000	1.5
515.4537	7.00	-2.55	96864.020	2.5	116259.000	2.5
515.4633	28.01	-2.29	116893.980	2.5	136288.600	2.5
515.4811	15.00	-1.43	56090.450	1.5	75484.400	2.5
515.4838	27.00	-2.10	33462.830	2.5	52856.680	3.5
515.4886	24.00	-2.81	35813.730	3.0	55207.400	4.0
515.4947	23.02	-.16	140750.820	2.5	160144.260	1.5
515.4984	17.01	-3.44	153257.000	2.0	172650.300	3.0
515.5008	7.00	-2.89	94881.790	3.5	114275.000	3.5
515.5030	62.01	-.63	8630.355	0.0	28028.884	0.0
515.5098	6.00	-1.82	69744.030	3.0	89136.900	4.0
515.5120	24.00	-1.10	45358.630	4.0	64751.420	4.0
515.5125	28.00	-.85	31441.665	2.0	50834.435	2.0
515.5140	44.00	-.81	9033.642	0.0	28431.757	0.0
515.5274	7.00	-3.02	94881.790	3.5	114274.000	2.5
515.5290	7.00	-3.88	94770.850	.5	114163.000	1.5
515.5324	20.02	-.80	371059.950	3.0	390451.970	3.0
515.5330	30.02	-2.41	217655.800	3.0	237047.800	2.0
515.5369	28.01	-2.71	114052.040	3.5	133443.890	2.5
515.5420	23.02	-.64	141488.320	4.5	160879.980	4.5
515.5439	26.02	-2.22	179748.170	5.0	199139.760	5.0
515.5450	40.00	-.20	12663.231	0.0	32060.180	0.0
515.5540	45.00	-1.60	10888.765	0.0	30285.375	0.0
515.5564	28.01	-.16	116261.810	.5	135652.930	1.5
515.5750	6.00	-3.45	69689.480	1.0	89079.900	2.0
515.5762	28.00	-.03	31441.665	2.0	50832.039	3.0
515.5835	28.01	-.60	116732.510	2.5	136122.610	2.5
515.5840	64.00	.38	7420.492	0.0	26815.974	0.0
515.5912	27.00	-1.19	33466.870	3.5	52856.680	3.5
515.5932	22.00	-4.56	27750.124	5.0	47139.860	4.0
515.5997	25.01	-2.07	82099.820	4.0	101489.310	5.0
515.6023	14.00	-4.46	40991.884	1.0	60381.278	1.0
515.6070	38.00	-.15	20003.065	0.0	39397.681	0.0
515.6080	18.01	-3.18	194800.180	4.5	214189.360	4.5
515.6088	7.00	-2.18	94770.850	.5	114160.000	1.5
515.6111	26.02	-2.23	69695.730	4.0	89084.790	3.0
515.6194	23.02	-.62	140933.140	3.5	160321.890	2.5
515.6207	15.04	.70	391242.400	1.5	410631.100	2.5
515.6207	15.04	-.25	391242.400	1.5	410631.100	1.5
515.6226	26.02	-2.87	186791.780	2.0	206180.410	3.0
515.6250	7.00	-1.99	94793.460	1.5	114182.000	2.5
515.6356	27.00	.29	32733.070	3.5	52121.210	4.5
515.6446	28.01	-3.94	72985.650	1.5	92373.450	2.5
515.6560	73.00	-1.79	5565.369	0.0	24958.142	0.0
515.6609	28.01	-4.96	114874.880	2.5	134262.070	3.5
515.6740	57.01	-2.41	967.890	0.0	20359.987	0.0
515.6760	64.01	-.98	12582.573	0.0	31974.594	0.0
515.6941	23.00	-3.00	20767.570	3.5	40153.510	2.5
515.6997	26.02	-3.52	179876.710	4.0	199262.440	3.0
515.7029	23.00	-.69	18372.460	3.5	37758.070	4.5
515.7070	62.01	-1.10	10888.765	0.0	30279.621	0.0
515.7090	45.00	-.08	28391.447	0.0	47782.227	0.0
515.7154	28.01	-.45	101740.270	3.5	121125.410	4.5
515.7246	22.00	-4.69	26772.965	5.0	46157.760	5.0
515.7284	23.00	-1.39	19145.130	5.5	38529.780	4.5
515.7295	23.01	-3.31	20617.050	2.0	40001.660	2.0
515.7324	29.01	-3.45	116375.470	3.0	135759.970	2.0
515.7335	28.01	-4.87	53601.190	1.5	72985.650	1.5
515.7340	26.01	-3.04	66078.340	2.5	85462.780	3.5
515.7417	23.00	-4.77	31200.120	1.5	50584.270	1.5
515.7430	57.01	-.35	17744.654	0.0	37134.156	0.0
515.7431	30.02	.31	217663.700	1.0	237047.800	2.0
515.7590	24.01	-2.12	69954.200	2.5	89337.700	1.5
515.7704	28.00	-2.28	29888.505	2.0	49271.578	3.0
515.7739	25.02	-4.25	176209.150	1.5	195592.090	1.5
515.7874	9.00	-2.43	118405.267	.5	137787.700	1.5
515.7960	72.00	-.56	22745.421	0.0	42132.931	0.0
515.7976	28.00	-1.38	29084.478	4.0	48466.530	5.0
515.8000	40.00	.14	16857.422	0.0	36244.781	0.0
515.8024	25.01	-3.60	82117.160	5.0	101499.030	4.0
515.8048	26.02	-3.19	179757.980	4.0	199139.760	5.0
515.8061	25.00	-.12	43524.080	3.5	62905.810	2.5
515.8083	29.01	-2.15	118532.150	2.0	137913.800	1.0
515.8083	29.01	-.35	116576.810	0.0	135958.460	1.0
515.8091	26.02	-3.42	181825.670	4.0	201207.290	4.0
515.8125	23.00	-2.37	19023.470	4.5	38404.960	5.5
515.8149	25.03	-4.90	152700.500	4.0	172081.900	3.0
515.8210	28.01	-4.61	114874.880	2.5	134256.050	2.5
515.8229	13.01	-.74	123468.100	3.0	142849.200	4.0
515.8229	13.01	-.52	123468.100	3.0	142849.200	4.0
515.8229	13.01	-4.15	123468.100	3.0	142849.200	3.0
515.8253	28.01	-.17	116468.400	1.5	135849.410	2.5
515.8439	27.00	-2.67	32781.710	2.5	52162.020	3.5
515.8471	23.02	-1.36	141196.430	2.5	160576.620	3.5
515.8480	64.00	-.71	7178.519	0.0	26564.074	0.0
515.8575	19.02	-1.32	243448.200	1.5	262828.000	1.5
515.8600	90.00	-1.56	2823.013	0.0	22208.117	0.0
515.8670	40.00	-1.10	12663.231	0.0	32048.072	0.0
515.8690	45.00	.41	28714.077	0.0	48098.843	0.0
515.8690	57.00	-1.00	0.000	0.0	19384.766	0.0
515.8735	17.01	-2.32	131754.800	1.0	151134.000	1.0
515.8852	27.00	-.57	32654.500	2.5	52033.260	1.5
515.8876	23.01	-4.65	20622.990	3.0	40001.660	2.0
515.8956	28.01	-.15	113623.100	.5	133001.470	.5
515.8961	26.02	-4.21	186882.980	3.0	206261.330	4.0
515.8996	23.00	-4.95	9824.580	2.5	29202.800	1.5
515.9036	26.00	-1.00	34547.192	2.0	53925.260	1.0
515.9062	28.01	-4.64	114874.880	2.5	134252.850	3.5
515.9094	29.01	-1.64	117666.600	4.0	137044.450	4.0
515.9097	27.00	-3.67	13795.520	2.5	33173.360	3.5
515.9193	28.01	-1.75	100845.410	.5	120222.890	1.5
515.9214	24.00	-3.45	28637.000	3.0	48014.400	4.0
515.9222	23.00	-2.45	21603.170	4.5	40980.540	4.5
515.9238	28.01	-3.47	116824.150	2.5	136201.460	3.5
515.9247	26.00	-2.67	37046.000	4.0	56423.276	4.0
515.9355	23.00	-.67	18126.270	1.5	37503.140	2.5
515.9363	18.01	-1.84	188766.150	2.5	208142.990	3.5
515.9371	10.01	-1.02	302961.070	1.5	322337.880	2.5
515.9385	10.01	-1.20	302057.260	.5	321434.020	1.5
515.9494	7.00	+2.86	96787.650	1.5	116164.000	1.5
515.9494	7.00	-3.45	96787.650	1.5	116164.000	2.5
515.9499	18.01	-3.82	183090.810	1.5	202467.140	1.5
515.9570	26.00	-3.35	31322.603	3.0	50698.666	2.0
515.9592	7.00	-3.51	96864.020	2.5	116240.000	1.5
515.9592	7.00	-2.83	96864.020	2.5	116240.000	2.5
515.9672	27.00	-1.75	27497.060	2.5	46872.740	3.5
515.9838	26.00	-4.22	26351.049	5.0	45726.104	5.0
515.9840	22.00	-2.32	18825.890	1.0	38200.940	0.0
515.9896	28.01	-4.55	114874.880	2.5	134249.720	1.5
515.9920	56.00	.20	17905.969	0.0	37286.114	0.0
515.9935	26.00	-2.10	34692.130	1.0	54066.821	2.0
516.0000	44.00	-1.79	9033.642	0.0	28413.487	0.0
516.0007	24.00	-4.22	35618.510	1.0	54992.930	2.0
516.0046	9.00	-1.59	118427.823	1.5	137802.100	2.5
516.0066	11.02	-1.96	399182.700	1.5	418556.900	.5
516.0070	63.00	.19	13147.176	0.0	32526.758	0.0
516.0087	28.01	-3.00	110021.920	4.5	129396.040	5.5
516.0120	15.01	-4.89	110252.000	1.0	129626.000	1.0
516.0200	17.01	+2.44	139350.000	1.0	158723.700	1.0
516.0266	25.00	-2.58	34845.260	.5	54218.710	1.5
516.0330	41.00	-1.99	322.630	0.0	19701.236	0.0
516.0330	92.01	-1.70	5726.684	0.0	25105.290	0.0
516.0336	7.00	-3.95	96750.810	1.5	116124.000	.5
516.0336	7.00	-3.25	96750.810	1.5	116124.000	1.5
516.0336	7.00	-3.28	96750.810	1.5	116124.000	2.5
516.0388	24.00	-2.06	27816.880	5.0	47189.870	4.0
516.0460	24.00	-3.54	7927.470	2.0	27300.190	1.0
516.0490	28.01	-3.94	114869.350	1.5	134241.960	.5
516.0511	24.01	-4.08	47354.630	2.5	66727.160	2.5
516.0577	23.02	-1.28	141507.700	3.5	160879.980	4.5
516.0612	25.01	+2.23	82117.160	5.0	101489.310	5.0
516.0740	28.01	-4.59	114836.630	3.5	134208.300	2.5
516.0801	6.00	-3.03	69710.660	2.0	89082.100	3.0
516.0820	26.01	-2.82	44915.070	3.5	64286.440	3.5
516.0822	18.01	-2.33	185624.730	3.5	204996.090	3.5
516.0825	7.00	-2.44	96787.650	1.5	116159.000	2.5
516.0900	64.01	-1.05	12824.546	0.0	32201.011	0.0
516.0903	22.00	-2.19	12118.394	4.0	31489.451	4.0
516.0990	40.00	-.90	11856.655	0.0	31232.782	0.0
516.1012	23.01	-6.85	20242.320	4.0	39612.970	5.0
516.1132	28.01	-2.57	102742.740	1.5	122112.940	.5
516.1177	26.01	-4.77	23031.300	1.5	42401.330	1.5
516.1182	25.01	-4.90	87580.230	4.0	106950.240	3.0
516.1219	18.01	-2.96	195297.610	1.5	214667.480	2.5
516.1272	26.00	-4.78	34555.586	0.0	53925.260	1.0
516.1307	7.00	-3.07	94793.460	1.5	114163.000	1.5
516.1387	6.00	-3.12	69710.660	2.0	89079.900	2.0
516.1566	26.02	-3.68	186303.440	3.0	205672.010	4.0
516.1619	29.01	-3.34	117666.600	4.0	137034.970	3.0
516.1650	75.00	-1.73	17583.339	0.0	36956.989	0.0
516.1718	26.00	-4.07	34636.820	2.0	54004.820	3.0
516.1740	59.01	-1.48	3871.561	0.0	23244.873	0.0
516.1761	24.00	-3.33	21856.940	3.0	41224.780	4.0
516.1810	73.00	-1.89	9920.875	0.0	29293.924	0.0
516.1891	24.00	-3.64	36577.730	4.0	55945.080	5.0
516.1891	7.00	-4.81	96787.650	1.5	116155.000	.5
516.1891	7.00	-3.21	96787.650	1.5	116155.000	1.5
516.1915	18.01	-4.84	194822.100	3.5	214189.360	4.5
516.1923	28.01	-1.47	116145.690	3.5	135512.920	2.5
516.2048	18.01	-3.63	155043.070	2.5	174409.830	1.5
516.2091	17.01	-3.01	131767.400	0.0	151134.000	1.0
516.2107	7.00	-3.22	94793.460	1.5	114160.000	1.5
516.2107	7.00	-2.20	94793.460	1.5	114160.000	2.5
516.2195	7.00	-2.05	94881.790	3.5	114248.000	3.5
516.2251	17.01	-2.83	131768.000	2.0	151134.000	1.0
516.2256	25.02	-2.92	121197.050	2.5	140563.030	3.5
516.2277	26.00	-.10	33695.378	5.0	53061.280	5.0
516.2280	18.00	-1.96	104102.144	1.0	123468.034	1.0
516.2288	15.00	-.96	56339.540	2.5	75705.400	3.5
516.2342	27.00	-3.02	25739.930	2.5	45105.590	3.5
516.2383	26.00	-4.71	21038.987	2.0	40404.492	1.0
516.2480	7.00	-2.46	94830.860	2.5	114196.000	2.5
516.2544	18.01	-1.73	192712.000	1.5	212076.900	2.5
516.2545	9.00	-2.51	118427.823	1.5	137792.720	2.5
516.2603	6.00	-3.40	69689.480	1.0	89054.160	2.0
516.2683	23.00	-3.43	20789.130	2.5	40153.510	2.5
516.2710	18.01	-2.49	186890.950	2.5	206255.230	2.5
516.2739	18.01	-1.01	173347.830	1.5	192712.000	1.5
516.2819	28.01	.05	99559.330	2.5	118923.200	3.5
516.2913	28.00	+2.33	30912.838	1.0	50276.354	0.0
516.2913	7.00	-1.37	94881.790	3.5	114245.309	4.5
516.3011	10.01	-2.32	302057.260	.5	321420.410	1.5
516.3134	18.01	-3.32	194822.100	3.5	214184.790	3.5
516.3190	42.00	.48	31698.405	0.0	51066.276	0.0
516.3267	29.01	-1.98	116371.410	4.0	135733.600	3.0
516.3270	58.01	-.70	11292.053	0.0	30659.624	0.0
516.3272	6.00	-3.94	61981.820	1.0	81343.990	2.0
516.3280	7.00	-4.57	94830.860	2.5	114193.000	1.5
516.3328	26.00	-3.66	28604.610	2.0	47966.571	3.0
516.3336	27.00	-.52	32733.070	3.5	52095.000	3.5
516.3368	25.02	-3.91	176390.670	2.5	195754.480	2.5
516.3419	23.00	-3.90	17054.870	2.5	36416.490	1.5
516.3437	25.02	-4.79	176100.710	.5	195462.260	.5
516.3460	90.00	-2.00	3629.588	0.0	22996.447	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
516.3620	57.01	-2.48	1935.780	0.0	21302.039	0.0
516.3624	18.01	-.23	189654.780	2.5	209015.630	3.5
516.3640	28.01	-2.58	101754.800	2.5	121115.590	1.5
516.3650	73.00	-2.51	5565.369	0.0	24931.515	0.0
516.3700	64.00	-.74	6936.547	0.0	26302.506	0.0
516.3816	24.01	-3.70	45669.540	1.5	65029.670	.5
516.3840	46.00	.59	35247.336	0.0	54612.769	0.0
516.3859	13.02	.21	189928.490	3.5	209288.460	4.5
516.3884	9.00	-2.17	118427.823	1.5	137787.700	1.5
516.3910	13.02	.30	189928.680	4.5	209288.460	5.5
516.3910	13.02	-1.43	189928.680	4.5	209288.460	4.5
516.4008	28.01	.16	113623.100	.5	132982.510	1.5
516.4019	24.00	-3.90	24940.610	2.0	44299.980	2.0
516.4078	7.00	-2.82	94770.850	.5	114130.000	.5
516.4107	18.01	-3.51	183985.940	1.5	203344.980	1.5
516.4124	26.00	-3.97	33801.555	2.0	53160.530	3.0
516.4140	92.00	-.67	8065.752	0.0	27430.060	0.0
516.4169	26.00	-3.37	27543.000	1.0	46901.808	1.0
516.4326	23.00	-3.27	20767.570	3.5	40125.790	3.5
516.4344	28.01	-.77	116312.340	1.5	135670.490	.5
516.4380	41.00	-1.78	2097.096	0.0	21460.505	0.0
516.4416	7.00	-2.65	95532.120	2.5	114890.000	1.5
516.4537	26.00	-1.28	35767.546	4.0	55124.974	3.0
516.4540	64.01	-1.12	11372.710	0.0	30735.519	0.0
516.4633	24.00	-4.47	25177.390	4.0	44534.460	4.0
516.4637	22.00	-4.21	28702.768	3.0	48059.820	3.0
516.4691	26.01	-4.72	44929.590	2.5	64286.440	3.5
516.4697	26.00	-4.35	20874.482	3.0	40231.312	2.0
516.4758	23.00	-2.18	17181.980	4.5	36538.580	4.5
516.4867	7.00	-3.73	96750.810	1.5	116107.000	.5
516.4867	7.00	-4.23	96750.810	1.5	116107.000	1.5
516.4897	23.00	-.68	18258.890	2.5	37614.970	3.5
516.4898	26.00	-2.08	33412.706	3.0	52768.780	4.0
516.5012	37.00	-5.86	0.000	0.0	19361.039	0.0
516.5131	37.00	-5.69	0.000	0.0	19360.593	0.0
516.5140	60.01	-1.27	5404.054	0.0	24764.613	0.0
516.5142	27.00	-3.14	13795.520	2.5	33150.680	1.5
516.5286	18.01	-.92	186890.950	2.5	206245.570	3.5
516.5292	30.02	-4.13	283515.200	3.0	302869.800	3.0
516.5321	24.00	-4.14	25038.610	5.0	44393.100	6.0
516.5342	24.01	-4.95	47372.750	1.5	66727.160	2.5
516.5393	26.00	-.38	34039.495	4.0	53393.715	4.0
516.5398	25.02	-3.11	115762.600	1.5	135116.800	1.5
516.5513	28.01	-2.81	100845.410	.5	120199.180	1.5
516.5558	13.01	-3.27	105438.400	1.0	124792.000	2.0
516.5604	26.02	-.86	186378.940	4.0	205732.370	3.0
516.5609	24.00	-1.93	45358.630	4.0	64712.040	3.0
516.5641	27.00	-4.96	31699.690	4.5	51052.980	3.5
516.5701	7.00	-3.35	94793.460	1.5	114146.525	2.5
516.5756	18.01	-2.61	185624.730	3.5	204977.590	2.5
516.5777	18.01	-1.00	160239.350	1.5	179592.130	2.5
516.5960	40.00	-.79	12259.943	0.0	31617.429	0.0
516.6060	27.00	-.72	34352.420	1.5	53704.140	2.5
516.6060	62.01	-1.00	10969.423	0.0	30326.535	0.0
516.6068	23.00	-4.26	20767.570	3.5	40119.260	2.5
516.6073	22.00	-4.39	26892.926	3.0	46244.600	2.0
516.6127	24.00	-2.10	27703.840	4.0	47055.310	5.0
516.6215	7.00	-2.85	94830.860	2.5	114182.000	2.5
516.6234	24.00	-.59	27703.840	4.0	47054.910	4.0
516.6284	26.00	-3.97	0.000	4.0	19350.882	5.0
516.6359	12.02	-.68	562939.500	2.0	582290.100	3.0
516.6359	12.02	-.68	562939.500	2.0	582290.100	3.0
516.6383	23.00	-4.58	15078.250	.5	34428.760	1.5
516.6407	25.01	-2.98	82117.160	5.0	101467.580	6.0
516.6431	26.02	-1.52	186882.980	3.0	206233.310	2.0
516.6463	22.00	-4.58	26657.409	4.0	46007.620	4.0
516.6610	15.00	-1.63	56339.540	2.5	75689.200	1.5
516.6653	28.02	-3.61	121566.700	1.0	140916.200	2.0
516.6693	26.02	-3.13	181828.660	2.0	201178.010	1.0
516.6700	63.00	.05	12985.861	0.0	32340.575	0.0
516.6747	24.00	-4.16	24897.550	4.0	44246.700	4.0
516.6760	23.00	-1.43	15270.420	1.5	34619.520	2.5
516.6790	73.00	-2.02	12743.888	0.0	32098.265	0.0
516.6819	25.00	-2.58	45060.810	3.5	64409.690	3.5
516.7299	26.01	-7.03	27620.390	2.5	46967.470	2.5
516.7322	12.00	-1.03	21850.405	0.0	41197.403	1.0
516.7361	25.01	-3.32	82142.460	6.0	101489.310	5.0
516.7420	72.00	-.08	24600.544	0.0	43952.561	0.0
516.7491	26.00	-1.29	11976.239	4.0	31322.603	3.0
516.7508	23.03	-1.58	264113.100	4.0	283459.400	3.0
516.7545	25.02	-1.96	172569.270	1.5	191915.430	.5
516.7588	23.03	-2.26	265019.700	1.0	284365.700	1.0
516.7695	29.01	-4.77	116388.000	2.0	135733.600	3.0
516.7712	7.00	-2.07	93581.520	.5	112927.055	1.5
516.7723	26.00	-3.00	27543.000	1.0	46888.494	2.0
516.7732	28.00	-1.17	34408.574	1.0	53754.036	2.0
516.7760	42.00	-.56	21454.900	0.0	40805.644	0.0
516.7790	57.00	-1.06	4032.876	0.0	23383.508	0.0
516.7812	28.01	-1.00	116167.760	1.5	135512.920	2.5
516.7889	7.00	-1.61	94830.860	2.5	114175.736	3.5
516.7920	60.01	-1.66	4436.164	0.0	23786.309	0.0
516.7927	24.00	-3.03	35807.900	2.0	55152.630	2.0
516.7932	23.00	-4.13	30864.340	5.5	50209.050	6.5
516.7951	24.00	-1.65	27703.840	4.0	47048.480	3.0
516.7967	24.00	-1.86	35862.820	4.0	55207.400	4.0
516.8031	23.00	-3.79	17116.920	3.5	36461.260	2.5
516.8031	23.00	-3.29	17116.920	3.5	36461.260	3.5
516.8049	7.01	-.22	225603.500	1.0	244947.770	2.0
516.8085	28.01	-1.95	100845.410	.5	120189.550	.5
516.8255	6.00	-4.75	69710.660	2.0	89054.160	2.0
516.8424	23.00	-4.71	30771.720	4.5	50114.590	5.5
516.8619	24.00	-4.10	8307.570	4.0	27649.710	4.0
516.8640	14.00	-2.16	45321.848	3.0	64663.910	4.0
516.8643	28.01	-3.07	102742.740	1.5	122084.790	1.5
516.8656	28.00	-.70	29832.810	3.0	49174.811	4.0
516.8678	24.01	-3.26	65384.040	4.5	84725.960	3.5
516.8833	28.01	-4.93	114942.420	1.5	134283.760	.5
516.8900	26.00	-3.91	415.932	3.0	19757.020	3.0
516.8980	76.00	.59	38312.322	0.0	57658.499	0.0
516.8996	7.01	-1.07	203537.660	1.0	222878.390	2.0
516.9009	26.02	-2.61	181825.670	4.0	201166.350	3.0
516.9023	26.01	-7.09	23317.600	2.5	42658.230	3.5
516.9033	28.01	-.03	116312.340	1.5	135652.930	1.5
516.9052	23.00	-4.30	20812.990	1.5	40153.510	2.5
516.9263	21.00	-1.55	18515.770	1.5	37855.500	2.5
516.9302	26.00	-.82	32873.623	4.0	52213.207	3.0
516.9485	24.00	-2.34	35813.730	3.0	55152.630	2.0
516.9563	28.01	.13	99559.330	2.5	118897.940	2.5
516.9629	28.01	-3.15	99040.750	1.5	118379.110	2.5
516.9653	37.00	-2.39	12578.950	0.0	31922.608	0.0
516.9670	66.01	-2.11	806.575	0.0	20150.169	0.0
516.9704	24.00	-4.21	35618.510	1.0	54956.590	1.0
516.9707	6.00	-3.49	69744.030	3.0	89082.100	3.0
516.9726	26.00	-4.90	26224.961	3.0	45562.959	3.0
516.9771	23.00	-1.78	19145.130	5.5	38482.960	6.5
516.9809	26.02	-4.41	181828.660	2.0	201166.350	3.0
516.9851	24.00	-1.58	28637.000	3.0	47974.530	3.0
516.9857	28.01	-4.63	102742.740	1.5	122080.250	2.5
516.9862	28.01	-3.89	53037.930	2.5	72375.420	1.5
516.9884	22.00	-3.01	28896.062	5.0	48233.470	6.0
516.9897	24.01	-4.65	65156.840	2.5	84494.200	2.5
516.9899	23.00	-1.04	18085.820	.5	37423.170	1.5
517.0012	27.00	-1.33	32733.070	3.5	52070.000	2.5
517.0028	24.00	-4.36	35870.530	4.0	55207.400	4.0
517.0083	26.00	-3.56	37046.000	4.0	56382.664	5.0
517.0108	25.02	-3.67	115780.230	2.5	135116.800	1.5
517.0116	7.00	-2.82	94793.460	1.5	114130.000	.5
517.0156	7.01	-.12	225603.500	1.0	244939.890	1.0
517.0167	7.00	-3.00	96787.650	1.5	116124.000	.5
517.0167	7.00	-4.30	96787.650	1.5	116124.000	1.5
517.0172	26.02	-3.21	181830.020	3.0	201166.350	3.0
517.0180	72.00	-.54	19680.435	0.0	39022.121	0.0
517.0230	90.01	-1.96	11050.080	0.0	30391.579	0.0
517.0249	26.00	-3.90	29798.960	4.0	49135.003	3.0
517.0258	26.02	-1.60	179876.710	4.0	199212.720	4.0
517.0327	22.01	-4.81	45548.900	1.5	64884.650	2.5
517.0327	27.00	-2.69	33439.720	4.5	52775.470	4.5
517.0381	26.02	-3.33	181828.660	2.0	201164.210	2.0
517.0524	22.00	-1.87	18287.560	4.0	37622.573	3.0
517.0592	13.02	-3.45	189928.490	3.5	209263.250	3.5
517.0592	13.02	-2.02	189928.490	3.5	209263.250	2.5
517.0643	13.02	-1.91	189928.680	4.5	209263.250	3.5
517.0686	28.01	-4.47	96535.870	3.5	115870.280	2.5
517.0744	26.02	-2.69	181830.020	3.0	201164.210	2.0
517.0755	23.00	-1.96	21646.390	3.5	40980.540	4.5
517.0870	7.00	-3.75	95475.280	.5	114809.000	.5
517.0950	28.01	-3.75	114874.880	2.5	134208.300	2.5
517.1030	44.00	-.75	7420.492	0.0	26758.999	0.0
517.1052	22.01	-4.32	45908.560	5.5	65241.600	5.5
517.1068	18.01	-2.85	186815.960	3.5	206148.940	3.5
517.1080	42.00	.15	25487.776	0.0	44826.096	0.0
517.1122	23.01	-4.38	20280.190	5.0	39612.970	5.0
517.1151	20.02	-3.66	371059.950	3.0	390392.620	3.0
517.1266	7.01	-.47	225603.500	1.0	244935.740	0.0
517.1293	7.00	-2.78	94830.860	2.5	114163.000	1.5
517.1421	28.01	-4.30	115785.060	1.5	135116.720	2.5
517.1470	7.01	.20	225627.470	2.0	244958.950	3.0
517.1571	22.00	-3.12	28788.372	4.0	48119.470	5.0
517.1599	26.00	-2.02	11976.239	4.0	31307.235	4.0
517.1619	26.01	-4.21	22637.190	4.5	41968.110	5.5
517.1630	73.00	-2.38	10566.135	0.0	29902.398	0.0
517.1689	26.00	-2.06	29371.860	3.0	48702.518	4.0
517.1690	64.00	-1.84	0.000	0.0	19336.039	0.0
517.1783	22.00	-2.10	18287.560	4.0	37617.868	4.0
517.1830	23.00	-3.75	20789.130	2.5	40119.260	2.5
517.1950	18.01	-3.23	183090.810	1.5	202420.490	.5
517.1967	26.02	-2.11	186998.600	4.0	206328.220	3.0
517.2082	6.00	-4.57	61981.820	1.0	81311.010	0.0
517.2095	7.00	-4.55	94830.860	2.5	114160.000	2.5
517.2111	23.00	-.75	18174.060	1.5	37503.140	2.5
517.2166	22.00	-4.62	26564.385	3.0	45893.260	3.0
517.2208	26.00	-4.47	20641.110	4.0	39969.830	3.0
517.2285	27.00	-1.05	31871.150	3.5	51199.580	3.5
517.2344	7.01	.07	223658.550	1.0	242986.760	2.0
517.2379	18.01	-2.88	189437.690	.5	208765.770	.5
517.2519	7.00	-1.88	93581.520	.5	112909.076	1.5
517.2684	12.00	-.55	21870.464	1.0	41197.403	1.0
517.2721	17.01	-2.01	127726.900	1.0	147053.700	2.0
517.2740	62.00	-.21	2258.411	0.0	21590.525	0.0
517.2839	18.01	-1.65	185624.730	3.5	204951.090	3.5
517.2853	25.02	-1.00	176265.780	1.5	195592.090	1.5
517.2855	30.02	-3.95	280726.900	2.0	300053.200	2.0
517.2855	30.02	-4.77	280726.900	1.0	300053.200	2.0
517.2869	28.00	-2.75	29832.810	3.0	49159.060	2.0
517.2910	57.01	-1.07	18793.202	0.0	38124.681	0.0
517.2919	20.02	-1.80	328090.990	2.0	347417.050	3.0
517.2940	42.00	.30	25487.776	0.0	44819.143	0.0
517.2973	7.01	-.24	223643.300	0.0	242969.160	1.0
517.2976	26.01	-2.92	47674.780	1.5	67000.630	2.5
517.2989	26.01	-4.62	67273.860	1.5	86599.660	2.5
517.3070	28.01	-.85	116167.760	1.5	135493.260	1.5
517.3123	30.02	-4.03	280782.800	3.0	300108.100	3.0
517.3128	26.00	-4.54	23783.617	5.0	43108.899	4.0
517.3171	25.01	-1.89	82142.460	6.0	101467.580	6.0
517.3203	17.01	-4.27	131768.000	2.0	151093.000	3.0
517.3337	23.03	-1.03	264902.200	3.0	284226.700	3.0
517.3385	7.01	.30	223688.450	2.0	243012.770	3.0
517.3482	27.00	-1.11	33439.720	4.5	52763.680	3.5
517.3514	18.01	-1.77	199679.760	2.5	219003.600	2.5
517.3600	18.01	-4.46	194861.270	2.5	214184.790	3.5
517.3605	25.02	-4.21	94771.470	2.5	114094.970	1.5
517.3739	24.00	-2.27	35884.400	5.0	55207.400	4.0
517.3742	22.00	-.79	0.000	2.0	19322.988	2.0
517.3795	28.01	-2.19	94729.250	2.5	114052.040	3.5
517.3840	57.01	.88	32021.035	0.0	51349.039	0.0
517.3878	7.00	-2.55	93581.520	.5	112904.000	.5
517.3900	59.01	-.52	7743.122	0.0	27070.902	0.0
517.3961	28.01	-2.89	113407.310	2.5	132729.480	2.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
517.3996	18.01	-2.82	199679.760	2.5	219001.800	1.5
517.4049	25.02	-1.74	176270.250	2.5	195592.090	1.5
517.4154	28.01	-1.11	116191.470	2.5	135512.920	2.5
517.4180	42.00	.15	25487.776	0.0	44814.510	0.0
517.4232	28.01	-3.60	100475.820	3.5	119796.980	2.5
517.4325	25.01	-3.82	85734.620	3.0	105055.430	2.0
517.4336	28.01	-1.68	113408.710	1.5	132729.480	2.5
517.4462	7.01	-0.00	225627.470	2.0	244947.770	2.0
517.4534	27.00	-4.01	32841.990	4.5	52162.020	3.5
517.4542	23.00	-.86	18438.070	4.5	37758.070	4.5
517.4591	10.01	-3.80	302750.810	3.5	322070.630	2.5
517.4658	10.01	-1.27	302750.810	3.5	322070.380	3.5
517.4672	26.00	-4.94	25091.620	0.0	44411.137	1.0
517.4717	7.00	-3.38	96787.650	1.5	116107.000	.5
517.4717	7.00	-3.88	96787.650	1.5	116107.000	1.5
517.4765	28.01	-1.77	116145.690	3.5	135464.860	3.5
517.4767	26.02	-.35	179893.560	5.0	199212.720	4.0
517.4824	10.01	-2.07	294333.220	.5	313652.170	1.5
517.4894	22.00	-4.79	26494.322	2.0	45813.010	2.0
517.4912	18.01	-2.30	173393.380	2.5	192712.000	1.5
517.4944	28.02	-4.19	121566.700	1.0	140885.200	1.0
517.4971	15.01	-3.82	110252.000	1.0	129570.400	1.0
517.5019	28.01	-3.48	112906.930	1.5	132225.150	1.5
517.5038	28.01	-4.50	117074.700	3.5	136392.850	3.5
517.5142	28.01	-.24	99559.330	2.5	118877.090	1.5
517.5427	18.01	-.99	186815.960	3.5	206132.660	4.5
517.5458	23.02	-1.23	162760.280	4.5	182076.860	5.5
517.5477	23.00	-2.30	21603.170	4.5	40919.680	5.5
517.5651	28.01	-4.11	116145.690	3.5	135461.550	2.5
517.5703	7.00	-2.40	94830.860	2.5	114146.525	2.5
517.5709	26.00	-6.04	704.003	2.0	20019.648	1.0
517.5721	17.01	-3.72	153257.000	2.0	172572.600	2.0
517.5765	28.00	-3.72	31031.042	3.0	50346.477	2.0
517.5790	7.00	-3.05	95493.660	1.5	114809.000	.5
517.5798	22.00	-3.25	28702.768	3.0	48018.080	4.0
517.5801	30.02	-4.84	280782.800	3.0	300098.100	4.0
517.5828	17.01	-1.91	140259.000	2.0	159574.200	2.0
517.5830	59.01	-2.20	3387.616	0.0	22708.189	0.0
517.5889	7.01	.50	223731.590	3.0	243046.560	4.0
517.5941	28.01	-1.13	99559.330	2.5	118874.110	3.5
517.5946	29.01	-2.61	114511.440	1.0	133826.200	2.0
517.5951	25.02	-.61	173920.690	1.5	193235.430	2.5
517.5962	23.03	.09	236148.600	1.0	255463.300	2.0
517.5970	45.00	.53	28391.447	0.0	47711.497	0.0
517.6024	27.00	-2.22	32841.990	4.5	52156.460	4.5
517.6075	27.00	-2.01	16778.160	2.5	36092.440	2.5
517.6093	7.00	-4.33	94881.790	3.5	114196.000	2.5
517.6201	24.01	-4.42	32355.940	3.5	51669.750	2.5
517.6232	18.01	-2.64	151087.250	2.5	170400.940	2.5
517.6265	23.02	-2.38	162335.880	3.5	181649.450	3.5
517.6265	28.01	-3.96	114970.190	.5	134283.760	.5
517.6280	64.01	-.93	8469.040	0.0	27787.933	0.0
517.6340	27.00	-.72	32781.710	2.5	52095.000	3.5
517.6399	18.01	-2.07	185624.730	3.5	204937.800	4.5
517.6498	23.00	-.74	18302.270	3.5	37614.970	3.5
517.6559	28.00	-.35	31441.665	2.0	50754.137	2.0
517.6573	7.01	-.59	225627.470	2.0	244939.890	1.0
517.6739	30.02	-3.31	283515.200	3.0	302827.000	2.0
517.6739	30.02	-4.37	283515.200	2.0	302827.000	2.0
517.6804	28.01	-3.82	98561.220	2.5	117872.780	2.5
517.7058	7.01	-.24	223658.550	1.0	242969.160	1.0
517.7077	26.01	-4.21	61035.370	.5	80345.910	.5
517.7117	28.01	-4.40	101740.270	3.5	121050.660	2.5
517.7128	24.00	-2.40	31352.420	1.0	50662.770	1.0
517.7139	25.00	-.63	43595.500	2.5	62905.810	2.5
517.7187	6.00	-4.90	69744.030	3.0	89054.160	2.0
517.7244	26.00	-2.07	29798.960	4.0	49108.876	4.0
517.7270	45.00	.12	31859.720	0.0	51174.919	0.0
517.7302	9.00	-3.52	129659.500	3.5	148969.200	4.5
517.7305	9.00	-4.90	129659.500	3.5	148969.190	3.5
517.7310	57.00	-.28	3468.273	0.0	22783.323	0.0
517.7313	22.00	-4.53	22404.690	3.0	41714.350	2.0
517.7364	27.00	-2.57	33462.830	2.5	52772.300	2.5
517.7377	27.00	-1.05	33150.680	1.5	52460.100	2.5
517.7418	24.00	-.28	27649.710	4.0	46958.980	5.0
517.7486	22.00	-5.52	7255.369	2.0	26564.385	3.0
517.7526	18.00	-1.98	105462.804	3.0	124771.670	2.0
517.7549	24.00	-2.32	31352.420	1.0	50661.200	0.0
517.7597	27.00	-.55	33466.870	3.5	52775.470	4.5
517.7689	25.01	-2.38	82193.040	2.0	101501.300	3.0
517.7726	25.01	-2.05	48435.960	6.0	67744.080	6.0
517.7876	24.00	-2.05	31355.210	2.0	50662.770	1.0
517.7898	28.01	-3.79	116893.980	2.5	136201.460	3.5
517.7946	25.02	-3.65	176641.140	3.5	195948.440	3.5
517.7950	77.00	-1.68	15970.189	0.0	35282.851	0.0
517.7960	18.01	-2.20	190106.230	1.5	209413.480	1.5
517.8043	22.00	-2.35	27887.740	3.0	47194.680	4.0
517.8048	24.00	-2.79	35897.870	2.0	55204.790	3.0
517.8080	26.01	-4.73	65556.340	4.5	84863.140	5.5
517.8080	25.01	-3.31	82193.040	2.0	101499.840	2.0
517.8100	64.01	-1.05	13308.491	0.0	32620.594	0.0
517.8107	30.02	-4.01	283601.800	4.0	302908.500	4.0
517.8198	18.01	-4.35	194883.000	3.5	214189.360	4.5
517.8222	23.00	-3.68	20812.990	1.5	40119.260	2.5
517.8236	23.02	-.81	141270.400	3.5	160576.620	3.5
517.8287	28.01	-4.56	100490.950	1.5	119796.980	2.5
517.8383	27.00	-4.17	21920.090	4.5	41225.760	4.5
517.8394	10.01	-2.72	302750.810	3.5	322056.440	3.5
517.8448	27.00	-3.41	33466.870	3.5	52772.300	2.5
517.8482	27.01	-4.43	64709.200	5.0	84014.500	5.0
517.8504	10.01	-.31	302750.810	3.5	322056.030	4.5
517.8536	26.02	-.30	200437.960	2.0	219743.040	1.0
517.8547	23.00	-.74	18198.080	2.5	37503.140	2.5
517.8587	25.01	-4.44	53017.160	1.0	72322.070	0.0
517.8598	28.01	-3.07	113623.100	.5	132927.970	1.5
517.8647	22.00	-2.87	8602.340	2.0	27907.026	2.0
517.8708	26.01	-5.31	22810.330	3.5	42114.790	4.5
517.8727	18.01	-3.85	186815.960	3.5	206120.350	2.5
517.8750	60.00	-1.37	1048.548	0.0	20358.227	0.0
517.8777	26.00	-1.46	35379.189	5.0	54683.390	4.0
517.8840	64.01	-.19	19841.750	0.0	39151.093	0.0
517.8863	24.00	-3.37	32097.360	6.0	51401.240	5.0
517.8890	75.00	-1.66	16534.792	0.0	35843.949	0.0
517.8949	26.01	-5.95	23031.300	1.5	42334.860	2.5
517.8976	25.01	-4.27	53017.160	1.0	72320.620	1.0
517.8990	40.00	-2.49	4113.534	0.0	23422.318	0.0
517.9086	23.00	-.95	18120.120	.5	37423.170	1.5
517.9119	28.00	-3.45	31441.665	2.0	50744.593	1.0
517.9120	57.00	-1.06	8388.382	0.0	27696.681	0.0
517.9177	26.02	-2.50	199701.820	3.0	219004.530	4.0
517.9250	18.01	-2.22	182951.150	.5	202253.590	1.5
517.9277	24.00	-3.41	31352.420	1.0	50654.760	2.0
517.9295	26.01	-4.78	66377.370	3.5	85679.640	2.5
517.9343	7.01	.49	225671.220	3.0	244973.310	4.0
517.9418	7.01	.66	223785.510	4.0	243087.320	5.0
517.9424	28.01	-3.46	116191.470	2.5	135493.260	1.5
517.9505	28.01	-4.47	95573.390	3.5	114874.880	2.5
517.9639	23.01	-3.40	30267.460	2.0	49568.450	3.0
517.9676	27.00	-.48	33462.830	2.5	52763.680	3.5
517.9738	10.01	-2.58	302750.810	3.5	322051.430	2.5
517.9797	23.00	-.77	19023.470	4.5	38323.870	4.5
517.9823	7.00	-3.12	94770.850	.5	114071.153	1.5
517.9851	30.02	-4.06	280782.800	3.0	300083.000	3.0
517.9851	30.02	-4.67	280782.800	2.0	300083.000	3.0
517.9910	7.00	-4.00	96864.020	2.5	116164.000	1.5
517.9910	7.00	-3.13	96864.020	2.5	116164.000	2.5
517.9910	7.00	-3.20	96864.020	2.5	116164.000	3.5
517.9920	64.01	-1.33	10969.423	0.0	30274.740	0.0
517.9926	23.00	-4.93	30864.340	5.5	50164.260	6.5
518.0025	24.00	-2.34	31355.210	2.0	50654.760	2.0
518.0042	26.00	-1.21	36079.353	3.0	55378.842	2.0
518.0049	28.01	-3.59	115081.360	4.5	134380.820	3.5
518.0176	27.00	-.79	31871.150	3.5	51170.140	4.5
518.0232	28.01	-.18	116145.690	3.5	135444.470	3.5
518.0270	28.01	-2.43	117662.110	1.5	136960.750	2.5
518.0280	25.00	-1.95	33825.490	2.5	53124.090	3.5
518.0310	41.00	-2.00	645.260	0.0	19949.124	0.0
518.0358	7.01	-.08	223688.450	2.0	242986.760	2.0
518.0361	23.03	-3.83	265067.400	2.0	284365.700	1.0
518.0403	26.00	-3.86	35257.309	4.0	54555.450	4.0
518.0449	22.00	-2.94	27740.190	2.0	47038.160	3.0
518.0453	22.00	-3.39	28638.832	2.0	47936.790	3.0
518.0522	26.01	-6.93	22939.350	2.5	42237.050	3.5
518.0551	22.00	-2.83	18061.540	1.0	37359.130	2.0
518.0594	26.02	-2.28	186882.980	3.0	206180.410	3.0
518.0737	23.00	-.82	18126.270	1.5	37423.170	1.5
518.0761	27.00	-1.11	33466.870	3.5	52763.680	3.5
518.0906	23.00	-3.38	26738.310	4.5	46034.580	5.5
518.0914	27.00	-1.22	33674.380	2.5	52970.620	2.5
518.0939	26.00	-3.98	38678.015	2.0	57974.160	2.0
518.0951	30.02	-2.63	218909.400	1.0	238205.500	1.0
518.0980	73.00	-.74	21696.873	0.0	40998.241	0.0
518.1096	24.01	-2.55	55023.300	2.5	74318.860	2.5
518.1123	28.01	-1.15	115085.360	3.5	134380.820	3.5
518.1160	28.00	-.63	34408.574	1.0	53703.899	1.0
518.1170	60.01	-1.22	6855.889	0.0	26156.549	0.0
518.1225	24.01	-2.75	47354.630	2.5	66649.710	1.5
518.1252	7.00	-3.45	96864.020	2.5	116159.000	2.5
518.1252	7.00	-2.25	96864.020	2.5	116159.000	3.5
518.1462	17.01	-2.90	149952.400	1.0	169246.600	1.0
518.1507	23.01	-5.42	17910.980	4.0	37205.010	3.0
518.1523	24.00	-2.86	35807.900	2.0	55101.870	3.0
518.1530	7.00	-3.59	94881.790	3.5	114175.736	3.5
518.1572	28.01	-1.98	116167.760	1.5	135461.550	2.5
518.1703	30.02	-3.99	280782.800	2.0	300076.100	2.0
518.1703	30.02	-4.39	280782.800	3.0	300076.100	2.0
518.1740	75.00	-1.29	22019.503	0.0	41318.040	0.0
518.1765	26.02	-2.54	186378.940	4.0	205672.010	4.0
518.1859	25.02	-2.49	174464.070	4.5	193756.790	4.5
518.1860	72.00	-2.49	0.000	0.0	19298.090	0.0
518.1894	23.02	-.40	141734.730	5.5	161027.320	4.5
518.1959	24.00	-3.06	28682.180	2.0	47974.530	3.0
518.1969	26.01	-5.05	25787.600	1.5	45079.910	2.5
518.2254	28.01	-2.78	96535.870	3.5	115827.120	3.5
518.2289	10.02	-4.59	379834.000	1.0	399125.120	0.0
518.2302	9.00	-3.11	117164.006	2.5	136455.080	1.5
518.2320	10.00	-3.29	152970.733	0.0	172261.740	1.0
518.2327	7.00	-4.76	96864.020	2.5	116155.000	1.5
518.2474	24.00	-1.81	31364.330	3.0	50654.760	2.0
518.2566	22.00	-4.78	27740.190	2.0	47030.280	3.0
518.2577	22.00	-3.50	28896.062	5.0	48186.110	4.0
518.2600	60.01	-1.37	5968.656	0.0	25263.990	0.0
518.2705	28.01	-.77	116145.690	3.5	135435.260	4.5
518.2741	28.00	-.34	32982.280	1.0	52271.716	2.0
518.2815	23.00	-.98	18085.820	.5	37374.980	.5
518.2893	24.01	-3.42	65029.670	.5	84318.540	1.5
518.2912	30.02	-4.42	280837.200	4.0	300126.000	4.0
518.2926	7.00	-4.04	93581.520	.5	112870.270	.5
518.3036	24.01	-4.46	69348.360	1.5	88636.700	1.5
518.3049	27.00	-.75	32781.710	2.5	52070.000	2.5
518.3070	18.01	-2.44	189040.870	1.5	208329.080	.5
518.3090	24.00	-2.11	35813.730	3.0	55101.870	3.0
518.3114	26.02	-1.67	199804.810	4.0	219092.860	5.0
518.3199	7.01	-.10	225671.220	3.0	244958.950	3.0
518.3208	25.02	-1.52	176464.780	3.5	195752.480	2.5
518.3265	9.00	-1.78	117164.006	2.5	136451.490	2.5
518.3364	29.01	-.84	116576.810	0.0	135863.930	1.0
518.3404	24.00	-3.20	8095.210	3.0	27362.180	2.0
518.3420	57.01	-1.47	3226.301	0.0	22518.583	0.0
518.3431	24.01	-4.87	50667.330	3.5	69954.200	2.5
518.3466	27.00	-.92	33173.360	3.5	52460.100	2.5
518.3604	12.00	-.32	21911.178	2.0	41197.403	1.0
518.3611	30.02	-4.89	280837.200	4.0	300123.400	5.0
518.3700	26.00	-4.76	26627.612	4.0	45913.480	3.0
518.3700	40.00	-1.62	5000.766	0.0	24292.006	0.0
518.3710	22.01	-2.92	15257.530	4.5	34543.360	3.5
518.3826	22.00	-2.94	8602.340	2.0	27887.740	3.0
518.3850	59.01	-1.99	5081.424	0.0	24372.106	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
518.3920	57.00	-1.38	1048.548	0.0	20338.969	0.0
518.3970	74.00	-1.26	18873.860	0.0	38164.095	0.0
518.4127	28.01	.23	116838.330	1.5	136122.610	2.5
518.4143	29.01	-3.11	117928.480	1.0	137212.700	1.0
518.4158	26.00	-2.35	34782.406	5.0	54066.570	4.0
518.4175	21.00	-3.49	18571.400	2.5	37855.500	2.5
518.4180	70.01	-.88	33472.871	0.0	52762.325	0.0
518.4190	45.00	-2.22	7743.122	0.0	27032.538	0.0
518.4265	26.00	-.83	34547.192	2.0	53830.960	3.0
518.4278	25.00	-2.81	33825.490	2.5	53109.210	2.5
518.4458	26.01	-3.97	65580.090	5.5	84863.140	5.5
518.4546	14.00	-4.05	60381.278	1.0	79664.000	1.0
518.4555	24.00	-.63	27500.370	3.0	46783.060	4.0
518.4557	28.00	-.88	29888.505	2.0	49171.187	1.0
518.4590	92.01	-1.90	5323.396	0.0	24611.324	0.0
518.4732	24.00	-3.42	27703.840	4.0	46985.870	5.0
518.4794	30.02	-4.09	280726.900	2.0	300008.700	1.0
518.4794	30.02	-3.92	280726.900	1.0	300008.700	1.0
518.4904	24.00	-4.71	27597.220	3.0	46878.610	3.0
518.4961	7.01	-.06	223731.590	3.0	243012.770	3.0
518.4987	18.01	-3.67	199679.320	3.5	219160.400	2.5
518.5028	24.00	-2.32	28637.000	3.0	47917.930	2.0
518.5058	56.01	-1.55	42355.182	0.0	61641.369	0.0
518.5087	7.01	-1.08	223688.450	2.0	242969.160	1.0
518.5098	17.00	-2.71	83130.900	1.5	102411.570	.5
518.5103	24.01	-3.93	67387.300	2.5	86667.950	1.5
518.5250	69.00	-1.53	8711.012	0.0	27996.485	0.0
518.5404	25.00	-1.70	45130.160	4.5	64409.690	3.5
518.5431	9.00	-2.08	117308.558	1.5	136587.990	1.5
518.5488	27.00	-3.99	32841.990	4.5	52121.210	4.5
518.5520	14.01	-1.82	103556.290	3.5	122835.390	3.5
518.5520	14.01	-.27	103556.290	3.5	122835.390	4.5
518.5555	14.01	-.39	103556.420	2.5	122835.390	3.5
518.5641	25.02	-3.34	115762.600	1.5	135041.250	1.5
518.5808	26.02	-1.94	199884.390	5.0	219162.420	6.0
518.5870	8.01	-3.58	189068.370	1.5	208346.170	.5
518.5880	22.01	-1.49	15265.600	3.5	34543.360	3.5
518.5888	28.01	-.54	116468.400	1.5	135746.130	1.5
518.5897	25.00	-4.04	33825.490	2.5	53103.190	1.5
518.5899	7.00	-2.31	94793.460	1.5	114071.153	1.5
518.6096	24.01	-3.70	47372.750	1.5	66649.710	1.5
518.6144	21.00	-1.99	18504.050	.5	37780.830	1.5
518.6188	22.00	-4.24	24694.895	4.0	43971.513	5.0
518.6192	30.02	-2.98	280772.200	6.0	300048.800	5.0
518.6206	7.01	-.95	225671.220	3.0	244947.770	2.0
518.6273	30.02	-4.79	283632.200	4.0	302908.500	4.0
518.6273	30.02	-3.08	283632.200	5.0	302908.500	4.0
518.6322	22.00	-.73	17075.310	4.0	36351.430	5.0
518.6357	28.01	-3.17	110021.920	4.5	129297.910	3.5
518.6383	9.00	-1.47	117308.558	1.5	136584.450	2.5
518.6552	28.00	-1.74	31441.665	2.0	50716.927	1.0
518.6677	30.02	-2.91	280772.200	7.0	300047.000	6.0
518.6677	30.02	-4.86	280772.200	6.0	300047.000	6.0
518.6682	23.01	-3.38	30318.630	4.0	49593.410	5.0
518.6706	23.02	-2.10	162760.280	4.5	182034.970	4.5
518.6733	26.00	-3.51	34692.130	1.0	53966.720	2.0
518.6807	22.00	-3.53	28596.293	1.0	47870.610	2.0
518.6840	72.00	-.56	22745.421	0.0	42024.982	0.0
518.6920	64.01	-1.07	12582.573	0.0	31861.837	0.0
518.6980	41.00	-2.41	80.658	0.0	19359.699	0.0
518.7030	40.00	-.80	15808.874	0.0	35087.729	0.0
518.7056	28.01	-.00	116191.470	2.5	135464.860	3.5
518.7090	62.00	-1.06	1451.835	0.0	20730.467	0.0
518.7168	28.00	-4.96	36600.805	2.0	55873.780	2.0
518.7188	24.00	-3.48	31355.210	2.0	50628.110	3.0
518.7240	64.01	-.97	12663.231	0.0	31941.306	0.0
518.7315	23.01	-4.53	54144.200	4.0	73416.630	5.0
518.7450	58.01	-.07	9678.902	0.0	28956.196	0.0
518.7452	27.00	-1.77	32841.990	4.5	52113.910	5.5
518.7579	22.00	-3.66	28788.372	4.0	48059.820	3.0
518.7597	23.00	-4.59	20767.570	3.5	40038.950	4.5
518.7627	26.02	-.21	200384.280	3.0	219655.550	2.0
518.7715	18.01	-1.67	190106.230	1.5	209377.170	2.5
518.7726	30.02	-4.40	280837.200	3.0	300108.100	3.0
518.7726	30.02	-3.53	280837.200	4.0	300108.100	3.0
518.7741	9.00	-1.95	117164.006	2.5	136434.850	2.5
518.7750	72.01	-1.70	15002.299	0.0	34278.478	0.0
518.7796	24.01	-4.05	69903.460	3.5	89174.100	3.5
518.7819	28.00	-.49	29888.505	2.0	49159.060	2.0
518.7861	30.02	-3.47	280782.800	3.0	300053.200	2.0
518.7861	30.02	-4.31	280782.800	2.0	300053.200	2.0
518.7864	22.00	-4.20	26494.322	2.0	45764.710	1.0
518.7880	64.00	-.95	6452.602	0.0	25728.298	0.0
518.7908	26.00	-.79	33412.706	3.0	52682.930	2.0
518.7934	18.02	-1.41	207233.090	2.0	226503.220	3.0
518.7947	28.01	-1.87	116191.470	2.5	135461.550	2.5
518.8050	24.01	-4.73	35356.060	1.5	54625.760	2.5
518.8144	24.00	-4.24	25038.610	5.0	44307.960	5.0
518.8163	28.01	-1.22	99559.330	2.5	118828.610	2.5
518.8220	57.01	.04	19599.777	0.0	38874.210	0.0
518.8246	28.01	-3.78	110573.360	2.5	129842.330	2.5
518.8341	17.00	-3.38	82918.893	2.5	102187.510	2.5
518.8349	26.00	-3.06	35856.386	2.0	55124.974	3.0
518.8354	28.01	-4.58	118294.170	3.5	137562.740	3.5
518.8507	30.02	-4.51	283601.800	3.0	302869.800	3.0
518.8507	30.02	-3.20	283601.800	4.0	302869.800	3.0
518.8613	10.00	-1.48	149657.042	3.0	168924.651	2.0
518.8626	28.01	-4.50	89100.490	3.5	108368.050	2.5
518.8682	22.01	-1.09	12758.150	2.5	32025.500	2.5
518.8777	24.00	-4.22	25106.340	3.0	44373.340	3.0
518.8817	25.01	-4.63	82232.180	5.0	101499.030	4.0
518.8833	23.00	-1.69	15270.420	1.5	34537.210	1.5
518.8833	26.02	-4.97	167002.000	2.0	186268.790	2.0
518.8844	20.00	-.19	23652.304	1.0	42919.053	2.0
518.8892	24.01	-3.52	50687.630	2.5	69954.200	2.5
518.8930	73.00	-2.12	12743.888	0.0	32015.684	0.0
518.9035	10.01	-1.73	303071.840	2.5	322337.880	2.5
518.9045	18.00	-3.31	106087.305	1.0	125353.310	1.0
518.9078	28.01	-4.04	114942.420	1.5	134208.300	2.5
518.9095	22.00	-3.42	6661.003	3.0	25926.820	4.0
518.9170	10.01	-.43	303071.840	2.5	322337.380	3.5
518.9200	41.00	-2.04	967.890	0.0	20238.683	0.0
518.9282	9.00	-.95	117164.006	2.5	136429.130	3.5
518.9299	21.00	-2.46	18515.770	1.5	37780.830	1.5
518.9321	23.00	-4.51	15264.830	5.5	34529.810	4.5
518.9342	30.02	-3.18	280861.100	5.0	300126.000	4.0
518.9387	7.00	-1.75	94881.790	3.5	114146.525	2.5
518.9401	25.02	-.83	176683.760	2.5	195948.440	3.5
518.9493	23.02	-4.57	162385.110	3.5	181649.450	3.5
518.9531	17.01	-1.93	131754.800	1.0	151019.000	2.0
518.9620	22.00	-.91	18061.540	1.0	37325.407	2.0
518.9644	24.00	-2.39	31364.330	3.0	50628.110	3.0
518.9789	28.01	-3.58	95573.390	3.5	114836.630	3.5
518.9868	15.00	-1.91	56090.450	1.5	75353.400	1.5
518.9908	30.02	-3.05	283545.600	5.0	302808.400	4.0
518.9910	9.00	-2.85	117164.006	2.5	136426.800	1.5
518.9927	26.02	-3.15	186998.600	4.0	206261.330	4.0
518.9970	23.00	-3.93	26437.680	1.5	45700.250	2.5
519.0043	30.02	-3.02	280861.100	6.0	300123.400	5.0
519.0043	30.02	-4.94	280861.100	5.0	300123.400	5.0
519.0110	23.01	-2.65	30306.400	3.0	49568.450	3.0
519.0296	25.00	-2.15	43644.450	1.5	62905.810	2.5
519.0380	7.01	-.20	223785.510	4.0	243046.560	4.0
519.0388	25.02	-4.49	115780.230	2.5	135041.250	1.5
519.0420	30.02	-3.78	280837.200	4.0	300098.100	4.0
519.0420	30.02	-4.92	280837.200	3.0	300098.100	4.0
519.0667	7.00	-3.35	96864.020	2.5	116124.000	1.5
519.0708	23.00	-.65	19145.130	5.5	38404.960	5.5
519.0880	90.01	-2.52	4032.876	0.0	23297.432	0.0
519.1013	30.02	-2.97	283545.600	6.0	302804.300	5.0
519.1013	30.02	-4.78	283545.600	5.0	302804.300	5.0
519.1080	64.01	-.96	12824.546	0.0	32088.360	0.0
519.1104	18.01	-3.81	189414.960	3.5	208673.320	2.5
519.1204	18.01	-2.45	186890.950	2.5	206148.940	3.5
519.1206	28.00	-1.44	42585.296	4.0	61843.280	5.0
519.1255	23.00	-5.73	14910.040	3.5	34167.840	2.5
519.1368	18.01	-2.26	189437.690	.5	208695.070	1.5
519.1393	15.01	-.31	86744.700	1.0	106001.990	1.0
519.1417	24.01	-3.33	30307.600	1.5	49564.800	1.5
519.1436	25.01	-3.03	82232.180	5.0	101489.310	5.0
519.1440	42.00	.15	31375.775	0.0	50638.253	0.0
519.1450	60.01	-1.28	1613.150	0.0	20875.591	0.0
519.1461	26.00	-.80	24506.902	2.0	43763.938	1.0
519.1576	26.01	-4.74	25787.600	1.5	45044.210	1.5
519.1600	40.01	-.62	14034.408	0.0	33296.293	0.0
519.1603	23.01	-2.40	30641.710	3.0	49898.220	2.0
519.1606	7.00	-2.40	93581.520	.5	112838.020	1.5
519.1636	26.02	-.50	199906.030	6.0	219162.420	6.0
519.1680	58.01	-.53	6936.547	0.0	26198.135	0.0
519.1793	7.00	-2.54	94770.850	.5	114026.654	.5
519.1801	22.00	-1.20	29768.655	2.0	49024.430	3.0
519.1876	30.02	-4.03	280870.500	4.0	300126.000	4.0
519.1876	30.02	-3.82	280870.500	5.0	300126.000	4.0
519.1881	24.00	-2.92	31009.000	3.0	50264.480	3.0
519.1901	22.00	-2.76	12118.394	4.0	31373.801	3.0
519.1964	7.01	-1.08	223731.590	3.0	242986.760	2.0
519.2002	24.00	-.35	27382.180	2.0	46637.210	3.0
519.2016	28.01	-2.45	116145.690	3.5	135400.670	3.5
519.2048	23.00	-1.01	18120.120	.5	37374.980	.5
519.2080	25.02	-.36	174243.330	3.5	193498.070	3.5
519.2086	26.00	-4.77	34636.820	2.0	53891.540	3.0
519.2091	28.02	-2.90	97996.300	3.0	117251.000	3.0
519.2315	27.00	-2.34	33462.830	2.5	52716.700	3.5
519.2324	22.00	-2.59	29661.232	1.0	48915.070	2.0
519.2351	26.00	-.66	24180.848	3.0	43434.585	3.0
519.2374	10.01	-.84	302816.980	1.5	322070.630	2.5
519.2393	27.00	-.43	33449.180	.5	52702.760	1.5
519.2442	30.02	-.28	214357.000	1.0	233610.400	2.0
519.2447	25.02	-1.29	176695.060	4.5	195948.440	3.5
519.2488	26.01	-2.57	65931.460	3.5	85184.690	4.5
519.2490	28.00	-1.22	29832.810	3.0	49086.030	4.0
519.2520	25.02	-4.44	176209.150	1.5	195464.260	.5
519.2547	27.00	-3.02	32841.990	4.5	52095.000	3.5
519.2550	28.01	-3.88	116191.470	2.5	135444.470	3.5
519.2577	30.02	-3.73	280870.500	5.0	300123.400	5.0
519.2617	29.01	-2.35	117666.600	4.0	136919.350	3.0
519.2620	60.01	-.25	9114.300	0.0	28372.401	0.0
519.2720	74.00	-1.62	14840.984	0.0	34098.714	0.0
519.2723	18.00	-2.41	105462.804	3.0	124715.160	3.0
519.2787	22.00	-4.47	27887.740	3.0	47139.860	4.0
519.2941	27.00	-2.17	32781.710	2.5	52033.260	1.5
519.2969	22.00	-.68	170.132	3.0	19421.576	3.0
519.3011	23.00	.05	18680.120	5.5	37931.410	5.5
519.3080	41.00	-2.03	1532.493	0.0	20788.888	0.0
519.3089	17.01	-3.15	131768.000	2.0	151019.000	2.0
519.3140	45.00	.74	28391.447	0.0	47647.620	0.0
519.3292	23.00	-4.67	30864.340	5.5	50114.590	5.5
519.3310	24.01	-4.83	55023.300	2.5	74273.480	1.5
519.3318	24.00	-1.78	31377.960	4.0	50628.110	3.0
519.3356	28.01	-1.69	99559.330	2.5	118809.340	1.5
519.3405	27.00	-4.55	33466.870	3.5	52716.700	3.5
519.3408	23.01	-3.84	30318.630	4.0	49568.450	3.0
519.3413	28.01	-4.56	110021.920	4.5	129271.720	3.5
519.3426	23.01	-2.31	20363.220	6.0	39612.970	5.0
519.3480	24.00	-2.73	27597.220	3.0	46846.770	3.0
519.3520	76.00	-2.00	10969.423	0.0	30224.187	0.0
519.3599	23.02	.48	141990.910	6.5	161240.020	5.5
519.3599	23.00	-.91	18174.060	1.5	37423.170	1.5
519.3707	23.00	-1.56	18126.270	1.5	37374.980	.5
519.3730	22.00	-4.03	26564.385	3.0	45813.010	2.0
519.3745	10.02	-3.29	379834.000	1.0	399062.570	1.0
519.3815	22.00	-.43	18911.399	2.0	38159.710	3.0
519.3839	28.01	-3.83	111783.790	3.5	131032.010	2.5
519.3840	90.01	-3.09	0.000	0.0	19253.577	0.0
519.3845	25.01	-3.65	62564.700	1.0	81812.900	2.0
519.3909	26.02	-3.14	69836.830	3.0	89084.790	3.0
519.3920	28.01	-2.52	118314.820	2.5	137562.740	3.5
519.3961	22.00	-3.46	8492.421	1.0	27740.190	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
519.3990	73.00	-1.57	17260.709	0.0	36513.730	0.0
519.4034	22.00	-.57	16961.420	3.0	36208.920	4.0
519.4049	18.00	-3.00	106087.305	1.0	125334.750	0.0
519.4121	28.00	-1.73	42585.296	4.0	61832.470	4.0
519.4154	22.00	-3.59	26910.705	6.0	46157.760	5.0
519.4160	26.02	-4.31	69837.760	2.0	89084.790	3.0
519.4351	10.01	-3.37	302829.060	4.5	322075.380	4.5
519.4384	26.02	-4.68	179893.560	5.0	199139.760	5.0
519.4438	17.01	-2.65	158177.100	1.0	177423.100	1.0
519.4492	30.02	-3.87	280837.200	3.0	300083.000	3.0
519.4492	30.02	-3.63	280837.200	4.0	300083.000	3.0
519.4514	23.00	-3.33	19078.150	3.5	38323.870	4.5
519.4530	18.01	-1.67	188766.150	2.5	208011.810	1.5
519.4814	23.00	-.17	18513.460	4.5	37758.070	4.5
519.4894	25.02	-4.79	94850.660	1.5	114094.970	1.5
519.4911	23.00	-.65	18258.890	2.5	37503.140	2.5
519.4921	10.01	-2.75	302831.170	3.5	322075.380	4.5
519.4932	10.01	-3.78	302831.170	3.5	322075.340	3.5
519.4944	26.00	-2.19	12560.933	3.0	31805.059	3.0
519.5020	44.00	-1.29	8711.012	0.0	27960.216	0.0
519.5110	59.01	-1.01	8872.327	0.0	28121.198	0.0
519.5253	7.00	-2.93	96864.020	2.5	116107.000	1.5
519.5310	59.01	-1.18	6371.944	0.0	25620.074	0.0
519.5380	23.00	-.39	18372.460	3.5	37614.970	3.5
519.5407	25.00	-3.42	25281.040	2.5	44523.450	3.5
519.5453	26.00	-.45	34039.495	4.0	53281.735	5.0
519.5600	60.00	-.74	2339.068	0.0	21586.123	0.0
519.5630	74.00	-.58	25810.406	0.0	45057.350	0.0
519.5637	26.02	-3.55	179579.830	5.0	198821.390	6.0
519.5740	23.00	-4.30	26397.360	.5	45638.540	1.5
519.5820	90.00	-1.55	4920.109	0.0	24166.349	0.0
519.5840	41.00	-2.14	1129.205	0.0	20375.371	0.0
519.5869	25.01	-2.93	62572.200	2.0	81812.900	2.0
519.5918	26.02	-.13	200325.560	4.0	219566.080	3.0
519.5942	27.00	-.81	32027.500	3.5	51267.930	4.5
519.5979	7.00	-2.02	94830.860	2.5	114071.153	1.5
519.6007	7.00	-3.30	96750.810	1.5	115991.000	2.5
519.6062	26.00	-.89	34328.733	3.0	53568.720	2.0
519.6077	27.00	-3.82	33462.830	2.5	52702.760	1.5
519.6085	23.03	-2.32	264482.800	2.0	283722.700	1.0
519.6169	23.01	-9.86	17910.980	4.0	37150.570	4.0
519.6188	10.01	-2.17	302829.060	4.5	322068.580	5.5
519.6277	7.00	-2.89	96750.810	1.5	115990.000	.5
519.6277	7.00	-2.19	96750.810	1.5	115990.000	1.5
519.6277	7.00	-2.30	96750.810	1.5	115990.000	2.5
519.6315	24.00	-2.15	35862.820	4.0	55101.870	3.0
519.6341	22.00	-4.95	7255.369	2.0	26494.322	2.0
519.6355	30.02	-3.43	280837.200	3.0	300076.100	2.0
519.6409	11.02	-1.42	399179.400	2.5	418418.100	1.5
519.6430	39.01	-1.21	14034.408	0.0	33278.389	0.0
519.6463	24.00	-2.72	28679.430	1.0	47917.930	2.0
519.6482	24.00	-.49	27816.880	5.0	47055.310	5.0
519.6485	21.00	-4.24	25584.640	2.5	44823.060	1.5
519.6496	24.00	-3.55	21847.880	2.0	41086.260	3.0
519.6590	24.00	-1.85	27816.880	5.0	47054.910	4.0
519.6593	25.00	-.99	25285.430	4.5	44523.450	3.5
519.6610	71.00	-.50	18389.915	0.0	37633.229	0.0
519.6655	10.01	-4.92	302829.060	4.5	322066.850	3.5
519.6669	23.00	-3.69	26505.880	2.5	45743.620	3.5
519.6701	16.01	-2.30	114162.200	.5	133399.820	1.5
519.6706	30.02	-3.51	280870.500	4.0	300108.100	3.0
519.6774	10.01	-4.38	302831.170	3.5	322068.520	4.5
519.6809	28.01	-3.21	117662.110	1.5	136899.330	1.5
519.6823	24.01	-3.67	65257.030	3.5	84494.200	2.5
519.6825	24.01	-2.57	55081.700	1.5	74318.860	2.5
519.6869	30.02	-3.90	280861.100	5.0	300098.100	4.0
519.7055	20.02	-1.32	343784.960	1.0	363021.270	2.0
519.7083	26.00	-3.55	32133.977	2.0	51370.184	2.0
519.7098	24.00	-1.97	31028.330	2.0	50264.480	3.0
519.7104	24.01	-3.92	50667.330	3.5	69903.460	3.5
519.7157	28.00	-.86	31441.665	2.0	50677.599	3.0
519.7179	22.00	-3.86	26657.409	4.0	45893.260	3.0
519.7206	24.00	-1.81	28682.180	2.0	47917.930	2.0
519.7217	25.00	-1.88	25287.740	3.5	44523.450	3.5
519.7225	10.01	-4.23	302831.170	3.5	322066.850	3.5
519.7301	25.01	-1.93	82232.180	5.0	101467.580	6.0
519.7301	11.02	-2.40	399182.700	1.5	418418.100	1.5
519.7355	26.02	-1.80	179904.560	6.0	199139.760	5.0
519.7502	22.00	-3.71	26772.965	5.0	46007.620	4.0
519.7509	26.01	-3.21	48039.230	2.5	67273.860	1.5
519.7558	10.01	-1.21	302816.980	1.5	322051.430	2.5
519.7560	26.01	-2.39	26055.400	2.5	45289.840	1.5
519.7673	22.00	-3.92	28702.768	3.0	47936.790	3.0
519.7688	10.01	-1.56	302816.980	1.5	322050.950	1.5
519.7770	64.00	0.00	7017.204	0.0	26256.224	0.0
519.7897	7.00	-2.54	94793.460	1.5	114026.654	.5
519.7914	26.00	-1.92	34692.130	1.0	53925.260	1.0
519.7971	24.00	-1.59	45707.360	6.0	64940.280	7.0
519.8070	60.00	-.89	1048.548	0.0	20286.457	0.0
519.8125	27.00	-4.76	35450.560	3.5	54682.910	4.5
519.8133	23.00	-3.22	20767.570	3.5	39999.890	2.5
519.8153	22.00	-2.46	27418.015	2.0	46650.260	3.0
519.8260	10.01	-2.91	302843.530	3.5	322075.380	4.5
519.8280	22.00	-4.09	28638.832	2.0	47870.610	2.0
519.8368	28.01	-1.29	116261.810	.5	135493.260	1.5
519.8395	10.01	-2.42	302839.280	2.5	322070.630	2.5
519.8398	24.00	-3.91	35870.530	4.0	55101.870	3.0
519.8427	10.01	-3.14	302844.110	2.5	322075.340	3.5
519.8463	10.01	-.69	302839.280	2.5	322070.380	3.5
519.8465	10.01	-1.93	302192.920	4.5	321424.010	4.5
519.8476	10.01	-.20	302192.920	4.5	321423.970	5.5
519.8509	28.01	-4.59	79923.880	4.5	99154.810	4.5
519.8555	22.00	-3.27	18593.990	3.0	37824.748	4.0
519.8666	28.01	-4.26	116824.150	2.5	136054.500	1.5
519.8715	26.00	-2.29	17927.378	1.0	37157.546	2.0
519.8839	22.00	-3.92	28788.372	4.0	48018.080	4.0
519.8855	26.00	-4.13	28604.610	2.0	47834.260	3.0
519.8901	24.00	-3.41	28637.000	3.0	47866.480	4.0
519.8911	16.01	-.83	131028.760	1.5	150258.200	.5
519.8922	18.01	-1.73	186890.950	2.5	206120.350	2.5
519.8944	24.00	-4.43	21856.940	3.0	41086.260	3.0
519.8952	25.00	-3.29	43524.080	3.5	62753.370	2.5
519.8972	18.00	-3.33	105462.804	3.0	124692.020	2.0
519.9044	22.00	-5.30	8436.618	0.0	27665.570	1.0
519.9160	90.00	-1.39	3790.903	0.0	23024.779	0.0
519.9210	64.01	-1.03	12985.861	0.0	32219.552	0.0
519.9225	23.00	-9.35	10892.500	3.5	30120.760	2.5
519.9409	30.02	-4.14	280870.500	4.0	300098.100	4.0
519.9409	30.02	-3.25	280870.500	5.0	300098.100	4.0
519.9409	17.01	-3.37	150019.000	0.0	169246.600	1.0
519.9501	7.01	-1.38	223785.510	4.0	243012.770	3.0
519.9517	26.00	-3.52	31307.235	4.0	50534.435	3.0
519.9628	24.01	-3.55	70394.460	4.5	89621.250	3.5
519.9642	23.01	-3.63	18293.870	2.0	37520.610	3.0
519.9701	26.00	-3.44	28604.610	2.0	47831.132	2.0
519.9715	27.00	-4.66	23207.760	1.5	42434.230	2.5
519.9829	7.00	-1.90	93581.520	.5	112807.567	.5
519.9869	30.02	-3.93	280782.800	2.0	300008.700	1.0
519.9870	44.00	.81	29036.707	0.0	48267.957	0.0
520.0004	25.01	-2.99	62587.500	3.0	81812.900	2.0
520.0088	23.00	-1.53	18198.080	2.5	37423.170	1.5
520.0091	23.01	-3.13	30673.140	2.0	49898.220	2.0
520.0115	10.01	-2.65	302843.530	3.5	322068.520	4.5
520.0170	42.01	-.50	21454.900	0.0	40685.041	0.0
520.0207	24.00	-.56	27300.190	1.0	46524.840	2.0
520.0365	28.00	-.69	32973.414	4.0	52197.482	3.0
520.0410	39.01	-1.05	7904.437	0.0	27133.690	0.0
520.0464	25.03	-4.80	152858.200	3.0	172081.900	3.0
520.0543	22.00	-4.09	28896.062	5.0	48119.470	5.0
520.0550	64.01	-.39	19841.750	0.0	39070.485	0.0
520.0567	10.01	-3.76	302843.530	3.5	322066.850	3.5
520.0590	62.00	-.31	1451.835	0.0	20680.423	0.0
520.0697	28.01	-4.27	99340.550	3.5	118563.390	3.5
520.0716	10.01	-4.12	302844.110	2.5	322066.880	2.5
520.0724	10.01	-3.38	302844.110	2.5	322066.850	3.5
520.0732	6.00	-3.97	70743.950	1.0	89966.660	2.0
520.0740	42.01	-1.26	18228.600	0.0	37456.633	0.0
520.0848	23.00	-2.39	19023.470	4.5	38245.750	3.5
520.0870	29.00	-.77	43716.376	0.0	62943.928	0.0
520.0873	7.00	-3.22	96750.810	1.5	115973.000	1.5
520.0960	63.00	.10	15808.874	0.0	35036.094	0.0
520.0978	16.01	.15	121528.200	1.5	140750.000	1.5
520.1038	28.01	.59	116732.510	2.5	135954.090	3.5
520.1119	22.00	-.59	16875.190	2.0	36096.470	3.0
520.1124	26.02	-.55	199701.820	3.0	218923.080	3.0
520.1150	40.00	-1.72	4355.506	0.0	23582.023	0.0
520.1328	16.01	-.80	121529.490	2.5	140750.000	1.5
520.1352	20.02	-.12	340580.150	3.0	359800.570	3.0
520.1419	23.00	-4.29	20202.490	2.5	39422.660	2.5
520.1470	82.00	-.70	29278.680	0.0	48504.014	0.0
520.1492	24.01	-2.10	69954.200	2.5	89174.100	3.5
520.1598	7.00	-3.22	93581.520	.5	112801.031	1.5
520.1625	23.00	-3.28	19026.340	2.5	38245.750	3.5
520.1696	10.01	-1.09	302831.800	.5	322050.950	1.5
520.2007	23.00	-8.40	14910.040	3.5	34128.040	3.5
520.2069	24.01	-4.07	70107.830	4.5	89325.600	4.5
520.2112	26.02	-.76	200437.940	2.0	219655.550	2.0
520.2120	44.00	-.51	19922.407	0.0	39145.339	0.0
520.2190	18.01	-1.46	190196.160	.5	209413.480	1.5
520.2234	10.01	-.81	302839.280	2.5	322056.440	3.5
520.2237	26.00	-1.51	34328.733	3.0	53545.882	3.0
520.2245	26.02	-1.83	186454.890	5.0	205672.010	4.0
520.2340	26.00	-2.00	17550.180	3.0	36766.950	3.0
520.2445	23.00	-3.78	15270.420	1.5	34486.800	2.5
520.2548	30.02	-4.92	280837.200	3.0	300053.200	2.0
520.2594	24.01	-2.37	50687.630	2.5	69903.460	3.5
520.2630	76.00	-1.27	10082.190	0.0	29303.238	0.0
520.2656	24.00	-2.80	37233.500	5.0	56449.100	6.0
520.2678	10.01	-2.19	302192.920	4.5	321408.440	3.5
520.2730	62.01	-2.17	2661.698	0.0	21882.376	0.0
520.2881	28.01	-4.23	116167.760	1.5	135382.530	1.5
520.2927	23.01	-2.59	20980.920	2.0	40195.520	3.0
520.3127	28.01	-3.83	114942.420	1.5	134156.280	1.5
520.3152	28.01	-3.26	112906.930	1.5	132120.700	.5
520.3163	22.00	-2.44	18145.400	2.0	37359.130	2.0
520.3220	41.00	-1.58	8630.355	0.0	27849.223	0.0
520.3230	76.00	-2.02	11292.053	0.0	30510.884	0.0
520.3238	27.00	-2.42	25568.680	5.5	44782.130	4.5
520.3260	74.00	-1.07	19438.462	0.0	38657.183	0.0
520.3352	10.01	-2.85	302192.920	4.5	321405.950	3.5
520.3496	30.02	-3.59	280870.500	4.0	300083.000	3.0
520.3496	18.01	-2.96	186890.950	2.5	206103.450	1.5
520.3542	10.01	-1.06	302192.920	4.5	321405.250	4.5
520.3591	10.01	-1.44	302839.280	2.5	322051.430	2.5
520.3618	23.00	-4.40	20789.130	2.5	40001.180	3.5
520.3677	26.00	-3.16	31322.603	3.0	50534.435	3.0
520.3721	10.01	-2.80	302839.280	2.5	322050.950	1.5
520.3783	23.00	-4.85	30771.720	4.5	49983.160	5.5
520.3788	28.00	-1.23	42621.048	3.0	61832.470	4.0
520.3793	22.00	-3.79	19937.859	1.0	39149.260	2.0
520.3967	23.00	-4.51	20789.130	2.5	39999.890	2.5
520.4084	18.01	-4.13	183797.360	2.5	203007.690	1.5
520.4092	15.02	.10	172429.200	2.5	191639.500	1.5
520.4092	15.02	-.85	172429.200	1.5	191639.500	1.5
520.4150	57.01	-.30	18470.572	0.0	37686.006	0.0
520.4327	21.00	-4.62	18571.400	2.5	37780.830	1.5
520.4380	60.00	-.97	0.000	0.0	19214.585	0.0
520.4390	28.01	-1.73	116191.470	2.5	135400.670	3.5
520.4441	18.01	-2.45	173347.830	1.5	192556.840	2.5
520.4479	18.01	-1.99	189040.870	1.5	208249.740	1.5
520.4506	24.00	-.27	7593.160	2.0	26801.930	1.0
520.4510	74.00	-.86	20325.695	0.0	39539.800	0.0
520.4579	25.01	-4.37	62572.200	2.0	81780.700	3.0
520.4584	26.00	-4.23	704.003	2.0	19912.486	2.0
520.4585	23.00	-3.52	26604.770	3.5	45813.250	4.5
520.4587	26.02	-.37	199884.390	5.0	219092.860	5.0
520.4621	22.00	-3.37	20006.032	2.0	39214.380	3.0
520.4642	15.01	-2.01	105224.830	0.0	124433.100	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
520.4698	26.00	-4.06	23783.617	5.0	42991.680	5.0
520.4904	17.00	-3.66	83894.037	3.5	103101.340	2.5
520.4910	28.01	-4.47	116824.150	2.5	136031.430	2.5
520.4950	26.00	-4.35	24118.815	4.0	43325.946	3.0
520.4991	23.00	-2.46	15270.420	1.5	34477.400	.5
520.5021	21.00	-1.30	17918.850	.5	37125.720	.5
520.5116	29.01	-2.87	117130.360	2.0	136336.880	1.0
520.5122	7.01	-2.21	203537.660	1.0	222744.160	1.0
520.5130	41.00	-1.78	9275.615	0.0	28487.431	0.0
520.5520	58.01	-1.04	10001.532	0.0	29211.909	0.0
520.5720	39.01	-.82	8227.067	0.0	27436.706	0.0
520.5747	25.00	-3.02	43428.580	4.5	62632.770	3.5
520.5799	28.01	-3.59	100592.980	3.5	119796.980	2.5
520.5815	24.00	-4.83	31049.330	6.0	50253.270	5.0
520.5955	26.00	-4.00	26224.961	3.0	45428.385	4.0
520.5962	28.01	-4.70	77332.470	2.5	96535.870	3.5
520.5979	7.00	-3.62	96787.650	1.5	115991.000	2.5
520.5994	28.01	-1.77	96535.870	3.5	115739.150	4.5
520.6037	24.00	-.06	7593.160	2.0	26796.280	2.0
520.6119	22.00	-.36	20062.980	1.0	39265.600	2.0
520.6154	28.01	-4.35	98561.220	2.5	117763.910	1.5
520.6190	74.00	-.93	19680.435	0.0	38888.339	0.0
520.6246	7.00	-4.77	96787.650	1.5	115990.000	.5
520.6246	7.00	-3.37	96787.650	1.5	115990.000	1.5
520.6317	28.01	-1.68	116468.400	1.5	135670.490	.5
520.6376	24.00	-2.43	31009.000	3.0	50210.870	4.0
520.6409	25.00	-3.89	38934.940	2.5	58136.690	3.5
520.6440	63.00	.24	16534.792	0.0	35741.774	0.0
520.6470	71.00	-2.80	1935.780	0.0	21142.651	0.0
520.6498	25.02	-4.21	176390.670	2.5	195592.090	1.5
520.6560	59.01	-.78	7581.807	0.0	26788.346	0.0
520.6561	24.00	-3.64	27703.840	4.0	46905.030	4.0
520.6612	27.01	-6.11	27585.300	1.0	46786.300	1.0
520.6612	30.02	-.60	217846.800	2.0	237047.800	2.0
520.6634	23.00	-.92	18174.060	1.5	37374.980	.5
520.6648	23.00	-1.65	18302.270	3.5	37503.140	2.5
520.6650	23.00	-4.04	26437.680	1.5	45638.540	1.5
520.6672	18.01	-2.57	199959.620	2.5	219160.400	2.5
520.6726	28.01	-.18	116312.340	1.5	135512.920	2.5
520.6740	23.00	-2.50	23353.090	3.5	42553.620	4.5
520.6787	26.00	-2.06	34547.192	2.0	53747.547	3.0
520.6959	26.02	-.50	199804.810	4.0	219004.530	4.0
520.7054	16.01	-1.45	114200.450	1.5	133399.820	1.5
520.7161	18.00	-2.16	106087.305	1.0	125286.280	1.0
520.7182	23.03	-1.08	264902.200	3.0	284101.100	3.0
520.7195	22.00	-3.37	6598.749	2.0	25797.600	3.0
520.7212	24.00	-.32	45741.490	7.0	64940.280	7.0
520.7315	28.01	-4.01	114869.350	1.5	134067.760	1.5
520.7351	22.00	-1.37	29661.232	1.0	48859.510	1.0
520.7393	24.00	-2.00	28679.430	1.0	47877.550	1.0
520.7654	23.00	-1.05	19023.470	4.5	38220.630	5.5
520.7741	28.01	-2.28	117763.910	1.5	136960.750	2.5
520.7838	25.02	-1.78	176265.780	1.5	195462.260	.5
520.7865	22.00	-.77	16817.190	1.0	36013.570	2.0
520.7900	59.01	-1.32	6371.944	0.0	25573.542	0.0
520.7941	26.00	-2.82	29320.050	1.0	48516.150	1.0
520.7958	9.00	-1.30	117391.950	.5	136587.990	1.5
520.7982	24.00	-4.30	25177.390	4.0	44373.340	3.0
520.8086	22.00	-1.02	26494.322	2.0	45689.890	3.0
520.8112	24.00	-2.08	21847.880	2.0	41043.350	3.0
520.8139	24.00	-2.34	28682.180	2.0	47877.550	1.0
520.8356	28.01	-4.67	97273.830	2.5	116468.400	1.5
520.8386	29.01	-3.70	117883.140	4.0	137077.600	3.0
520.8411	23.00	-3.97	26505.880	2.5	45700.250	2.5
520.8419	24.00	.09	7593.160	2.0	26787.500	3.0
520.8422	23.00	-4.45	23210.560	2.5	42404.890	3.5
520.8479	26.02	-2.80	179579.830	5.0	198773.950	5.0
520.8503	24.01	-3.81	70427.220	3.5	89621.250	3.5
520.8563	26.00	-3.52	31686.342	2.0	50880.152	1.0
520.8601	26.00	-1.13	26140.164	3.0	45333.834	2.0
520.8609	24.00	-3.93	25106.340	3.0	44299.980	2.0
520.8631	24.01	-4.45	45730.740	2.5	64924.300	3.5
520.8720	24.00	-3.05	31364.330	3.0	50557.560	4.0
520.8728	25.01	-3.35	62587.500	3.0	81780.700	3.0
520.8739	23.02	-.44	141488.320	4.5	160681.480	3.5
520.8837	24.00	-2.56	8307.570	4.0	27500.370	3.0
520.8966	26.00	-4.53	21038.987	2.0	40231.312	2.0
520.9070	47.00	.79	29359.337	0.0	48556.622	0.0
520.9114	24.01	-4.22	55081.700	1.5	74273.480	1.5
520.9225	28.01	-4.81	117763.910	1.5	136955.280	.5
520.9300	40.00	-.78	12421.258	0.0	31617.695	0.0
520.9309	28.01	-3.49	116191.470	2.5	135382.530	1.5
520.9467	28.01	-4.71	118563.390	3.5	137753.870	4.5
520.9611	17.00	-2.59	82918.893	2.5	102108.640	1.5
520.9757	18.01	-4.12	154203.970	3.5	173393.380	2.5
520.9868	13.01	-4.92	123418.000	3.0	142607.000	2.0
520.9890	26.00	-3.15	26105.908	6.0	45294.830	5.0
521.0039	27.00	-1.32	27497.060	2.5	46685.430	1.5
521.0221	30.02	-3.98	280861.100	5.0	300048.800	5.0
521.0283	22.00	-3.19	26772.965	5.0	45960.439	6.0
521.0340	58.01	-1.45	7662.464	0.0	26855.069	0.0
521.0357	24.00	-1.66	45614.880	4.0	64802.080	5.0
521.0386	22.00	-.55	386.874	4.0	19573.968	4.0
521.0439	23.00	-4.85	20812.990	1.5	39999.890	2.5
521.0440	42.00	-2.28	12259.943	0.0	31452.180	0.0
521.0458	26.02	.39	199906.030	6.0	219092.860	5.0
521.0480	18.00	-2.29	105462.804	3.0	124649.549	3.0
521.0490	64.01	-.94	12985.861	0.0	32177.914	0.0
521.0512	21.00	.41	20237.100	4.5	39423.730	4.5
521.0536	25.02	-.48	174048.890	2.5	193235.430	2.5
521.0558	21.00	-4.50	11520.150	1.5	30706.610	1.5
521.0572	24.00	-1.09	21856.940	3.0	41043.350	3.0
521.0659	28.01	-4.23	114970.190	.5	134156.280	1.5
521.0705	28.01	-4.63	118828.610	2.5	138014.530	2.5
521.0710	30.02	-3.92	280861.100	6.0	300047.000	6.0
521.0824	24.01	-4.57	32603.730	2.5	51789.210	3.5
521.0835	27.00	-.44	33449.180	.5	52634.620	.5
521.0846	24.01	-2.99	30307.600	1.5	49493.000	.5
521.0846	24.00	-1.64	45566.020	3.0	64751.420	4.0
521.0859	7.00	-3.00	96787.650	1.5	115973.000	1.5
521.0946	24.00	-2.87	35807.900	2.0	54992.930	2.0
521.1014	21.00	-4.39	25724.720	3.5	44909.500	2.5
521.1023	28.01	-3.03	119656.250	3.5	138841.000	3.5
521.1082	28.01	-1.48	116468.400	1.5	135652.930	1.5
521.1209	22.00	-3.39	6742.757	4.0	25926.820	4.0
521.1211	26.00	-3.39	27543.000	1.0	46727.055	2.0
521.1230	90.00	-1.69	3790.903	0.0	22980.231	0.0
521.1278	21.00	-.43	20239.920	3.5	39423.730	4.5
521.1441	23.02	-.94	141196.430	2.5	160379.640	2.5
521.1520	45.00	.20	30891.830	0.0	50080.090	0.0
521.1544	22.01	-1.47	20891.880	3.5	40074.710	3.5
521.1590	24.00	-4.34	33934.880	3.0	53117.540	4.0
521.1590	70.00	-.28	25084.489	0.0	44272.491	0.0
521.1655	28.01	-3.91	102742.740	1.5	121925.160	.5
521.1688	27.00	-.80	33674.380	2.5	52856.680	3.5
521.1816	27.00	-.13	31871.150	3.5	51052.980	3.5
521.1821	26.02	-2.78	186998.600	4.0	206180.410	3.0
521.1824	26.02	-.69	200384.280	3.0	219566.080	3.0
521.1860	42.00	-1.03	20164.380	0.0	39351.388	0.0
521.1860	57.00	-.11	4032.876	0.0	23219.884	0.0
521.2063	28.01	-1.49	116312.340	1.5	135493.260	1.5
521.2063	25.02	-.47	174575.870	3.5	193756.790	4.5
521.2101	23.00	-4.99	30694.340	3.5	49875.120	4.5
521.2229	24.00	-2.37	26787.500	3.0	45967.810	2.0
521.2229	16.01	-.80	121528.200	1.5	140708.510	2.5
521.2297	10.01	-1.72	302890.570	2.5	322070.630	2.5
521.2311	22.00	-.63	18145.400	2.0	37325.407	2.0
521.2365	10.01	-.86	302890.570	2.5	322070.380	3.5
521.2370	60.01	-1.49	1613.150	0.0	20796.281	0.0
521.2422	24.00	-2.40	31377.960	4.0	50557.560	4.0
521.2530	24.00	-3.32	35813.730	3.0	54992.930	2.0
521.2580	16.01	.34	121529.490	2.5	140708.510	2.5
521.2655	23.00	-5.01	14949.300	4.5	34128.040	3.5
521.2655	23.00	-1.96	19145.130	5.5	38323.870	4.5
521.2691	24.01	-3.42	65029.670	.5	84208.280	.5
521.2691	27.00	-.12	28345.860	4.5	47524.470	4.5
521.2723	23.02	-1.10	141987.320	3.5	161165.810	2.5
521.2730	45.00	-1.99	11856.655	0.0	31040.461	0.0
521.2732	18.01	-1.51	199981.940	1.5	219160.400	2.5
521.2736	7.00	-2.28	93581.520	.5	112759.966	1.5
521.2740	73.00	-2.95	0.000	0.0	19183.769	0.0
521.2780	29.00	-1.29	44442.294	0.0	63625.916	0.0
521.2790	74.00	.05	28633.420	0.0	47817.005	0.0
521.2927	21.00	-2.08	17947.980	1.5	37125.720	.5
521.2996	20.02	-.22	371274.480	2.0	390451.970	3.0
521.3020	24.00	-3.41	28637.000	3.0	47814.400	3.0
521.3047	25.02	-3.62	121117.140	3.5	140294.440	3.5
521.3074	23.01	-3.83	18353.890	3.0	37531.090	4.0
521.3075	22.00	-.97	17995.750	0.0	37172.947	1.0
521.3109	24.01	-4.26	35607.600	3.5	54784.670	3.5
521.3156	23.00	-1.94	18438.070	4.5	37614.970	3.5
521.3156	14.00	-4.32	60487.103	1.0	79664.000	1.0
521.3230	60.00	-.29	2339.068	0.0	21521.034	0.0
521.3316	27.00	-4.52	36092.440	2.5	55268.750	3.5
521.3317	22.00	-3.27	20126.055	3.0	39302.360	4.0
521.3329	26.00	-2.03	35379.189	5.0	54555.450	4.0
521.3337	10.01	-.29	302247.780	3.5	321424.010	4.5
521.3346	30.02	-4.20	283632.200	4.0	302808.400	4.0
521.3430	44.00	.51	28310.790	0.0	47492.020	0.0
521.3479	28.01	-2.35	119665.290	2.5	138841.000	3.5
521.3629	23.00	-1.25	15571.900	2.5	34747.060	3.5
521.3641	22.00	-3.26	26892.926	3.0	46068.040	4.0
521.3645	24.00	-2.47	31009.000	3.0	50184.100	2.0
521.3647	22.00	-3.33	26657.409	4.0	45832.500	5.0
521.3705	27.00	-1.78	27497.060	2.5	46671.940	2.5
521.3790	26.00	-2.41	31805.059	3.0	50979.627	4.0
521.3898	24.01	-3.44	35610.500	4.5	54784.670	3.5
521.3999	29.01	-2.70	115569.200	5.0	134743.000	4.0
521.4004	23.02	-.96	141507.700	3.5	160681.480	3.5
521.4140	24.00	-1.56	27176.220	1.0	46349.500	2.0
521.4176	22.00	-4.43	8492.421	1.0	27665.570	1.0
521.4205	23.00	-4.08	20789.130	2.5	39962.170	2.5
521.4211	24.00	-1.60	45663.280	5.0	64836.300	6.0
521.4240	10.01	-2.36	302247.780	3.5	321420.690	2.5
521.4371	26.01	-4.48	44915.070	3.5	64087.500	2.5
521.4453	24.00	-1.54	21810.840	1.0	40982.970	2.0
521.4461	30.02	-4.13	283632.200	5.0	302804.300	5.0
521.4466	27.00	-.48	32027.500	3.5	51199.580	3.5
521.4526	26.01	-3.05	66012.830	4.5	85184.690	4.5
521.4572	10.01	-2.50	302903.650	2.5	322075.340	3.5
521.4610	26.00	-2.13	34636.820	2.0	53808.370	1.0
521.4616	24.00	-2.52	26796.280	2.0	45967.810	2.0
521.4730	27.00	-.17	31871.150	3.5	51042.260	2.5
521.4740	18.00	-3.25	105617.315	2.0	124788.390	1.0
521.4790	45.00	-.02	28391.447	0.0	47567.675	0.0
521.4877	24.00	-1.10	36034.220	3.0	55204.790	3.0
521.4974	22.00	-1.80	27480.047	3.0	46650.260	3.0
521.5092	18.01	-3.26	139258.250	.5	158428.030	.5
521.5100	63.00	.69	13711.778	0.0	32886.866	0.0
521.5179	20.02	-2.11	328588.760	3.0	347758.220	2.0
521.5187	26.00	-1.14	26339.682	2.0	45509.112	1.0
521.5198	22.00	-4.86	19937.859	1.0	39107.250	1.0
521.5285	16.01	-2.00	114230.750	2.5	133399.820	1.5
521.5307	24.00	-1.81	27816.880	5.0	46985.870	5.0
521.5473	27.00	-3.73	15184.040	2.5	34352.420	1.5
521.5576	27.00	-2.80	25937.590	4.5	45105.590	3.5
521.5723	21.00	-2.05	17918.850	.5	37086.310	1.5
521.5761	23.00	-4.39	24898.730	2.5	44066.050	3.5
521.5767	25.01	-3.06	62564.700	1.0	81732.000	1.0
521.5840	26.01	-2.12	65696.110	4.5	84863.140	5.5
521.5925	23.01	-2.48	18353.890	3.0	37520.610	3.0
521.6153	24.00	-2.73	26801.930	1.0	45967.810	2.0
521.6156	10.01	-.63	302890.570	2.5	322056.440	3.5
521.6269	18.00	-2.29	105617.315	2.0	124762.770	1.0
521.6277	26.00	-2.25	12968.552	2.0	32133.977	2.0
521.6365	29.01	-2.50	118484.000	3.0	137649.100	2.0
521.6444	25.00	-2.84	43314.230	5.5	62479.040	4.5
521.6473	28.00	-1.23	30163.140	2.0	49327.845	2.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
521.6480	24.00	-3.62	38537.680	5.0	57702.360	5.0
521.6581	10.01	-2.22	302902.570	1.5	322066.880	2.5
521.6589	23.00	-.72	18258.890	2.5	37423.170	1.5
521.6621	24.00	-1.66	31393.400	5.0	50557.560	4.0
521.6757	25.02	-1.97	121117.140	3.5	140280.800	4.5
521.6760	59.01	-2.12	4032.876	0.0	23201.862	0.0
521.6812	18.01	-.84	173393.380	2.5	192556.840	2.5
521.6874	10.01	-3.38	302903.650	2.5	322066.880	2.5
521.6882	10.01	-2.24	302903.650	2.5	322066.850	3.5
521.6956	28.01	-4.44	101740.270	3.5	120903.200	3.5
521.6997	18.01	-2.73	183090.810	1.5	202253.590	1.5
521.7147	28.01	-4.14	116468.400	1.5	135630.630	2.5
521.7187	18.01	-2.51	190106.230	1.5	209268.310	1.5
521.7291	24.01	-4.24	65156.840	2.5	84318.540	1.5
521.7359	23.01	-4.34	20242.320	4.0	39403.770	4.0
521.7396	26.00	-1.30	25899.974	4.0	45061.287	3.0
521.7480	64.00	-1.43	967.890	0.0	20134.231	0.0
521.7519	10.01	-1.48	302890.570	2.5	322051.430	2.5
521.7563	12.02	-1.26	564289.800	1.0	583450.500	1.0
521.7563	12.02	-1.26	564289.800	1.0	583450.500	1.0
521.7574	10.01	-1.39	302247.780	3.5	321408.440	3.5
521.7577	23.00	-4.76	30771.720	4.5	49932.370	4.5
521.7612	28.01	-4.51	116893.980	2.5	136054.500	1.5
521.7631	24.00	-4.15	21810.840	1.0	40971.290	2.0
521.7650	10.01	-2.62	302890.570	2.5	322050.950	1.5
521.7676	26.00	-3.54	32133.977	2.0	51294.262	3.0
521.7754	26.02	-1.99	179178.620	3.0	198338.620	4.0
521.7754	17.01	.26	112608.000	1.0	131768.000	2.0
521.7808	25.01	-2.81	62572.200	2.0	81732.000	1.0
521.7917	30.02	-1.82	216464.500	4.0	235623.900	3.0
521.7917	17.01	-.44	112608.000	1.0	131767.400	0.0
521.7926	26.00	-2.45	29356.780	2.0	48516.150	1.0
521.7932	28.00	-.92	33112.368	3.0	52271.716	2.0
521.7944	23.03	-1.79	265067.400	2.0	284226.700	3.0
521.8103	26.02	.54	200003.700	7.0	219162.420	6.0
521.8124	24.01	-3.87	69478.060	2.5	88636.700	1.5
521.8133	26.02	.07	199701.820	3.0	218860.430	2.0
521.8179	26.02	-.79	179178.620	3.0	198337.060	3.0
521.8202	29.00	.27	30811.173	0.0	49974.862	0.0
521.8206	23.00	-4.03	15270.420	1.5	34428.760	1.5
521.8250	28.00	-2.93	30619.440	2.0	49777.619	3.0
521.8252	10.01	-1.58	302247.780	3.5	321405.950	3.5
521.8263	23.01	-4.28	53868.630	2.0	73026.760	2.0
521.8288	24.01	-4.06	70317.040	2.5	89475.080	2.5
521.8323	26.01	-2.95	44929.590	2.5	64087.500	2.5
521.8334	25.00	-1.75	43595.500	2.5	62753.370	2.5
521.8437	22.00	-3.66	26564.385	3.0	45721.878	4.0
521.8443	10.01	-2.59	302247.780	3.5	321405.250	4.5
521.8450	73.00	-2.70	1935.780	0.0	21098.558	0.0
521.8484	26.01	-2.92	66522.320	2.5	85679.640	2.5
521.8503	26.00	-2.83	36940.600	2.0	56097.850	3.0
521.8503	18.00	-3.45	107054.319	0.0	126211.570	1.0
521.8520	90.01	-2.13	7259.177	0.0	26421.698	0.0
521.8884	21.00	-1.09	20237.100	4.5	39392.950	3.5
521.8906	24.00	-4.30	31028.330	2.0	50184.100	2.0
521.8961	23.00	-5.47	14910.040	3.5	34065.610	2.5
521.8996	7.00	-2.32	93581.520	.5	112736.961	1.5
521.9007	27.00	-1.05	29563.170	1.5	48718.570	2.5
521.9050	59.01	-.93	6371.944	0.0	25532.519	0.0
521.9064	28.01	-4.18	116468.400	1.5	135623.590	1.5
521.9100	41.00	-1.36	9436.930	0.0	28597.322	0.0
521.9100	90.00	-1.30	8065.752	0.0	27226.144	0.0
521.9132	26.02	-.08	179178.620	3.0	198333.560	2.0
521.9184	25.01	-3.38	49889.860	3.0	69044.610	2.0
521.9292	18.00	-2.68	105617.315	2.0	124771.670	2.0
521.9315	23.00	-4.83	31721.730	4.5	50876.000	4.5
521.9400	42.00	-.57	22100.161	0.0	41259.451	0.0
521.9400	64.00	-.21	6694.574	0.0	25853.864	0.0
521.9404	22.00	-4.91	25227.217	3.0	44381.160	4.0
521.9588	18.01	-3.61	184191.710	.5	203344.980	1.5
521.9653	21.00	.36	20239.920	3.5	39392.950	3.5
521.9700	22.00	-1.97	170.132	3.0	19322.988	2.0
521.9759	24.01	-4.67	69903.460	3.5	89056.100	2.5
521.9879	24.00	-4.40	33762.740	6.0	52914.940	6.0
522.0067	28.01	-4.35	116468.400	1.5	135619.910	1.5
522.0070	29.00	-.61	30811.173	0.0	49968.004	0.0
522.0086	20.02	-4.19	328606.780	2.0	347758.220	2.0
522.0110	59.01	-.74	6371.944	0.0	25528.628	0.0
522.0128	22.00	-2.65	27498.975	3.0	46650.260	3.0
522.0155	7.00	-2.20	96750.810	1.5	115902.000	2.5
522.0210	26.00	-3.34	33765.291	2.0	52916.278	2.0
522.0236	22.00	-.80	18825.890	1.0	37976.780	2.0
522.0285	28.00	-.52	30163.140	2.0	49313.851	3.0
522.0300	64.01	-1.16	10001.532	0.0	29157.519	0.0
522.0343	12.02	-.11	564300.000	0.0	583450.500	1.0
522.0343	12.02	-.11	564300.000	0.0	583450.500	1.0
522.0364	22.00	-3.27	27887.740	3.0	47038.160	3.0
522.0566	28.01	-4.22	116468.400	1.5	135618.080	2.5
522.0694	28.01	-1.61	116312.340	1.5	135461.550	2.5
522.0724	24.00	-4.36	28637.000	3.0	47786.100	2.0
522.0759	21.00	-3.67	11557.640	2.5	30706.610	1.5
522.0836	24.00	-2.06	35807.900	2.0	54956.590	1.0
522.0849	28.01	-3.16	112686.300	2.5	131834.940	2.5
522.0912	24.00	-.87	27300.190	1.0	46448.600	1.0
522.0937	25.01	-3.28	62564.700	1.0	81713.020	0.0
522.1265	18.00	-1.51	105462.804	3.0	124609.917	4.0
522.1280	27.00	-1.11	34196.210	1.5	53343.270	1.5
522.1324	28.01	-.56	116732.510	2.5	135879.410	3.5
522.1325	22.00	-.86	26564.385	3.0	45711.280	4.0
522.1351	17.01	.04	112608.000	1.0	131754.800	1.0
522.1427	9.00	-1.70	117308.558	1.5	136455.080	1.5
522.1432	26.00	-5.65	415.932	3.0	19562.435	4.0
522.1456	22.00	-.95	29768.655	2.0	48915.070	2.0
522.1458	26.02	-.78	200325.560	4.0	219471.970	4.0
522.1564	24.00	-.72	45566.020	3.0	64712.040	3.0
522.1586	23.00	-3.77	20789.130	2.5	39935.070	1.5
522.1760	24.00	-1.20	27223.050	2.0	46368.350	3.0
522.1772	26.00	-3.02	26406.490	1.0	45551.748	1.0
522.1774	23.02	.30	141734.730	5.5	160879.980	4.5
522.1856	18.01	-1.55	172829.580	1.5	191974.530	1.5
522.1880	15.00	-1.85	56339.540	2.5	75484.400	2.5
522.2006	26.02	-.59	179194.220	4.0	198338.620	4.0
522.2150	28.01	-4.48	118563.390	3.5	137707.260	3.5
522.2169	11.02	-2.59	444825.000	2.5	463968.800	3.5
522.2200	38.00	-.16	18067.285	0.0	37216.303	0.0
522.2300	28.01	-4.30	118563.390	3.5	137706.710	2.5
522.2325	22.00	-4.04	20006.032	2.0	39149.260	2.0
522.2339	26.02	-4.08	179630.770	4.0	198773.950	5.0
522.2352	10.00	-1.87	149824.221	2.0	168967.353	1.0
522.2354	22.00	-3.53	6556.828	1.0	25699.950	2.0
522.2388	23.03	-1.35	237638.800	2.0	256781.800	1.0
522.2399	26.00	-3.72	18378.187	2.0	37521.144	2.0
522.2406	9.00	-2.05	117308.558	1.5	136451.490	2.5
522.2431	26.02	-.00	179194.220	4.0	198337.060	3.0
522.2480	24.00	-3.03	27382.180	2.0	46524.840	2.0
522.2486	27.00	-.72	32027.500	3.5	51170.140	4.5
522.2562	26.02	-1.75	179194.220	4.0	198336.580	5.0
522.2589	22.00	-3.94	25438.898	2.0	44581.160	2.0
522.2660	45.00	.34	32101.693	0.0	51249.024	0.0
522.2693	22.00	-.47	16817.190	1.0	35959.070	1.0
522.2751	27.00	-4.19	28470.510	1.5	47612.180	1.5
522.2892	18.00	-3.03	105462.804	3.0	124603.957	2.0
522.2909	22.00	-1.50	29661.232	1.0	48802.320	0.0
522.2925	12.00	-3.51	35051.264	1.0	54192.294	2.0
522.2961	23.03	-.21	236322.400	2.0	255463.300	2.0
522.3029	25.02	-4.81	94850.660	1.5	113991.310	.5
522.3092	28.01	-4.52	118874.110	3.5	138014.530	2.5
522.3108	24.00	-3.97	25106.340	3.0	44246.700	4.0
522.3187	26.00	-2.33	29320.050	1.0	48460.120	0.0
522.3474	24.00	-3.60	33934.880	3.0	53073.900	3.0
522.3474	28.01	-4.85	113172.960	4.5	132311.980	4.5
522.3490	63.00	.25	13389.148	0.0	32533.437	0.0
522.3507	13.01	-2.28	123468.100	3.0	142607.000	2.0
522.3520	23.00	-4.01	26604.770	3.5	45743.620	3.5
522.3534	24.00	-.80	45663.280	5.0	64802.080	5.0
522.3550	44.00	-1.32	12098.628	0.0	31242.697	0.0
522.3613	24.00	-2.97	35398.020	4.0	54536.530	5.0
522.3624	23.00	-1.35	18302.270	3.5	37440.740	4.5
522.3648	22.00	-.37	16875.190	2.0	36013.570	2.0
522.3662	21.00	-1.94	17947.980	1.5	37086.310	1.5
522.3684	24.00	-3.81	33935.650	2.0	53073.900	3.0
522.3701	7.00	-2.46	96750.810	1.5	115889.000	.5
522.3793	22.00	-6.34	8602.340	2.0	27740.190	2.0
522.3815	26.02	-2.15	179579.830	5.0	198717.600	4.0
522.3842	24.00	-.98	29420.900	1.0	48558.570	2.0
522.3894	21.01	-3.30	39114.440	1.0	58251.920	2.0
522.3902	28.01	-4.66	116893.980	2.5	136031.430	2.5
522.3905	28.01	-3.56	118877.090	1.5	138014.530	2.5
522.4053	18.01	-2.98	196305.040	3.5	215441.940	4.5
522.4069	24.00	-.54	27500.370	3.0	46637.210	3.0
522.4118	18.01	-4.52	196305.040	3.5	215441.700	3.5
522.4135	22.00	-2.98	6661.003	3.0	25797.600	3.0
522.4151	24.00	-.84	45614.880	4.0	64751.420	4.0
522.4162	27.01	-6.21	27902.500	4.0	47039.000	3.0
522.4167	28.01	-1.09	101144.630	3.5	120281.110	4.5
522.4247	7.00	-3.36	96750.810	1.5	115887.000	.5
522.4247	7.00	-2.53	96750.810	1.5	115887.000	1.5
522.4247	7.00	-2.51	96750.810	1.5	115887.000	2.5
522.4273	26.01	-4.30	61041.780	2.5	80177.870	1.5
522.4301	22.00	.23	17215.440	5.0	36351.430	5.0
522.4301	26.02	-3.97	149285.000	3.0	168420.990	2.0
522.4304	26.00	-3.89	17550.180	3.0	36686.159	4.0
522.4310	26.00	-4.14	38678.015	2.0	57813.970	3.0
522.4456	28.01	-1.91	117763.910	1.5	136899.330	1.5
522.4503	24.00	-2.28	31048.850	1.0	50184.100	2.0
522.4506	25.00	-.70	44288.760	4.5	63424.000	3.5
522.4538	24.00	-1.76	27163.200	0.0	46298.320	1.0
522.4546	24.00	-1.82	21847.880	2.0	40982.970	2.0
522.4557	22.00	-.17	16961.420	3.0	36096.470	3.0
522.4598	12.02	.13	562939.500	2.0	582074.400	2.0
522.4598	12.02	.13	562939.500	2.0	582074.400	2.0
522.4610	22.00	-3.37	18525.070	2.0	37659.927	3.0
522.4670	74.00	-1.63	4758.794	0.0	23898.759	0.0
522.4901	28.00	-4.14	35639.148	3.0	54772.940	3.0
522.4930	40.00	-1.80	4113.534	0.0	23252.546	0.0
522.4951	22.00	.03	17075.310	4.0	36208.920	4.0
522.4972	24.00	.08	27825.450	5.0	46958.980	5.0
522.5022	24.00	-.54	27649.710	4.0	46783.060	4.0
522.5050	60.01	-1.35	5968.656	0.0	25107.229	0.0
522.5110	38.00	-.01	18067.285	0.0	37205.638	0.0
522.5120	92.01	-2.42	4355.506	0.0	23493.822	0.0
522.5160	41.00	-1.24	11453.368	0.0	30591.538	0.0
522.5209	22.00	-5.37	13981.750	1.0	33114.412	2.0
522.5210	23.00	-4.73	26505.880	2.5	45638.540	1.5
522.5254	28.02	-3.33	121412.200	2.0	140544.700	3.0
522.5330	24.00	-3.71	28682.180	2.0	47814.400	3.0
522.5361	22.00	-4.71	27025.652	4.0	46157.760	5.0
522.5454	22.00	-1.02	26772.965	5.0	45904.730	6.0
522.5522	26.00	-4.63	888.132	1.0	20019.648	1.0
522.5627	22.00	-2.98	27907.026	2.0	47038.160	3.0
522.5650	26.02	.09	179207.570	5.0	198338.620	4.0
522.5699	24.00	-3.73	33906.650	1.0	53037.520	2.0
522.5751	23.00	-.65	18372.460	3.5	37503.140	2.5
522.5773	28.01	-4.85	116468.400	1.5	135599.000	.5
522.5781	24.00	-4.34	25177.390	4.0	44307.960	5.0
522.5961	15.01	-2.09	105303.190	1.0	124433.100	1.0
522.6021	24.00	-3.55	23163.270	0.0	42292.960	1.0
522.6027	27.00	-2.85	29948.760	2.5	49078.430	1.5
522.6068	22.00	-2.65	18695.230	4.0	37824.748	4.0
522.6207	26.02	-.49	179207.570	5.0	198336.580	5.0
522.6210	57.01	-1.11	17744.654	0.0	36878.979	0.0
522.6226	24.00	-.55	45707.360	6.0	64836.300	6.0
522.6360	58.01	-1.33	7662.464	0.0	26796.240	0.0
522.6385	24.00	-3.77	37233.500	5.0	56361.860	5.0
522.6407	26.00	-4.66	23783.617	5.0	42911.897	5.0
522.6445	26.02	-4.73	200437.940	2.0	219566.080	3.0
522.6510	28.01	-.53	101144.630	3.5	120272.530	4.5
522.6557	22.01	-1.25	12628.770	1.5	31756.500	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
522.6663	28.01	-1.70	101144.630	3.5	120271.970	2.5
522.6762	7.00	-2.27	96864.020	2.5	115991.000	2.5
522.6869	26.00	-.81	24506.902	2.0	43633.491	2.0
522.6904	26.00	-3.02	34636.820	2.0	53763.280	3.0
522.6907	24.00	-2.17	27223.050	2.0	46349.500	2.0
522.6950	9.00	-1.11	117308.558	1.5	136434.850	2.5
522.6956	10.01	-3.05	302307.750	2.5	321434.020	1.5
522.6978	26.02	-1.81	179207.570	5.0	198333.760	6.0
522.6978	18.01	-3.16	196315.510	2.5	215441.700	3.5
522.7021	24.00	-1.51	21856.940	3.0	40982.970	2.0
522.7035	7.00	-4.01	96864.020	2.5	115990.000	1.5
522.7035	7.00	-3.87	96864.020	2.5	115990.000	2.5
522.7060	26.01	-3.31	44915.070	3.5	64040.960	3.5
522.7131	26.01	-2.70	54063.530	.5	73189.160	1.5
522.7155	26.00	-1.65	19552.474	1.0	38678.015	2.0
522.7165	22.00	-.17	26564.385	3.0	45689.890	3.0
522.7177	23.02	-2.58	141196.430	2.5	160321.890	2.5
522.7191	26.00	-1.42	12560.933	3.0	31686.342	2.0
522.7500	18.01	-3.24	199879.320	3.5	219003.600	2.5
522.7522	22.00	-1.67	29912.262	3.0	49036.460	4.0
522.7527	28.01	-.93	101144.630	3.5	120268.810	3.5
522.7573	23.00	-1.22	18198.080	2.5	37322.090	3.5
522.7595	26.01	-2.48	54063.530	.5	73187.460	.5
522.7660	78.00	-1.69	13389.148	0.0	32518.166	0.0
522.7691	23.01	-2.39	20280.190	5.0	39403.770	4.0
522.7738	24.00	-4.30	21847.880	2.0	40971.290	2.0
522.7762	24.00	-3.95	27597.220	3.0	46720.540	4.0
522.7793	6.00	-4.70	61981.820	1.0	81105.030	1.0
522.7823	23.03	-.23	236322.400	2.0	255445.500	3.0
522.7830	26.02	-.56	179725.310	6.0	198848.380	7.0
522.7866	22.01	-3.05	20951.770	2.5	40074.710	3.5
522.7866	28.01	-1.78	115085.360	3.5	134208.300	2.5
522.7886	18.02	-3.34	207233.090	2.0	226355.960	2.0
522.7945	24.00	-2.62	33762.740	6.0	52885.390	5.0
522.8066	26.00	-3.30	36975.640	3.0	56097.850	3.0
522.8087	26.00	-3.19	35257.309	4.0	54379.440	3.0
522.8096	24.00	-2.96	27176.220	1.0	46298.320	1.0
522.8101	23.00	-4.80	20812.990	1.5	39935.070	1.5
522.8194	22.00	-4.18	29914.720	3.0	49036.460	4.0
522.8387	26.00	-.89	34039.495	4.0	53160.530	3.0
522.8430	60.01	-1.71	2984.328	0.0	22110.528	0.0
522.8473	28.01	-2.88	116261.810	.5	135382.530	1.5
522.8525	28.01	-3.50	99442.860	4.5	118563.390	3.5
522.8602	28.01	-4.53	116824.150	2.5	135944.400	3.5
522.8632	26.02	.07	199884.390	5.0	219004.530	4.0
522.8640	26.02	.18	179216.470	6.0	198336.580	5.0
522.8815	24.00	-1.93	21810.840	1.0	40930.310	1.0
522.8954	26.00	-3.88	29956.780	2.0	48475.740	3.0
522.9143	26.02	.04	199804.810	4.0	218923.080	3.0
522.9150	9.00	-3.35	117308.558	1.5	136426.800	1.5
522.9178	20.02	-.32	371274.480	2.0	390392.620	3.0
522.9270	38.00	0.00	18067.285	0.0	37190.413	0.0
522.9302	24.00	-3.41	37244.170	4.0	56361.860	5.0
522.9411	26.02	-.54	179216.470	6.0	198333.760	6.0
522.9447	22.00	-2.30	29907.273	2.0	49024.430	3.0
522.9504	29.01	-3.33	118532.150	2.0	137649.100	2.0
522.9518	28.01	-.68	116732.510	2.5	135849.410	2.5
522.9529	28.01	-4.78	111783.790	3.5	130900.650	2.5
522.9603	28.01	-3.20	118897.940	2.5	138014.530	2.5
522.9761	29.01	-3.98	116643.960	3.0	135759.970	2.0
522.9802	27.01	-4.32	67824.600	2.0	86940.460	2.0
522.9841	28.01	-3.71	111120.540	1.5	130236.260	2.5
522.9842	18.00	-2.96	106237.597	2.0	125353.310	1.0
522.9852	26.00	-1.34	26479.366	1.0	45595.046	0.0
522.9864	26.00	-.91	34039.495	4.0	53155.130	4.0
522.9939	26.02	-.84	147305.970	3.0	166421.330	4.0
522.9986	28.01	-2.47	112719.750	3.5	131834.940	2.5
523.0202	27.00	-2.11	14036.280	1.5	33150.680	1.5
523.0215	7.00	-2.57	96787.650	1.5	115902.000	2.5
523.0241	9.00	-2.09	116987.394	3.5	136101.650	3.5
523.0265	24.01	-3.29	70394.460	4.5	89508.630	5.5
523.0363	27.00	-.31	33150.680	1.5	52264.490	1.5
523.0374	25.01	-3.19	82387.530	3.0	101501.300	3.0
523.0403	9.00	-.84	116987.394	3.5	136101.060	4.5
523.0475	28.02	-4.34	121802.800	3.0	140916.200	2.0
523.0489	18.01	-2.67	191012.350	1.5	210125.700	2.5
523.0524	22.00	-3.03	22081.198	2.0	41194.420	3.0
523.0525	25.02	-.62	173835.070	.5	192948.290	1.5
523.0601	10.01	-1.43	302307.750	2.5	321420.690	2.5
523.0610	18.01	-4.19	155708.020	.5	174820.930	.5
523.0620	45.00	.34	32101.693	0.0	51219.885	0.0
523.0678	10.01	-2.46	302307.750	2.5	321420.410	1.5
523.0766	18.01	-3.21	192556.840	2.5	211669.180	2.5
523.0774	26.02	.30	179221.450	7.0	198333.760	6.0
523.0800	73.00	-2.69	5968.656	0.0	25086.191	0.0
523.0813	22.00	-.53	29912.262	3.0	49024.430	3.0
523.1021	22.00	-1.07	18061.540	1.0	37172.947	1.0
523.1031	26.01	-4.97	44929.590	2.5	64040.960	3.5
523.1039	25.02	-4.49	176641.140	3.5	195752.480	2.5
523.1060	42.00	-.03	27181.584	0.0	46298.168	0.0
523.1160	90.00	-1.50	2500.383	0.0	21616.602	0.0
523.1286	7.00	-2.67	93581.520	.5	112691.960	.5
523.1296	22.00	-4.88	22404.690	3.0	41515.090	4.0
523.1356	10.00	-3.47	152970.733	0.0	172080.916	1.0
523.1402	26.00	-3.04	28819.966	5.0	47929.981	4.0
523.1485	22.00	-3.75	29914.720	3.0	49024.430	3.0
523.1485	23.01	-2.62	30613.970	4.0	49723.680	4.0
523.1518	24.01	-4.09	70399.040	5.5	89508.630	5.5
523.1527	10.01	-1.37	302961.070	1.5	322070.630	2.5
523.1614	23.02	-1.31	141270.400	3.5	160379.640	2.5
523.1686	7.00	-3.65	96864.020	2.5	115973.000	1.5
523.1702	25.00	-1.11	43644.450	1.5	62753.370	2.5
523.1750	22.00	-2.83	13981.750	1.0	33090.492	1.0
523.1754	24.00	-4.18	36577.730	4.0	55686.460	5.0
523.1765	25.00	-1.31	43524.080	3.5	62632.770	3.5
523.1776	24.00	-4.04	28679.430	1.0	47788.080	0.0
523.1814	20.02	.55	343784.960	1.0	362893.470	2.0
523.1834	28.00	-2.57	30163.140	2.0	49271.578	3.0
523.2080	24.01	-4.70	68305.730	1.5	87413.270	2.5

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
523.2318	24.00	-4.42	28679.430	1.0	47786.100	2.0
523.2320	18.01	-1.43	192556.840	2.5	211663.500	3.5
523.2360	42.01	-1.23	20809.640	0.0	39921.475	0.0
523.2383	28.01	-3.84	98467.250	3.5	117573.680	4.5
523.2411	16.01	-2.00	114162.200	.5	133268.530	.5
523.2446	24.01	-2.34	32836.840	3.5	51943.040	4.5
523.2622	28.01	-4.91	120903.200	3.5	140008.760	3.5
523.2627	28.01	-1.32	101144.630	3.5	120250.170	3.5
523.2775	24.00	-3.34	33906.650	1.0	53011.650	1.0
523.2810	41.00	-1.15	9275.615	0.0	28385.806	0.0
523.2811	23.00	-4.95	20830.200	.5	39935.070	1.5
523.2817	9.00	-2.78	116987.394	3.5	136092.240	2.5
523.2885	25.03	-3.60	152986.000	2.0	172090.600	1.0
523.2910	58.01	-.40	10566.135	0.0	29675.961	0.0
523.2945	28.01	-1.08	117662.110	1.5	136766.490	2.5
523.2947	26.00	-.32	23711.443	4.0	42815.814	5.0
523.2997	7.00	-3.81	96750.810	1.5	115855.000	.5
523.2997	7.00	-3.11	96750.810	1.5	115855.000	1.5
523.2997	7.00	-3.16	96750.810	1.5	115855.000	2.5
523.3071	24.00	-3.73	28682.180	2.0	47786.100	2.0
523.3082	26.00	-4.56	29371.860	3.0	48475.740	3.0
523.3210	90.01	-1.60	9678.902	0.0	28787.633	0.0
523.3213	22.00	-2.98	13981.750	1.0	33085.153	0.0
523.3331	28.01	-2.91	120903.200	3.5	140006.170	4.5
523.3370	25.01	-2.89	85952.600	3.0	105055.430	2.0
523.3422	24.00	-3.77	33934.880	3.0	53037.520	2.0
523.3487	30.02	-2.50	218540.300	2.0	237642.700	3.0
523.3540	74.00	-1.23	19115.832	0.0	38223.358	0.0
523.3624	24.01	-3.34	69954.200	2.5	89056.100	2.5
523.3633	24.00	-3.45	33935.650	2.0	53037.520	2.0
523.3731	23.00	-.68	18513.460	4.5	37614.970	3.5
523.3775	7.00	-4.95	96787.650	1.5	115889.000	.5
523.3775	7.00	-3.01	96787.650	1.5	115889.000	1.5
523.3816	22.00	-2.88	6598.749	2.0	25699.950	2.0
523.3824	23.00	-1.25	18126.270	1.5	37227.440	2.5
523.3901	28.01	-4.29	98561.220	2.5	117662.110	1.5
523.3907	10.01	-1.40	302307.750	2.5	321408.620	2.5
523.3930	64.00	-.49	7178.519	0.0	26284.621	0.0
523.3956	10.01	-1.35	302307.750	2.5	321408.440	3.5
523.3960	37.00	-2.75	12816.545	0.0	31922.537	0.0
523.3985	26.00	-3.64	31322.603	3.0	50423.185	4.0
523.4008	12.02	-1.33	562634.200	1.0	581734.700	1.0
523.4008	12.02	-1.33	562634.200	1.0	581734.700	1.0
523.4010	58.01	-1.09	8227.067	0.0	27332.677	0.0
523.4027	10.00	-2.16	149824.221	2.0	168924.651	2.0
523.4066	23.00	.06	19023.470	4.5	38123.760	4.5
523.4153	10.01	-.75	303237.910	1.5	322337.880	2.5
523.4200	60.01	-.99	4355.506	0.0	23460.622	0.0
523.4260	42.00	-.96	18389.915	0.0	37494.812	0.0
523.4270	57.00	-.25	4032.876	0.0	23137.737	0.0
523.4277	23.01	-4.28	18269.490	1.0	37369.010	2.0
523.4310	75.00	-.93	22987.393	0.0	42092.108	0.0
523.4323	7.00	-3.18	96787.650	1.5	115887.000	1.5
523.4323	7.00	-2.69	96787.650	1.5	115887.000	2.5
523.4408	22.00	-.86	26657.409	4.0	45756.450	5.0
523.4479	29.01	-2.41	117666.600	4.0	136765.380	4.0
523.4622	26.01	-2.31	25981.650	3.5	45079.910	2.5
523.4639	10.01	-.50	302307.750	2.5	321405.950	3.5
523.4715	27.00	-.63	33674.380	2.5	52772.300	2.5
523.4736	18.00	-2.64	105617.315	2.0	124715.160	3.0
523.4860	25.02	-3.59	121197.050	2.5	140294.440	3.5
523.4860	46.00	.16	35731.281	0.0	54833.989	0.0
523.4923	24.00	-1.81	45614.880	4.0	64712.040	3.0
523.5008	22.00	-3.40	15108.121	3.0	34204.971	4.0
523.5192	27.00	-1.67	17233.680	3.5	36329.860	2.5
523.5219	26.02	-1.15	179725.310	6.0	198821.390	6.0
523.5346	24.00	-4.68	21810.840	1.0	40906.460	1.0
523.5374	26.00	-.75	32873.623	4.0	51969.140	3.0
523.5384	23.00	-4.92	26604.770	3.5	45700.250	2.5
523.5390	73.00	-1.93	12743.888	0.0	31844.662	0.0
523.5420	26.00	-3.95	20874.482	3.0	39969.830	3.0
523.5433	23.00	-4.57	20789.130	2.5	39884.430	1.5
523.5494	28.00	-.80	31441.665	2.0	50536.742	1.0
523.5568	24.00	-1.45	45741.490	7.0	64836.300	6.0
523.5592	24.00	-1.41	45707.360	6.0	64802.080	5.0
523.5653	28.01	-4.39	115870.280	2.5	134964.780	1.5
523.5658	26.02	-.11	147326.850	4.0	166421.330	4.0
523.5770	58.01	-1.02	11856.655	0.0	30956.042	0.0
523.5861	10.01	-1.62	294086.490	1.5	313180.230	1.5
523.5988	28.00	-4.67	35639.148	3.0	54732.425	2.0
523.6000	7.03	-.27	465301.000	0.0	484399.549	0.0
523.6009	17.01	-3.99	158723.700	1.0	177816.900	2.0
523.6028	18.01	-2.55	183914.560	.5	203007.690	1.5
523.6053	24.00	-2.78	31009.000	3.0	50102.040	3.0
523.6100	24.00	-4.30	28679.430	1.0	47772.300	1.0
523.6118	8.01	-4.98	255689.600	2.5	274782.400	3.5
523.6188	26.00	-1.50	33765.291	2.0	52857.840	1.0
523.6225	20.00	-4.26	23652.304	1.0	42744.716	2.0
523.6228	18.01	-2.76	190106.230	1.5	209198.630	2.5
523.6289	23.00	-2.82	19023.470	4.5	38115.650	3.5
523.6367	26.00	-2.18	34782.406	5.0	53874.300	5.0
523.6396	21.00	-2.62	17947.980	1.5	37039.770	2.5
523.6522	28.01	-3.28	118923.200	3.5	138014.530	2.5
523.6560	7.00	-3.60	96750.810	1.5	115842.000	.5
523.6560	7.00	-4.11	96750.810	1.5	115842.000	1.5
523.6563	24.01	-4.78	55023.300	2.5	74114.480	3.5
523.6607	24.00	-3.11	27597.220	3.0	46688.240	3.0
523.6652	22.00	-1.29	29768.655	2.0	48859.510	1.0
523.6655	9.00	-2.15	116987.394	3.5	136078.240	2.5
523.6788	10.01	-.89	302961.070	1.5	322051.430	2.5
523.6862	18.01	-2.20	190507.360	1.5	209597.450	1.5
523.6873	26.02	-2.73	200325.560	4.0	219415.610	5.0
523.6901	25.02	-4.76	121117.140	3.5	140207.090	2.5
523.6920	10.01	-1.65	302961.070	1.5	322050.950	1.5
523.6994	23.01	-4.46	30641.710	3.0	49731.320	2.0
523.7050	58.01	-.88	10566.135	0.0	29660.854	0.0
523.7079	27.00	-3.88	33674.380	2.5	52763.680	3.5
523.7128	23.00	-4.69	31937.180	5.5	51026.300	5.5
523.7160	45.00	.66	30891.830	0.0	49986.148	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
523.7175	24.00	-4.35	35897.870	2.0	54986.820	3.0
523.7249	26.00	-3.20	28604.610	2.0	47693.289	3.0
523.7276	24.01	-1.32	32854.460	4.5	51943.040	4.5
523.7326	23.00	-4.81	24830.180	1.5	43918.580	2.5
523.7346	22.00	-3.96	20126.055	3.0	39214.380	3.0
523.7353	23.02	.18	141488.320	4.5	160576.620	3.5
523.7394	24.00	-3.65	27816.880	5.0	46905.030	4.0
523.7397	24.00	-1.56	45663.280	5.0	64751.420	4.0
523.7430	41.00	-1.50	8907.725	0.0	27401.059	0.0
523.7444	28.01	-1.97	117872.780	2.5	136960.750	2.5
523.7521	26.02	-3.52	200384.280	3.0	219471.970	4.0
523.7530	73.01	-.80	14518.354	0.0	33611.323	0.0
523.7548	22.00	-2.67	12118.394	4.0	31205.985	3.0
523.7590	22.00	-3.63	25493.722	2.0	44581.160	2.0
523.7628	25.01	-3.77	62572.200	2.0	81659.500	3.0
523.7757	26.02	-.88	179630.770	4.0	198717.600	4.0
523.7803	24.00	-.85	29420.900	1.0	48507.560	1.0
523.7913	18.01	-4.32	190511.190	2.5	209597.450	1.5
523.8000	22.00	-2.40	14028.470	2.0	33114.412	2.0
523.8122	28.01	-3.71	114869.350	1.5	133954.850	.5
523.8146	26.01	-2.97	66377.370	3.5	85462.780	3.5
523.8200	42.00	.62	25729.749	0.0	44820.276	0.0
523.8228	28.00	-.86	33112.368	3.0	52197.482	3.0
523.8236	26.00	-2.86	32133.977	2.0	51219.059	3.0
523.8267	18.02	-4.57	231627.300	1.0	250712.270	2.0
523.8297	25.02	-4.94	94906.450	.5	113991.310	.5
523.8415	26.01	-3.68	61093.440	2.5	80177.870	1.5
523.8550	38.00	.14	18067.285	0.0	37156.537	0.0
523.8566	22.00	-.77	16875.190	2.0	35959.070	1.0
523.8573	22.00	-2.21	6842.964	5.0	25926.820	4.0
523.8607	26.01	-8.96	23317.600	2.5	42401.330	1.5
523.8675	9.00	-1.36	116987.394	3.5	136070.880	3.5
523.8920	77.00	-1.58	16454.134	0.0	35542.038	0.0
523.8926	24.01	-3.85	53566.220	3.5	72648.790	3.5
523.8931	23.01	-4.56	32040.760	2.0	51123.310	2.0
523.8964	24.00	-1.37	21847.880	2.0	40930.310	1.0
523.9091	23.01	-3.00	30641.710	3.0	49723.680	4.0
523.9132	25.01	-3.38	82419.480	3.0	101501.300	3.0
523.9229	17.00	-3.47	82918.893	2.5	102000.360	1.5
523.9240	63.00	-.20	12985.861	0.0	32072.599	0.0
523.9533	25.01	-4.47	82419.480	3.0	101499.840	2.0
523.9550	57.00	-.98	7985.094	0.0	27070.702	0.0
523.9568	29.01	-4.05	115662.770	4.0	134743.000	4.0
523.9676	24.00	-3.48	27597.220	3.0	46677.060	2.0
523.9682	18.00	-2.89	107131.755	1.0	126211.570	1.0
523.9823	21.01	-.98	11736.350	0.0	30815.650	1.0
523.9830	58.01	-1.48	9275.615	0.0	28360.204	0.0
523.9930	22.00	-3.40	6556.828	1.0	25635.740	1.0
523.9961	30.02	-1.95	218428.000	0.0	237506.800	1.0
524.0195	23.00	-.85	18680.120	5.5	37758.070	4.5
524.0225	24.01	-4.35	69348.360	1.5	88426.200	.5
524.0233	28.01	-4.80	116824.150	2.5	135901.960	2.5
524.0290	17.02	-1.30	198835.500	.5	217913.100	1.5
524.0363	26.00	-3.47	26351.049	5.0	45428.385	4.0
524.0390	41.00	-1.92	8630.355	0.0	27712.904	0.0
524.0398	24.00	-2.92	31028.330	2.0	50105.540	1.0
524.0464	24.00	-.55	29584.620	2.0	48661.590	3.0
524.0519	24.00	-1.07	35897.870	2.0	54974.640	2.0
524.0520	70.01	-.90	30085.255	0.0	49167.331	0.0
524.0554	26.02	.13	200395.330	5.0	219471.970	4.0
524.0615	26.01	-3.47	58666.360	3.5	77742.780	2.5
524.0730	24.00	-3.69	33935.650	2.0	53011.650	1.0
524.0810	39.00	.06	18389.915	0.0	37470.935	0.0
524.0857	7.01	-1.76	202170.630	1.0	221246.170	1.0
524.0865	22.01	-8.02	20951.770	2.5	40027.280	1.5
524.0868	23.00	.11	19145.130	5.5	38220.630	5.5
524.0880	42.01	.32	25729.749	0.0	44810.514	0.0
524.0931	24.00	-3.24	27223.050	2.0	46298.320	1.0
524.0967	23.01	-3.30	18293.870	2.0	37369.010	2.0
524.1022	23.00	-4.23	26738.310	4.5	45813.250	4.5
524.1086	18.00	-2.12	105617.315	2.0	124692.020	2.0
524.1195	23.01	-.81	36425.070	4.0	55499.380	5.0
524.1280	13.01	-3.68	125706.200	1.0	144780.200	2.0
524.1359	24.00	-2.58	31028.330	2.0	50102.040	3.0
524.1368	24.00	-4.16	37205.880	3.0	56279.560	4.0
524.1414	23.00	-3.27	25253.530	5.5	44327.040	6.5
524.1447	18.01	-3.16	194800.180	4.5	213873.570	3.5
524.1494	26.02	-.71	179748.170	5.0	198821.390	6.0
524.1502	27.00	-4.72	36092.440	2.5	55165.630	2.5
524.1629	24.00	-4.71	31987.060	4.0	51059.790	4.0
524.1681	23.00	-1.43	18085.820	.5	37158.360	1.5
524.1788	18.01	-1.09	190196.160	.5	209268.310	1.5
524.1829	25.01	-3.84	62587.500	3.0	81659.500	3.0
524.1889	26.00	-3.66	35611.608	3.0	54683.390	4.0
524.2081	22.00	-1.45	29768.655	2.0	48839.740	3.0
524.2087	18.00	-2.62	107131.755	1.0	126202.820	0.0
524.2206	28.01	-2.67	117662.110	1.5	136732.740	1.5
524.2327	28.01	-2.96	116312.340	1.5	135382.530	1.5
524.2380	44.00	-1.74	10566.135	0.0	29641.440	0.0
524.2418	28.01	-3.69	101246.160	.5	120316.020	.5
524.2434	21.00	-.87	18711.030	.5	37780.830	1.5
524.2495	26.00	-1.06	29313.008	6.0	48382.585	5.0
524.2564	18.01	-2.62	194822.100	3.5	213891.430	2.5
524.2569	24.00	-4.79	25177.390	4.0	44246.700	4.0
524.2587	17.00	-2.35	82918.893	2.5	101988.140	2.5
524.2676	23.02	-1.73	141507.700	3.5	160576.620	3.5
524.2731	25.02	-2.22	176683.760	2.5	195752.480	2.5
524.2792	23.03	-4.09	265271.600	3.0	284340.100	4.0
524.2810	42.00	.02	25729.749	0.0	44803.490	0.0
524.2852	23.00	-2.69	18372.460	3.5	37440.740	4.5
524.2908	16.01	-1.32	114200.450	1.5	133268.530	.5
524.2990	74.00	-1.21	16292.819	0.0	35365.905	0.0
524.3108	7.00	-2.84	96787.650	1.5	115855.000	.5
524.3108	7.00	-4.14	96787.650	1.5	115855.000	1.5
524.3113	24.00	-1.19	29420.900	1.0	48488.230	0.0
524.3232	26.01	-2.12	66612.740	1.5	85679.640	2.5
524.3320	26.02	.40	147354.750	5.0	166421.330	4.0
524.3364	24.00	-.63	27382.180	2.0	46448.600	1.0
524.3394	25.01	-3.80	85989.120	2.0	105055.430	2.0
524.3405	24.01	-4.74	70107.830	4.5	89174.100	3.5
524.3470	40.00	-.68	16938.079	0.0	36009.419	0.0
524.3474	24.01	-4.17	32603.730	2.5	51669.750	2.5
524.3496	22.00	-2.90	18593.990	3.0	37659.927	3.0
524.3528	18.01	-2.21	195123.540	5.5	214189.360	4.5
524.3531	27.00	-.85	27497.060	2.5	46562.870	1.5
524.3600	23.02	-2.36	162760.280	4.5	181825.840	4.5
524.3649	22.00	-.85	18911.399	2.0	37976.780	2.0
524.3649	22.00	-4.14	29971.078	4.0	49036.460	4.0
524.3669	25.01	-4.62	54846.000	0.0	73911.310	1.0
524.3759	26.00	-1.04	34328.733	3.0	53393.715	4.0
524.3798	28.00	-2.25	29888.505	2.0	48953.344	1.0
524.3856	23.00	-4.32	20812.990	1.5	39877.620	.5
524.3872	28.00	-2.01	42767.900	3.0	61832.470	4.0
524.3892	25.03	-4.53	152700.500	4.0	171765.000	4.0
524.3990	72.00	-1.73	8872.327	0.0	27941.776	0.0
524.4110	70.00	-.27	24600.544	0.0	43669.557	0.0
524.4140	22.00	-1.49	29661.232	1.0	48724.830	1.0
524.4241	22.00	-3.97	8602.340	2.0	27665.570	1.0
524.4244	28.01	-3.26	117662.110	1.5	136725.330	.5
524.4249	23.00	-2.28	18258.890	2.5	37322.090	3.5
524.4268	9.00	-1.49	117391.950	.5	136455.080	1.5
524.4275	22.00	-1.13	29661.232	1.0	48724.340	2.0
524.4336	26.00	-4.53	29469.010	2.0	48531.896	3.0
524.4414	25.02	-3.10	121117.140	3.5	140179.740	2.5
524.4500	6.02	-1.09	308215.000	0.0	327282.595	0.0
524.4573	22.00	-3.04	14028.470	2.0	33090.492	1.0
524.4647	14.00	-4.36	45321.848	3.0	64363.600	4.0
524.4695	18.01	-4.38	199879.320	3.5	218940.900	4.5
524.4722	25.02	-1.61	174436.590	2.5	193498.070	3.5
524.4780	73.00	-2.57	9598.245	0.0	28664.822	0.0
524.4830	18.01	-3.97	195128.270	4.5	214189.360	4.5
524.4936	28.00	-4.74	35639.148	3.0	54699.852	3.0
524.5000	7.03	-.00	465463.000	0.0	484528.777	0.0
524.5039	18.01	-2.50	194800.180	4.5	213860.510	3.5
524.5069	18.01	-1.52	194800.180	4.5	213860.400	4.5
524.5179	22.00	-1.14	29855.248	1.0	48915.070	2.0
524.5258	22.00	-3.64	26772.965	5.0	45832.500	5.0
524.5314	29.01	-1.06	117666.600	4.0	136725.930	5.0
524.5358	18.01	-2.16	194800.180	4.5	213859.350	4.5
524.5388	18.01	-.42	194800.180	4.5	213859.240	5.5
524.5443	28.01	-2.55	101144.630	3.5	120203.490	2.5
524.5460	18.01	-3.97	155351.030	1.5	174409.830	1.5
524.5510	42.00	-.66	20809.640	0.0	39873.563	0.0
524.5576	25.00	-3.73	33825.490	2.5	52883.870	1.5
524.5576	25.00	-3.43	33825.490	2.5	52883.870	2.5
524.5592	28.01	-4.74	32499.530	4.5	51557.850	3.5
524.5598	18.01	-2.64	183090.810	1.5	202149.110	2.5
524.5601	28.00	-2.77	32982.280	1.0	52040.568	2.0
524.5605	26.00	-.83	34782.406	5.0	53840.680	6.0
524.5625	17.01	-2.28	131754.800	1.0	150813.000	1.0
524.5650	23.00	-3.58	20789.130	2.5	39847.240	1.5
524.5677	28.01	-3.72	101258.010	1.5	120316.020	.5
524.5834	9.00	-2.74	118405.267	.5	137462.710	1.5
524.5995	26.00	-3.97	26224.961	3.0	45281.816	2.0
524.6027	24.01	-4.33	35569.020	2.5	54625.760	2.5
524.6041	24.00	-3.14	31048.850	1.0	50105.540	1.0
524.6088	18.01	-2.34	195128.270	4.5	214184.790	3.5
524.6133	22.00	-.72	20209.444	2.0	39265.800	2.0
524.6167	26.02	-4.86	205002.470	3.0	224058.700	4.0
524.6198	26.02	-1.50	179661.480	3.0	198717.600	4.0
524.6246	22.00	-3.77	18482.860	1.0	37538.804	2.0
524.6250	28.01	-2.92	119833.000	5.5	138888.930	6.5
524.6449	9.01	-2.88	227228.420	1.0	246283.630	2.0
524.6549	22.00	-2.50	6742.757	4.0	25797.600	3.0
524.6685	7.00	-3.24	96787.650	1.5	115842.000	.5
524.6685	7.00	-3.74	96787.650	1.5	115842.000	1.5
524.6718	23.00	-3.57	20830.200	.5	39884.630	1.5
524.6762	24.01	-2.71	29952.080	.5	49006.150	1.5
524.6817	22.00	-.04	26657.409	4.0	45711.280	4.0
524.6870	64.00	.24	15566.901	0.0	34625.883	0.0
524.6952	23.00	-2.14	18174.060	1.5	37227.440	2.5
524.7052	26.00	-5.12	704.003	2.0	19757.020	3.0
524.7071	21.00	-3.65	11520.150	1.5	30573.100	.5
524.7100	72.01	.13	27907.502	0.0	46965.648	0.0
524.7112	28.01	-3.42	115000.250	3.5	134053.050	2.5
524.7252	7.01	-.39	211779.450	1.0	230831.740	2.0
524.7291	22.00	-.59	16961.420	3.0	36013.570	2.0
524.7350	92.01	-2.40	5323.396	0.0	24380.634	0.0
524.7373	29.01	-2.55	117747.450	3.0	136799.300	2.0
524.7373	20.02	.69	340748.720	2.0	359800.570	3.0
524.7473	23.02	.15	141270.400	3.5	160321.890	2.5
524.7478	18.01	-1.62	194822.100	3.5	213873.570	3.5
524.7566	24.00	-1.81	7750.780	0.0	26801.930	1.0
524.7650	90.01	-2.74	0.000	0.0	19056.149	0.0
524.7750	92.01	-2.11	4516.821	0.0	23572.607	0.0
524.7756	25.00	-1.21	43428.580	4.5	62479.040	4.5
524.7767	28.01	-4.82	116893.980	2.5	135944.400	3.5
524.7772	22.00	-2.87	27480.047	3.0	46530.450	4.0
524.7807	22.00	-.85	29986.185	3.0	49036.460	4.0
524.7883	25.02	-.75	176265.780	1.5	195315.780	2.5
524.7911	29.01	-2.53	120092.200	2.0	139142.100	2.0
524.7911	27.00	-2.20	14399.280	.5	33449.180	.5
524.7971	24.00	-4.49	38537.680	5.0	57587.360	4.0
524.7985	18.01	-3.77	192556.840	2.5	211606.470	3.5
524.7993	8.01	-4.16	255689.600	2.5	274739.200	2.5
524.8103	29.01	-2.92	118163.500	2.0	137212.700	1.0
524.8189	24.01	-4.49	68305.730	1.5	87354.620	1.5
524.8246	18.00	-4.83	106237.597	2.0	125286.280	1.0
524.8252	28.01	-4.33	95893.760	1.5	114942.420	1.5
524.8258	26.02	-1.00	179725.310	6.0	198773.950	5.0
524.8351	17.01	-3.08	158768.600	2.0	177816.900	2.0
524.8372	28.00	-4.60	31786.210	3.0	50834.435	2.0
524.8378	22.00	-3.41	6556.828	1.0	25605.030	0.0
524.8383	22.00	-1.63	15156.787	4.0	34204.971	4.0
524.8473	24.01	-3.46	70427.220	3.5	89475.080	2.5
524.8489	8.01	-3.04	255691.400	3.5	274739.200	2.5
524.8539	23.00	-1.88	15571.900	2.5	34619.520	2.5
524.8808	17.00	-3.35	83364.927	.5	102411.570	.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
524.8860	75.00	-.95	21616.215	0.0	40667.971	0.0
524.8872	23.00	-4.46	20202.490	2.5	39248.900	1.5
524.8969	24.00	-3.72	37233.500	5.0	56279.560	4.0
524.9032	28.00	-2.76	31786.210	3.0	50832.039	3.0
524.9038	24.01	-4.37	65680.150	4.5	84725.960	3.5
524.9090	26.00	-1.86	36079.353	3.0	55124.974	3.0
524.9093	23.00	-2.33	19078.150	3.5	38123.760	4.5
524.9096	17.01	-2.03	131767.400	0.0	150813.000	1.0
524.9106	28.01	-4.68	79923.880	4.5	98969.440	5.5
524.9115	25.02	-2.18	176270.250	2.5	195315.780	2.5
524.9203	23.00	-4.60	13801.530	1.5	32846.740	2.5
524.9203	23.00	-3.36	13801.530	1.5	32846.740	2.5
524.9258	23.01	-2.92	32040.760	2.0	51085.770	3.0
524.9261	17.01	-2.70	131768.000	2.0	150813.000	1.0
524.9276	22.00	-5.69	6598.749	2.0	25643.695	3.0
524.9346	9.00	-2.64	118405.267	.5	137449.960	1.5
524.9352	26.02	-3.64	149285.000	3.0	168329.670	3.0
524.9368	25.00	-2.90	33825.490	2.5	52870.100	3.5
524.9393	28.01	.23	116468.400	1.5	135512.920	2.5
524.9412	25.01	-3.37	89126.000	3.0	108170.450	2.0
524.9437	24.01	-2.90	30307.600	1.5	49351.960	2.5
524.9531	24.00	-2.56	39158.630	4.0	58202.650	3.0
524.9542	18.01	-2.53	199959.620	2.5	219003.600	2.5
524.9545	18.01	-1.61	189437.690	.5	208481.660	.5
524.9568	22.00	-4.84	25537.276	1.0	44581.160	2.0
524.9590	60.01	-.37	7823.779	0.0	26872.886	0.0
524.9600	6.02	-.19	324212.000	0.0	343261.070	0.0
524.9616	26.00	-4.24	31937.308	1.0	50981.020	0.0
524.9636	7.01	-1.17	210705.260	2.0	229748.900	3.0
524.9674	30.02	.46	215340.500	2.0	234384.000	3.0
524.9967	18.01	-2.48	187589.230	2.5	206631.670	2.5
524.9981	22.00	-2.57	27025.652	4.0	46068.040	4.0
524.9989	14.00	-4.55	60621.640	0.0	79664.000	1.0
525.0000	27.00	.05	33674.380	2.5	52716.700	3.5
525.0039	18.01	-3.18	199959.620	2.5	219001.800	1.5
525.0206	26.00	-4.84	978.076	0.0	20019.648	1.0
525.0251	24.01	-3.43	54444.190	3.5	73485.600	3.5
525.0520	29.00	-.74	44522.951	0.0	63568.684	0.0
525.0560	18.01	-3.00	189654.780	2.5	208695.070	1.5
525.0639	23.02	-1.47	141987.320	3.5	161027.320	4.5
525.0649	26.00	-2.23	17726.985	2.0	36766.950	3.0
525.0820	60.01	-1.16	5968.656	0.0	25013.300	0.0
525.0930	22.00	-3.18	6661.003	3.0	25699.950	2.0
525.1036	28.01	-2.79	99340.550	3.5	118379.110	2.5
525.1050	28.01	-4.20	97273.830	2.5	116312.340	1.5
525.1077	18.01	-3.98	194822.100	3.5	213860.510	3.5
525.1108	18.01	-3.13	194822.100	3.5	213860.400	4.5
525.1123	22.00	-2.40	29986.185	3.0	49024.430	3.0
525.1125	23.00	-2.21	18120.120	.5	37158.360	1.5
525.1135	23.03	-2.68	264902.200	3.0	283940.400	2.0
525.1180	64.00	.06	8388.382	0.0	27431.721	0.0
525.1196	7.00	-4.01	96864.020	2.5	115902.000	2.5
525.1196	7.00	-2.22	96864.020	2.5	115902.000	3.5
525.1329	23.00	-1.73	19078.150	3.5	38115.650	3.5
525.1392	25.00	-.37	43595.500	2.5	62632.770	3.5
525.1398	18.01	-.51	194822.100	3.5	213859.350	4.5
525.1469	22.00	-2.68	6598.749	2.0	25635.740	1.0
525.1583	29.01	-3.03	115639.020	2.0	134675.600	2.0
525.1620	41.00	-2.29	0.000	0.0	19041.743	0.0
525.1670	44.00	-1.35	12743.888	0.0	31785.450	0.0
525.1685	24.00	-1.87	35934.020	6.0	54970.230	7.0
525.1740	59.01	-1.83	5000.766	0.0	24042.074	0.0
525.1825	23.00	-4.84	26122.040	3.5	45157.740	4.5
525.1855	22.00	-3.82	27614.667	4.0	46650.260	3.0
525.1911	24.00	-3.45	37244.170	4.0	56279.560	4.0
525.1920	62.00	-.20	2258.411	0.0	21299.067	0.0
525.1922	25.01	-1.98	56883.380	1.0	75918.730	2.0
525.2032	22.01	-2.56	20891.880	3.5	39926.830	2.5
525.2050	9.00	-2.51	118427.823	1.5	137462.710	1.5
525.2060	9.00	-3.81	117391.950	.5	136426.800	1.5
525.2101	22.00	-2.10	386.874	4.0	19421.576	3.0
525.2137	18.01	-1.08	187589.230	2.5	206623.800	3.5
525.2140	64.00	-.06	10969.423	0.0	30009.281	0.0
525.2226	23.00	-3.50	20812.990	1.5	39847.240	1.5
525.2294	25.02	-.25	174464.070	4.5	193498.070	3.5
525.2352	22.00	-1.15	18818.230	0.0	37852.021	1.0
525.2355	23.00	-3.17	23519.840	4.5	42553.620	4.5
525.2358	26.01	-4.40	44915.070	3.5	63948.840	4.5
525.2377	23.03	-2.39	265067.400	2.0	284101.100	3.0
525.2391	28.01	-3.38	114869.350	1.5	133903.000	1.5
525.2620	58.01	-.84	9775.615	0.0	28313.733	0.0
525.2714	22.00	-.73	26657.409	4.0	45689.890	3.0
525.2770	62.01	-1.73	7985.094	0.0	27022.668	0.0
525.2782	18.00	-1.59	105617.315	2.0	124649.549	3.0
525.2813	28.01	-3.96	111783.790	3.5	130815.910	3.5
525.2822	23.00	-3.13	18126.270	1.5	37158.360	1.5
525.2924	24.00	-2.82	24093.160	2.0	43124.880	2.0
525.2971	25.01	-3.25	85989.120	2.0	105020.670	1.0
525.2991	22.00	-4.66	27498.975	3.0	46530.450	4.0
525.3028	26.00	-3.97	18378.187	2.0	37409.530	1.0
525.3030	41.00	-1.22	11130.738	0.0	30167.370	0.0
525.3161	23.00	-1.95	18085.820	.5	37116.680	.5
525.3241	26.00	-2.96	29320.050	1.0	48350.620	1.0
525.3261	17.01	-3.88	158723.700	1.0	177754.200	1.0
525.3261	17.01	-2.80	158786.400	3.0	177816.900	2.0
525.3284	22.00	-1.82	29829.097	0.0	48859.510	1.0
525.3310	26.00	-4.17	34843.980	6.0	53874.300	5.0
525.3355	18.01	-1.35	194861.270	2.5	213891.430	2.5
525.3413	18.01	-2.71	194861.270	2.5	213891.220	1.5
525.3418	23.00	-2.85	18805.050	.5	37834.980	1.5
525.3460	57.00	-.82	1048.548	0.0	20083.622	0.0
525.3469	26.00	-1.82	26479.366	1.0	45509.112	1.0
525.3517	15.01	.35	88894.000	1.0	107923.570	2.0
525.3550	6.02	-.62	308248.000	0.0	327282.748	0.0
525.3575	23.00	-1.63	18198.080	2.5	37227.440	2.5
525.3597	24.00	-3.09	31028.330	2.0	50057.610	2.0
525.3600	18.01	-2.43	192556.840	2.5	211586.110	2.5
525.3644	22.00	-1.40	18061.540	1.0	37090.650	0.0
525.3697	6.00	-4.07	70743.950	1.0	89772.870	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
525.3735	28.00	-3.67	35639.148	3.0	54667.928	4.0
525.3768	23.00	-4.01	24789.360	.5	43818.020	1.5
525.3796	24.00	-4.75	33934.880	3.0	52963.440	4.0
525.3846	27.00	-1.19	33674.380	2.5	52702.760	1.5
525.3898	23.00	-3.39	25111.500	4.5	44139.690	5.5
525.3921	9.00	-3.51	117391.950	.5	136420.060	.5
525.3926	7.00	-2.99	93581.520	.5	112609.612	1.5
525.3930	41.00	-1.45	8711.012	0.0	27744.383	0.0
525.3942	26.02	-4.02	179630.770	4.0	198658.800	3.0
525.4061	25.02	-.81	173920.690	1.5	192948.290	1.5
525.4076	22.00	-1.85	18145.400	2.0	37172.947	1.0
525.4144	29.01	-1.65	120092.200	2.0	139119.500	3.0
525.4152	24.00	-3.82	35398.020	4.0	54425.290	4.0
525.4351	28.01	-3.20	117872.780	2.5	136899.330	1.5
525.4362	27.00	-3.43	35450.560	3.5	54477.070	3.5
525.4370	25.02	-4.47	115762.600	1.5	134789.080	.5
525.4418	17.00	-3.23	82918.893	2.5	101945.200	1.5
525.4454	18.00	-3.84	106087.305	1.0	125113.480	2.0
525.4467	22.00	-1.10	18825.890	1.0	37852.021	1.0
525.4564	26.02	-1.05	179748.170	5.0	198773.950	5.0
525.4644	26.02	-1.63	186712.020	1.0	205737.510	2.0
525.4647	27.00	-.81	32027.500	3.5	51052.980	3.5
525.4750	64.00	-.78	6291.287	0.0	25321.688	0.0
525.4784	7.00	-4.59	96864.020	2.5	115889.000	1.5
525.4818	28.01	-.91	116468.400	1.5	135493.260	1.5
525.4857	27.00	-1.92	33945.900	2.5	52970.620	2.5
525.4890	28.01	-.55	101247.370	2.5	120271.970	2.5
525.4915	26.01	-3.38	26055.400	2.5	45079.910	2.5
525.4926	24.00	-.83	27500.370	3.0	46524.840	2.0
525.4958	26.00	-4.76	888.132	1.0	19912.486	2.0
525.4970	26.00	-1.18	34636.820	2.0	53661.130	3.0
525.4972	15.01	-1.13	112607.700	2.0	131632.000	3.0
525.5133	24.00	-.37	27935.260	4.0	46958.980	5.0
525.5189	9.00	-1.74	118427.823	1.5	137451.340	2.5
525.5326	25.00	-.89	25265.740	5.5	44288.760	4.5
525.5331	8.01	-3.89	255759.400	3.5	274782.400	3.5
525.5337	7.00	-4.03	96864.020	2.5	115887.000	1.5
525.5337	7.00	-3.86	96864.020	2.5	115887.000	2.5
525.5337	7.00	-3.17	96864.020	2.5	115887.000	3.5
525.5376	23.00	-3.85	15724.220	3.5	34747.060	3.5
525.5392	18.01	-1.54	186171.260	.5	205194.040	1.5
525.5420	74.00	-.72	22342.133	0.0	41370.108	0.0
525.5510	60.01	-1.43	1613.150	0.0	20640.799	0.0
525.5570	9.00	-1.64	118427.823	1.5	137449.960	1.5
525.5667	26.00	-1.61	34039.495	4.0	53061.280	5.0
525.5702	18.01	-2.90	199981.940	1.5	219003.600	2.5
525.5732	18.01	-3.19	200138.850	3.5	219160.400	2.5
525.5738	26.00	-2.12	34547.192	2.0	53568.720	2.0
525.5763	28.01	-.40	101247.370	2.5	120268.810	3.5
525.5800	64.00	-.55	6452.602	0.0	25479.201	0.0
525.5820	76.00	-.96	18954.517	0.0	37981.044	0.0
525.5840	22.00	-.58	17075.310	4.0	36096.470	3.0
525.5956	23.01	-3.71	20980.920	2.0	40001.660	2.0
525.5978	24.01	-3.89	70317.040	2.5	89337.700	1.5
525.6083	26.02	-.72	200395.330	5.0	219415.610	5.0
525.6199	18.01	-1.94	199981.940	1.5	219001.800	1.5
525.6210	23.00	-1.07	18302.270	3.5	37322.090	3.5
525.6232	24.01	-4.64	69903.460	3.5	88923.200	2.5
525.6564	18.01	-1.58	189654.780	2.5	208673.320	2.5
525.6669	24.01	-3.74	35607.600	3.5	54625.760	2.5
525.6840	28.01	-3.13	111783.790	3.5	130801.330	4.5
525.6900	38.00	.39	18228.600	0.0	37251.218	0.0
525.6918	26.01	-8.17	23317.600	2.5	42334.860	2.5
525.6979	23.00	-4.43	20830.200	.5	39847.240	1.5
525.6995	23.00	-3.84	24830.180	1.5	43847.160	2.5
525.7040	92.01	-1.97	5565.369	0.0	24587.480	0.0
525.7070	44.00	.63	30407.885	0.0	49429.888	0.0
525.7073	24.00	-2.73	27703.840	4.0	46720.540	4.0
525.7275	26.02	-.83	179757.980	4.0	198773.950	5.0
525.7424	18.01	-3.76	192556.840	2.5	211572.270	1.5
525.7460	21.00	-2.78	17918.850	.5	36934.150	1.5
525.7483	9.00	-2.82	118427.823	1.5	137443.040	2.5
525.7510	23.01	-3.76	18353.890	3.0	37369.010	2.0
525.7510	70.01	-.52	34198.789	0.0	53219.200	0.0
525.7609	27.00	-.52	32027.500	3.5	51042.260	2.5
525.7617	22.00	-1.23	20062.980	1.0	39077.713	1.0
525.7639	28.01	-2.71	111120.540	1.5	130135.190	1.5
525.7664	26.00	-3.83	28819.966	5.0	47834.529	5.0
525.7764	28.01	-3.42	114836.630	3.5	133850.830	3.5
525.7820	12.02	-1.27	570112.800	0.0	589126.800	1.0
525.7830	28.01	-.79	101258.010	1.5	120271.970	2.5
525.7858	15.00	-3.00	56339.540	2.5	75353.400	1.5
525.7893	22.00	-3.42	18525.070	2.0	37538.804	2.0
525.7924	28.01	-1.44	116732.510	2.5	135746.130	1.5
525.8040	23.00	-3.67	24898.730	2.5	43911.930	3.5
525.8071	26.01	-3.64	61332.820	1.5	80345.910	.5
525.8076	28.01	-4.54	116087.380	4.5	135100.450	3.5
525.8126	23.00	-2.22	14514.750	1.5	33527.640	2.5
525.8151	28.02	-4.78	98238.200	4.0	117251.000	3.0
525.8225	18.01	-3.80	194861.270	2.5	213873.800	2.5
525.8283	26.00	-3.56	31686.342	2.0	50698.666	2.0
525.8289	18.01	-1.05	194861.270	2.5	213873.570	3.5
525.8300	23.00	-3.53	24992.880	3.5	44005.140	4.5
525.8325	21.00	.57	20237.100	4.5	39249.270	5.5
525.8325	27.00	-4.21	15184.040	2.5	34196.210	1.5
525.8360	90.00	-1.82	3790.903	0.0	22808.239	0.0
525.8400	58.01	-1.71	5565.369	0.0	24582.561	0.0
525.8627	28.01	-.70	116838.330	1.5	135849.410	2.5
525.8779	23.00	-3.63	23353.090	3.5	42363.620	3.5
525.8842	14.00	-.18	45293.629	2.0	64303.930	3.0
525.8914	25.02	-3.34	121197.050	2.5	140207.090	2.5
525.9040	42.00	-.48	20809.640	0.0	39824.517	0.0
525.9077	26.00	-1.12	35257.309	4.0	54266.760	5.0
525.9130	24.00	-2.37	39158.630	4.0	58167.890	4.0
525.9174	18.01	-1.34	186171.260	.5	205180.360	.5
525.9202	25.00	-4.37	38351.780	.5	57360.780	1.5
525.9268	18.01	-2.52	200151.640	1.5	219160.400	2.5
525.9269	24.00	-2.52	31048.850	1.0	50057.610	2.0
525.9276	22.00	-3.64	14105.680	3.0	33114.412	2.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
525.9360	18.01	-2.66	194883.000	3.5	213891.430	2.5
525.9360	74.00	.08	27342.899	0.0	46356.619	0.0
525.9390	57.01	-2.63	1371.178	0.0	20384.790	0.0
525.9404	24.01	-4.77	68305.730	1.5	87314.000	.5
525.9410	23.01	-5.80	17910.980	4.0	36919.230	3.0
525.9437	10.01	-2.89	302425.870	1.5	321434.020	1.5
525.9460	28.01	-4.25	115956.710	2.5	134964.780	1.5
525.9466	28.00	-1.30	30163.140	2.0	49171.187	1.0
525.9484	28.01	-4.83	116893.980	2.5	135901.960	2.5
525.9535	22.00	-4.16	29907.273	2.0	48915.070	2.0
525.9587	27.00	-8.83	7442.410	3.5	26450.020	2.5
525.9673	30.02	-.85	218040.500	3.0	237047.800	2.0
525.9686	26.01	-4.57	66672.390	3.5	85679.640	2.5
525.9697	17.00	-2.92	83130.900	1.5	102138.110	.5
525.9740	59.01	-.83	5081.424	0.0	24093.771	0.0
525.9916	25.01	-4.81	52383.720	4.0	71390.140	3.0
526.0001	22.00	-.13	22081.198	2.0	41087.310	3.0
526.0107	13.02	-2.48	189876.100	2.5	208881.830	2.5
526.0107	13.02	-1.33	189876.100	2.5	208881.830	1.5
526.0118	25.01	-3.10	89096.560	4.0	108102.250	3.0
526.0170	42.00	-.30	30649.858	0.0	49660.650	0.0
526.0196	13.02	-1.18	189876.420	3.5	208881.830	2.5
526.0387	20.00	-1.66	20335.360	1.0	39340.080	2.0
526.0387	20.00	-2.14	20335.360	1.0	39340.080	2.0
526.0387	18.01	-4.19	186074.350	2.5	205079.070	2.5
526.0408	9.00	-2.36	118936.797	1.5	137941.440	2.5
526.0440	72.01	-1.53	17260.709	0.0	36270.526	0.0
526.0513	22.00	-1.37	29855.248	1.0	48859.510	1.0
526.0567	7.01	.09	211827.670	2.0	230831.740	2.0
526.0569	28.01	-3.22	99559.330	2.5	118563.390	3.5
526.0605	24.00	-3.69	37205.880	3.0	56209.810	3.0
526.0658	14.00	-.92	45293.629	2.0	64297.370	3.0
526.0746	23.00	-4.33	24915.160	1.5	43918.580	2.5
526.0771	25.00	-2.02	25285.430	4.5	44288.760	4.5
526.0916	22.00	-1.32	29912.262	3.0	48915.070	2.0
526.0918	28.01	-.50	101247.370	2.5	120250.170	3.5
526.0954	23.00	-.70	18438.070	4.5	37440.740	4.5
526.0979	28.01	-2.09	117763.910	1.5	136766.490	2.5
526.1023	24.00	-3.10	35884.400	5.0	54886.820	6.0
526.1026	29.01	-2.63	118071.340	1.0	137073.750	2.0
526.1140	42.00	-.93	20003.065	0.0	39010.352	0.0
526.1261	28.01	-3.14	117074.700	3.5	136076.260	4.5
526.1378	24.00	-3.90	27703.840	4.0	46704.980	5.0
526.1411	25.00	-3.55	25287.740	3.5	44288.760	4.5
526.1455	27.01	-3.49	67939.600	2.0	86940.460	2.0
526.1480	26.00	-4.67	23783.617	5.0	42784.387	6.0
526.1555	24.01	-4.41	47354.630	2.5	66355.130	1.5
526.1597	22.00	-3.26	29914.720	3.0	48915.070	2.0
526.1669	28.01	-3.43	113225.060	.5	132225.150	1.5
526.1704	20.00	-.56	20335.360	1.0	39335.322	1.0
526.1704	20.00	-1.06	20335.360	1.0	39335.322	1.0
526.1763	24.00	-.26	29824.750	3.0	48824.500	4.0
526.1765	21.00	-.63	18855.760	1.5	37855.500	2.5
526.1903	18.01	-2.63	194861.270	2.5	213860.510	3.5
526.2028	10.01	-3.57	303071.840	2.5	322070.630	2.5
526.2053	15.00	-1.57	57876.700	.5	76875.400	1.5
526.2097	10.01	-1.64	303071.840	2.5	322070.380	3.5
526.2150	22.01	-2.21	12758.150	2.5	31756.500	1.5
526.2192	23.03	-.01	236148.600	1.0	255146.800	2.0
526.2241	20.00	-.47	20335.360	1.0	39333.382	0.0
526.2241	20.00	-.98	20335.360	1.0	39333.382	0.0
526.2267	24.01	-4.12	69638.770	1.5	88636.700	1.5
526.2275	25.00	-2.16	43428.580	4.5	62426.480	3.5
526.2413	17.02	-4.43	182076.000	1.5	201073.400	.5
526.2436	26.02	-3.63	179661.480	3.0	198658.800	3.0
526.2450	27.00	-.58	33462.830	2.5	52460.100	2.5
526.2455	22.00	-3.62	30039.211	5.0	49036.460	4.0
526.2475	26.01	-6.23	25787.600	1.5	44784.780	2.5
526.2607	26.00	-2.38	34843.980	6.0	53840.680	6.0
526.2646	23.00	-1.73	18120.120	.5	37116.680	.5
526.2824	28.00	-.91	30163.140	2.0	49159.060	2.0
526.2884	26.00	-2.68	26224.961	3.0	45220.662	3.0
526.3128	10.01	-1.23	302425.870	1.5	321420.690	2.5
526.3206	10.01	-1.21	302425.870	1.5	321420.410	1.5
526.3313	26.00	-1.13	26339.682	2.0	45333.834	2.0
526.3349	22.00	.24	26910.705	6.0	45904.730	6.0
526.3400	26.00	-2.68	29356.780	2.0	48350.620	1.0
526.3444	25.01	-3.26	86061.750	3.0	105055.430	2.0
526.3500	22.00	-.73	17215.440	5.0	36208.920	4.0
526.3569	27.00	-2.35	33466.870	3.5	52460.100	2.5
526.3591	28.01	-.39	116468.400	1.5	135461.550	2.5
526.3672	28.01	-4.49	114869.350	1.5	133862.210	1.5
526.3732	24.00	.05	36212.150	4.0	55204.790	3.0
526.3810	64.00	-1.92	483.945	0.0	19481.591	0.0
526.3872	26.00	-2.36	28819.966	5.0	47812.104	4.0
526.3880	59.01	-1.55	3871.561	0.0	22868.955	0.0
526.3882	25.02	-.91	174243.330	3.5	193235.430	2.5
526.3888	24.01	-3.52	54444.190	3.5	73436.270	2.5
526.3985	23.01	-2.54	20242.320	4.0	39234.050	3.0
526.4015	24.00	-4.21	33040.100	2.0	52031.720	3.0
526.4157	24.00	-1.46	7810.820	1.0	26801.930	1.0
526.4193	7.00	-3.19	96864.020	2.5	115855.000	1.5
526.4220	12.01	-1.68	93310.590	2.5	112301.470	2.5
526.4220	12.01	-.38	93310.590	2.5	112301.470	3.5
526.4229	27.00	-.47	34352.420	1.5	53343.270	1.5
526.4237	20.00	-.53	20349.260	2.0	39340.080	2.0
526.4237	20.00	-1.03	20349.260	2.0	39340.080	2.0
526.4243	18.01	-2.55	194883.000	3.5	213873.800	2.5
526.4306	18.01	-2.49	194883.000	3.5	213873.570	3.5
526.4323	25.00	-3.09	43524.080	3.5	62514.590	2.5
526.4334	24.00	-4.20	31028.330	2.0	50018.800	1.0
526.4351	23.00	-1.41	18126.270	1.5	37116.680	.5
526.4365	12.01	-.53	93311.110	1.5	112301.470	2.5
526.4431	14.00	-3.86	45321.848	3.0	64311.970	4.0
526.4441	26.00	-3.89	24118.815	4.0	43108.899	4.0
526.4448	26.00	-3.77	29371.860	3.0	48361.920	4.0
526.4484	23.01	-3.91	18269.490	1.0	37259.420	1.0
526.4728	26.01	-3.14	65696.110	4.5	84685.160	3.5
526.4756	22.00	-2.10	28788.372	4.0	47777.320	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
526.4794	26.01	-3.51	26055.400	2.5	45044.210	1.5
526.4836	27.00	-.33	33173.360	3.5	52162.020	3.5
526.4913	28.01	-3.63	114869.350	1.5	133857.730	.5
526.4950	72.01	-1.24	18793.202	0.0	37786.735	0.0
526.5063	23.00	-4.31	24830.180	1.5	43818.020	1.5
526.5136	6.00	-2.82	68856.330	1.0	87843.910	1.0
526.5150	76.00	-.35	23148.708	0.0	42141.519	0.0
526.5157	24.00	-1.12	27649.710	4.0	46637.210	3.0
526.5246	26.00	-3.75	24338.766	3.0	43325.946	3.0
526.5394	18.01	-.76	189934.550	.5	208921.200	1.5
526.5396	18.00	-3.42	105617.315	2.0	124603.957	2.0
526.5403	26.00	-3.08	34782.406	5.0	53769.020	4.0
526.5440	23.00	-3.50	23519.840	4.5	42506.320	4.5
526.5462	25.00	-2.65	43314.230	5.5	62300.630	4.5
526.5521	27.00	-4.44	13795.520	2.5	32781.710	2.5
526.5526	21.00	-2.88	17947.980	1.5	36934.150	1.5
526.5557	20.00	-.14	20349.260	2.0	39335.322	1.0
526.5557	20.00	-.65	20349.260	2.0	39335.322	1.0
526.5634	23.00	-3.89	26171.960	4.5	45157.740	4.5
526.5670	62.00	-1.49	0.000	0.0	18990.936	0.0
526.5684	17.01	-4.00	158768.600	2.0	177754.200	1.0
526.5709	28.00	-2.47	29481.020	4.0	48466.530	5.0
526.5710	58.01	-.51	10001.532	0.0	28992.323	0.0
526.5723	24.00	-1.96	7810.820	1.0	26796.280	2.0
526.5787	27.00	-.86	29216.370	2.5	48201.600	3.5
526.5941	26.00	-3.52	20641.110	4.0	39625.784	4.0
526.5961	10.01	-1.89	303071.840	2.5	322056.440	3.5
526.5967	22.00	-.32	15220.390	5.0	34204.971	4.0
526.5969	26.00	-4.13	29320.050	1.0	48304.623	2.0
526.6017	24.00	-3.27	27703.840	4.0	46688.240	3.0
526.6045	23.00	-1.55	18174.060	1.5	37158.360	1.5
526.6078	23.00	-.62	21603.170	4.5	40587.350	3.5
526.6142	7.00	-3.08	93581.520	.5	112565.470	.5
526.6271	22.00	.10	26772.965	5.0	45756.450	5.0
526.6297	27.00	-.18	29735.180	3.5	48718.570	2.5
526.6378	27.00	-.23	33173.360	3.5	52156.460	4.5
526.6397	9.02	-1.88	441158.600	1.5	460141.630	2.5
526.6400	63.00	.09	13711.778	0.0	32700.081	0.0
526.6470	44.00	-.48	20809.640	0.0	39797.691	0.0
526.6475	10.01	-.83	302425.870	1.5	321408.620	2.5
526.6491	22.00	-4.14	6661.003	3.0	25643.695	3.0
526.6492	25.02	-1.91	121197.050	2.5	140179.740	2.5
526.6500	27.00	-1.35	16467.900	4.5	35450.560	3.5
526.6563	26.00	-.63	24180.848	3.0	43163.282	4.0
526.6660	14.00	-1.01	45321.848	3.0	64303.930	3.0
526.6664	26.02	-.77	186712.020	1.0	205694.090	1.0
526.6700	90.00	-2.33	3629.588	0.0	22616.810	0.0
526.6719	18.01	-2.97	186074.350	2.5	205056.220	1.5
526.6830	28.01	-3.17	111783.790	3.5	130765.260	3.5
526.6830	44.00	-.59	19922.407	0.0	38909.160	0.0
526.6924	25.00	-1.48	43314.230	5.5	62295.360	5.5
526.6927	28.01	-4.90	95893.760	1.5	114874.880	2.5
526.7011	56.01	-3.50	42355.182	0.0	61341.282	0.0
526.7030	56.00	-.30	17905.969	0.0	36892.001	0.0
526.7041	24.01	-3.88	32603.730	2.5	51584.440	1.5
526.7044	23.03	-.23	236766.900	3.0	255747.600	3.0
526.7114	22.00	-3.41	6556.828	1.0	25537.276	1.0
526.7174	18.01	-.65	188766.150	2.5	207746.380	2.5
526.7268	26.00	-1.89	35257.309	4.0	54237.200	4.0
526.7293	8.01	-2.48	255759.400	3.5	274739.200	2.5
526.7352	10.01	-2.38	303071.840	2.5	322051.430	2.5
526.7393	23.01	-4.21	30613.970	4.0	49593.410	5.0
526.7461	18.00	-2.54	106087.305	1.0	125066.501	2.0
526.7479	24.01	-2.11	59130.510	1.5	78109.640	1.5
526.7485	10.01	-3.73	303071.840	2.5	322050.950	1.5
526.7538	28.00	-2.77	30192.268	0.0	49171.187	1.0
526.7568	23.00	-3.29	14548.830	2.5	33527.640	2.5
526.7604	25.02	-3.65	94697.850	3.5	113676.530	2.5
526.7618	23.00	-1.85	19145.130	5.5	38123.760	4.5
526.7670	26.00	-4.32	38995.717	1.0	57974.160	2.0
526.7799	7.00	-2.79	96864.020	2.5	115842.000	1.5
526.7810	17.00	-2.89	83130.900	1.5	102108.840	1.5
526.7871	24.00	-4.01	45734.320	2.0	64712.040	3.0
526.7901	25.00	-1.54	43595.500	2.5	62573.110	1.5
526.7929	18.01	-1.22	194883.000	3.5	213860.510	3.5
526.7960	18.01	-.94	194883.000	3.5	213860.400	4.5
526.7985	25.01	-3.86	48317.850	4.0	67295.160	4.0
526.8010	64.00	-1.19	7904.437	0.0	26886.937	0.0
526.8146	28.01	-1.28	101246.160	.5	120222.890	1.5
526.8182	23.03	-1.59	264482.800	2.0	283459.400	3.0
526.8254	23.00	-3.02	15770.720	4.5	34747.060	3.5
526.8271	25.02	-1.84	175918.500	.5	194894.780	1.5
526.8279	25.01	-4.41	89126.000	3.0	108102.250	3.0
526.8312	22.00	-.09	30060.328	4.0	49036.460	4.0
526.8321	28.00	-.63	36600.805	2.0	55576.905	3.0
526.8340	8.02	-.36	313801.070	0.0	332777.100	1.0
526.8362	28.01	-4.25	114874.880	2.5	133850.830	3.5
526.8387	14.00	-.58	45321.848	3.0	64297.710	4.0
526.8481	14.00	-2.59	45321.848	3.0	64297.370	3.0
526.8482	28.01	-1.33	101247.370	2.5	120222.890	1.5
526.8495	27.00	-.30	30102.960	2.5	49078.430	1.5
526.8609	22.01	-1.92	20951.770	2.5	39926.830	2.5
526.8693	26.02	-4.47	105929.160	3.0	124903.920	2.0
526.8780	64.00	-1.62	483.945	0.0	19463.671	0.0
526.8917	24.00	-.73	29584.620	2.0	48558.570	2.0
526.8948	6.00	-2.28	68856.330	1.0	87830.170	1.0
526.8981	28.01	-3.88	111783.790	3.5	130757.510	4.5
526.9123	25.01	-4.33	54938.100	1.0	73911.310	1.0
526.9270	45.00	-.06	28714.077	0.0	47692.038	0.0
526.9365	24.00	-3.61	33040.100	2.0	52012.440	2.0
526.9540	26.00	-1.41	6928.266	5.0	25899.974	4.0
526.9742	24.00	-4.78	33060.740	3.0	52031.720	3.0
526.9753	18.01	-.94	189040.870	1.5	208011.810	1.5
526.9887	22.00	-1.64	15108.121	3.0	34076.580	3.0
526.9920	41.00	-1.66	8711.012	0.0	27686.632	0.0
526.9954	26.01	-4.56	66078.340	2.5	85048.560	1.5
527.0029	24.00	-3.97	31048.850	1.0	50016.800	1.0
527.0054	17.00	-4.62	84132.262	2.5	103102.120	1.5
527.0070	26.00	-3.42	29320.050	1.0	48269.852	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
527.0173	26.02	-.64	179748.170	5.0	198717.600	4.0
527.0270	20.00	.13	20371.000	3.0	39340.080	2.0
527.0270	20.00	-.38	20371.000	3.0	39340.080	2.0
527.0271	17.00	-3.73	84132.262	2.5	103101.340	2.5
527.0292	24.01	-3.85	69954.200	2.5	88923.200	2.5
527.0309	20.02	.75	344149.810	2.0	363118.750	3.0
527.0340	28.01	-4.15	117763.910	1.5	136732.740	1.5
527.0360	26.00	-1.55	12968.552	2.0	31937.308	1.0
527.0417	23.00	-1.45	18258.890	2.5	37227.440	2.5
527.0487	27.01	-7.50	27484.300	3.0	46452.600	2.0
527.0591	28.00	-3.67	31786.210	3.0	50754.137	2.0
527.0700	4.01	-.09	96498.000	0.0	115470.812	0.0
527.0854	23.02	-1.84	141714.500	2.5	160681.480	3.5
527.0950	75.00	.69	23471.338	0.0	42443.250	0.0
527.0987	30.02	-2.47	218540.300	2.0	237506.800	1.0
527.1029	23.00	-1.84	13801.530	1.5	32767.880	1.5
527.1079	26.02	-3.20	205092.530	4.0	224058.700	4.0
527.1190	57.00	-.79	1048.548	0.0	20019.596	0.0
527.1226	24.00	-3.60	37244.170	4.0	56209.810	3.0
527.1251	23.01	-4.56	18293.870	2.0	37259.420	1.0
527.1318	23.00	-2.79	15571.900	2.5	34537.210	1.5
527.1385	9.00	-4.20	117622.923	2.5	136587.990	1.5
527.1400	62.00	-.20	806.575	0.0	19776.868	0.0
527.1432	17.01	-1.30	159574.200	2.0	178539.100	2.0
527.1437	28.01	-.78	101258.010	1.5	120222.890	1.5
527.1488	22.00	-3.83	18695.230	4.0	37659.927	3.0
527.1530	41.00	-1.89	1129.205	0.0	20099.030	0.0
527.1635	22.00	-2.92	22404.690	3.0	41368.860	4.0
527.1654	22.00	-1.47	30060.328	4.0	49024.430	3.0
527.1790	64.00	-1.31	6936.547	0.0	25905.436	0.0
527.1800	42.00	-1.23	20003.065	0.0	38971.918	0.0
527.1807	28.01	-4.79	108368.050	2.5	127331.600	2.5
527.1860	24.00	-3.30	31987.060	4.0	50950.420	3.0
527.1960	63.00	.61	15486.244	0.0	34454.521	0.0
527.1971	24.00	-3.97	33040.100	2.0	52003.060	1.0
527.1980	20.02	.87	340580.150	3.0	359543.080	4.0
527.2000	92.00	-1.30	7581.807	0.0	26549.941	0.0
527.2007	24.00	-.29	27820.230	3.0	46783.060	4.0
527.2180	23.01	-3.89	30306.400	3.0	49268.610	4.0
527.2210	25.01	-4.89	48333.060	5.0	67295.160	4.0
527.2369	26.02	-.42	147291.210	2.0	166252.740	3.0
527.2370	9.00	-3.07	117622.923	2.5	136584.450	2.5
527.2399	28.01	-2.28	117763.910	1.5	136725.330	.5
527.2405	26.01	-2.13	48039.230	2.5	67000.630	2.5
527.2435	22.00	-4.88	26803.417	2.0	45764.710	1.0
527.2480	41.00	-2.00	8630.355	0.0	27596.762	0.0
527.2480	63.00	-.22	13389.148	0.0	32355.555	0.0
527.2560	6.02	-.40	308317.000	0.0	327283.119	0.0
527.2716	23.00	-1.22	18198.080	2.5	37158.360	1.5
527.2875	28.01	.04	116786.420	.5	135746.130	1.5
527.2886	28.01	-4.04	115108.090	2.5	134067.760	1.5
527.2900	26.02	-1.36	179757.980	4.0	198717.600	4.0
527.2900	6.00	-3.89	69689.480	1.0	88649.100	0.0
527.2910	64.00	-.99	6291.287	0.0	25256.147	0.0
527.2975	26.02	.59	179889.030	8.0	198848.380	7.0
527.3000	7.04	.07	712464.000	0.0	731428.536	0.0
527.3045	26.02	-1.87	205092.530	4.0	224051.630	3.0
527.3171	26.00	-1.27	26550.466	0.0	45509.112	1.0
527.3236	10.01	-3.04	302475.610	.5	321434.020	1.5
527.3323	28.01	-3.30	121050.660	2.5	140008.760	3.5
527.3378	26.00	-2.03	20037.815	0.0	38995.717	1.0
527.3381	27.00	-1.94	27497.060	2.5	46454.950	1.5
527.3430	60.01	-.75	5404.054	0.0	24367.044	0.0
527.3459	24.00	-.54	27825.450	5.0	46783.060	4.0
527.3505	14.00	-4.29	60706.558	1.0	79664.000	1.0
527.3578	18.01	-1.44	192712.000	1.5	211669.180	2.5
527.3595	6.00	-3.75	69689.480	1.0	88646.600	1.0
527.3606	26.00	-1.70	34782.406	5.0	53739.488	5.0
527.3634	23.00	-2.25	13810.900	.5	32767.880	1.5
527.3662	26.02	-1.03	179760.720	3.0	198717.600	4.0
527.3829	28.01	-2.85	102742.740	1.5	121699.020	1.5
527.3856	18.01	-4.94	191169.520	1.5	210125.700	2.5
527.3858	22.00	-1.37	29768.655	2.0	48724.830	1.0
527.3873	28.01	-.29	101247.370	2.5	120203.490	2.5
527.3901	28.01	-4.02	115827.120	3.5	134783.140	2.5
527.3994	22.00	-3.33	29768.655	2.0	48724.340	2.0
527.4041	10.00	-2.63	150772.112	1.0	169727.630	1.0
527.4157	23.03	-.47	265271.600	3.0	284226.700	3.0
527.4196	25.00	.21	43524.080	3.5	62479.040	4.5
527.4240	58.01	-.30	8388.382	0.0	27348.460	0.0
527.4241	8.01	-2.54	255827.600	4.5	274782.400	3.5
527.4249	23.00	-4.90	15664.750	1.5	34619.520	2.5
527.4330	23.01	-4.06	30613.970	4.0	49568.450	3.0
527.4413	23.00	-4.81	23210.560	2.5	42164.740	3.5
527.4549	9.01	-3.27	264455.960	4.0	283409.650	3.0
527.4614	9.01	-4.33	264456.190	3.0	283409.650	3.0
527.4717	9.00	-3.68	130016.100	2.5	148969.190	3.5
527.4736	28.01	-2.81	101246.160	.5	120199.180	1.5
527.4742	8.01	-4.39	255829.400	3.5	274782.400	3.5
527.4797	24.00	-1.32	35934.020	6.0	54886.820	6.0
527.4853	24.00	-2.73	36034.220	3.0	54986.820	3.0
527.4917	24.01	-1.55	32836.840	3.5	51789.210	3.5
527.4954	22.00	-3.07	29907.273	2.0	48859.510	1.0
527.4967	23.00	-2.32	18805.050	.5	37757.240	.5
527.4982	26.00	-2.08	32873.623	4.0	51825.758	3.0
527.5040	72.00	-1.16	16050.847	0.0	35008.049	0.0
527.5073	28.01	-.53	101247.370	2.5	120199.180	1.5
527.5078	23.00	-2.19	15078.250	.5	34030.040	1.5
527.5201	24.00	-.45	27223.050	2.0	46174.400	3.0
527.5229	24.00	-.25	23305.010	2.0	42256.260	3.0
527.5259	24.01	-4.97	50687.630	2.5	69638.770	1.5
527.5298	24.00	-2.67	33113.270	4.0	52064.270	4.0
527.5306	26.00	-3.27	28604.610	2.0	47555.584	1.0
527.5309	28.01	-2.71	118803.820	6.5	137754.780	5.5
527.5468	23.01	-6.18	16533.000	5.0	35483.390	6.0
527.5550	74.00	-1.11	19115.832	0.0	38071.202	0.0
527.5560	75.00	-2.12	0.000	0.0	18955.334	0.0
527.5582	23.01	-2.33	30318.630	4.0	49268.610	4.0
527.5631	9.00	-3.45	117164.006	2.5	136113.810	1.5
527.5680	23.00	-1.46	18372.460	3.5	37322.090	3.5
527.5705	6.00	-4.37	69689.480	1.0	88639.020	1.0
527.5713	24.00	-.03	23305.010	2.0	42254.520	2.0
527.5780	58.01	-1.08	10243.505	0.0	29198.048	0.0
527.5788	24.00	-3.47	37205.880	3.0	56155.120	2.0
527.5994	26.01	-2.22	25805.320	4.5	44753.820	3.5
527.6014	23.00	-4.13	24898.730	2.5	43847.160	2.5
527.6019	24.00	-.08	23305.010	2.0	42253.420	1.0
527.6150	28.01	-4.96	118828.610	2.5	137776.550	3.5
527.6175	27.00	-1.67	33173.360	3.5	52121.210	4.5
527.6177	26.00	-2.91	29356.780	2.0	48304.623	2.0
527.6181	23.02	-1.88	141196.430	2.5	160144.260	1.5
527.6200	28.01	-4.63	115120.000	2.5	134067.760	1.5
527.6200	41.00	-1.20	9436.930	0.0	28389.964	0.0
527.6280	42.00	-1.06	21454.900	0.0	40407.647	0.0
527.6323	6.00	-4.34	69689.480	1.0	88636.800	2.0
527.6392	22.00	-1.11	29855.248	1.0	48802.320	0.0
527.6420	57.00	-.73	8388.382	0.0	27340.626	0.0
527.6440	13.01	-2.97	123415.900	2.0	142362.800	2.0
527.6440	13.01	-2.23	123415.900	2.0	142362.800	1.0
527.6440	13.01	-4.51	123415.900	2.0	142362.800	3.0
527.6476	26.02	-.00	147305.970	3.0	166252.740	3.0
527.6484	28.01	-4.24	111783.790	3.5	130730.530	2.5
527.6635	26.02	-4.91	205092.530	4.0	224038.730	5.0
527.6766	26.02	-.62	186791.780	2.0	205737.510	2.0
527.6800	15.01	-3.54	106001.990	1.0	124947.600	2.0
527.6835	28.01	-1.70	101258.010	1.5	120203.490	2.5
527.6852	22.00	-4.15	25635.740	1.0	44581.160	2.0
527.6880	60.01	-1.19	6855.889	0.0	25806.481	0.0
527.6980	28.01	-4.34	115108.090	2.5	134053.050	2.5
527.7021	22.00	-4.04	18593.990	3.0	37538.804	2.0
527.7024	10.01	-1.09	302475.610	.5	321420.410	1.5
527.7024	13.01	-2.06	123418.000	3.0	142362.800	2.0
527.7024	13.01	-2.97	123418.000	3.0	142362.800	3.0
527.7080	70.00	-.13	24358.571	0.0	43308.445	0.0
527.7292	26.00	-1.51	35611.608	3.0	54555.450	4.0
527.7298	26.02	-2.94	179904.560	6.0	198848.380	7.0
527.7298	26.02	-.95	179904.560	7.0	198848.380	7.0
527.7410	40.00	-1.63	4355.506	0.0	23304.195	0.0
527.7418	28.01	-1.09	101246.160	.5	120189.550	.5
527.7500	90.01	-1.57	10485.478	0.0	29433.844	0.0
527.7570	26.00	-4.49	31937.308	1.0	50880.152	1.0
527.7618	25.00	.52	44288.760	4.5	63231.430	4.5
527.7632	23.00	-1.86	18174.060	1.5	37116.680	.5
527.7796	24.01	-3.54	70679.220	4.5	89621.250	3.5
527.7805	13.01	-1.90	123420.800	4.0	142362.800	3.0
527.8036	28.01	-2.77	101258.010	1.5	120199.180	1.5
527.8095	23.00	-2.08	21646.390	3.5	40587.350	3.5
527.8120	23.00	-2.41	15078.250	.5	34019.120	1.5
527.8128	16.00	-2.42	55329.861	1.0	74270.701	0.0
527.8180	92.01	-2.31	5323.396	0.0	24269.321	0.0
527.8189	22.00	-1.95	18911.399	2.0	37852.021	1.0
527.8198	26.02	-1.69	186791.780	2.0	205732.370	3.0
527.8234	26.01	-2.05	66522.320	2.5	85462.780	3.5
527.8237	20.02	-.75	340580.150	3.0	359520.600	2.0
527.8240	75.00	-1.32	16212.162	0.0	35157.871	0.0
527.8245	24.00	-.10	36034.220	3.0	54974.640	2.0
527.8343	17.00	-1.31	82918.893	2.5	101858.960	2.5
527.8535	26.01	-3.65	65931.460	3.5	84870.840	2.5
527.8576	26.00	-4.00	26623.726	2.0	45562.959	3.0
527.8605	28.01	-3.25	118803.820	6.5	137742.950	5.5
527.8672	27.00	-4.21	36329.860	2.5	55268.750	3.5
527.8700	16.00	-1.94	55329.861	1.0	74268.650	1.0
527.8773	22.00	-3.86	6598.749	2.0	25537.276	1.0
527.8808	13.01	-1.79	125700.500	0.0	144638.900	1.0
527.8832	22.00	-.69	26772.965	5.0	45711.280	4.0
527.8931	26.01	-3.10	47674.780	1.5	66612.740	1.5
527.8993	16.00	-1.72	55329.861	1.0	74267.597	2.0
527.9019	9.00	-1.12	117164.006	2.5	136101.650	3.5
527.9024	18.00	-3.19	105617.315	2.0	124554.939	1.0
527.9045	27.00	-4.17	13795.520	2.5	32733.070	3.5
527.9069	22.00	-3.05	25643.695	3.0	44581.160	2.0
527.9130	57.01	-1.17	18147.942	0.0	37090.457	0.0
527.9228	22.00	-4.36	6556.828	1.0	25493.722	2.0
527.9307	23.00	-5.12	13801.530	1.5	32738.140	1.5
527.9377	24.00	-1.46	35862.820	4.0	54799.180	5.0
527.9430	41.00	-1.83	9436.930	0.0	28378.369	0.0
527.9494	6.00	-4.26	69710.660	2.0	88646.600	1.0
527.9535	28.00	-4.85	30392.052	1.0	49327.845	2.0
527.9560	70.01	-.60	34602.076	0.0	53543.048	0.0
527.9561	13.01	-4.20	125706.200	1.0	144641.900	0.0
527.9650	42.00	-1.35	16696.107	0.0	35636.756	0.0
527.9659	26.00	-3.64	26627.612	4.0	45562.959	3.0
527.9731	23.00	-3.31	25130.960	2.5	44066.050	3.5
527.9826	24.01	-2.06	32854.460	4.5	51789.210	3.5
527.9876	23.00	-4.57	26122.040	3.5	45056.610	3.5
527.9979	23.01	-2.38	30267.460	2.0	49201.660	2.0
527.9993	20.02	-.90	327962.110	1.0	346896.260	2.0
528.0001	24.01	-2.27	32855.090	2.5	51789.210	3.5
528.0050	40.00	-.83	12663.231	0.0	31602.446	0.0
528.0063	21.00	-4.68	18000.250	2.5	36934.150	1.5
528.0080	90.01	-1.90	14195.724	0.0	33134.831	0.0
528.0087	10.00	-2.41	150772.112	1.0	169705.925	0.0
528.0120	45.00	.04	31295.118	0.0	50234.082	0.0
528.0224	23.00	-.97	19026.340	2.5	37959.660	2.5
528.0230	12.02	-.98	562634.200	1.0	581567.500	0.0
528.0230	12.02	-.98	562634.200	1.0	581567.500	0.0
528.0230	6.00	-2.19	68856.330	1.0	87789.630	1.0
528.0294	26.00	-3.11	29356.780	2.0	48289.852	1.0
528.0300	28.01	-3.73	115120.000	2.5	134053.050	2.5
528.0303	24.00	-1.07	27176.220	1.0	46109.260	2.0
528.0314	9.04	-.57	854971.000	2.5	873904.000	2.5
528.0314	9.04	-1.72	854971.000	2.5	873904.000	1.5
528.0356	28.01	-4.32	97799.660	1.5	116734.510	2.5
528.0380	26.00	-2.01	29371.860	3.0	48304.623	2.0
528.0380	92.00	-1.61	0.000	0.0	18938.031	0.0
528.0385	18.00	-3.28	107131.755	1.0	126064.500	2.0
528.0398	13.01	-1.91	125706.200	1.0	144638.900	1.0
528.0398	13.01	-1.44	125706.200	1.0	144638.900	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
528.0420	23.00	-1.98	14548.830	2.5	33481.450	3.5
528.0462	22.00	-.84	29907.273	2.0	48839.740	3.0
528.0615	23.01	-6.28	18269.490	1.0	37201.410	0.0
528.0629	27.00	-.08	29269.730	4.5	48201.600	3.5
528.0721	28.01	-1.44	101258.010	1.5	120189.550	.5
528.0760	28.01	-4.50	118803.820	6.5	137735.220	6.5
528.0820	44.00	-2.00	8469.040	0.0	27405.493	0.0
528.0833	24.01	-3.89	70394.460	4.5	89325.600	4.5
528.0860	42.00	-.09	22745.421	0.0	41681.731	0.0
528.0891	24.00	-4.99	35398.020	4.0	54328.950	3.0
528.0900	7.03	-.75	465463.000	0.0	484399.166	0.0
528.0933	29.01	-2.35	118142.970	3.0	137073.750	2.0
528.0950	23.00	-3.60	15688.800	2.5	34619.520	2.5
528.0961	24.01	-3.92	35569.020	2.5	54499.700	1.5
528.0983	25.02	-.74	175918.500	.5	194849.100	1.5
528.1000	7.03	-.63	465223.000	0.0	484158.808	0.0
528.1020	73.00	-2.58	9678.902	0.0	28614.638	0.0
528.1173	26.00	-2.61	36975.640	3.0	55905.560	4.0
528.1254	28.01	-4.79	115000.250	3.5	133929.880	3.5
528.1373	17.02	-1.85	198983.900	1.5	217913.100	1.5
528.1462	22.00	-1.41	29986.185	3.0	48915.070	2.0
528.1474	22.00	-3.88	17369.590	1.0	36298.430	1.0
528.1524	25.00	-.20	43644.450	1.5	62573.110	1.5
528.1527	24.00	-2.87	35870.530	4.0	54799.180	5.0
528.1569	26.01	-4.19	60956.820	3.5	79885.320	2.5
528.1608	6.00	-3.52	69710.660	2.0	88639.020	1.0
528.1633	18.01	-.34	188766.150	2.5	207694.420	3.5
528.1643	9.00	-1.69	117164.006	2.5	136092.240	2.5
528.1653	28.00	-1.27	33112.368	3.0	52040.568	2.0
528.1702	26.00	-3.76	26623.726	2.0	45551.748	1.0
528.1706	28.01	-4.14	112906.930	1.5	131834.940	2.5
528.1756	26.02	-2.87	179893.560	5.0	198821.390	6.0
528.1797	26.00	-1.09	24506.902	2.0	43434.585	3.0
528.1801	28.01	-3.37	119913.330	4.5	138841.000	3.5
528.1854	22.00	-3.38	29912.262	3.0	48839.740	3.0
528.1909	23.00	-1.67	18513.460	4.5	37440.740	4.5
528.1921	23.00	-4.36	13810.900	.5	32738.140	1.5
528.1960	27.01	-4.55	28111.900	2.0	47039.000	3.0
528.1987	8.01	-4.96	255812.200	1.5	274739.200	2.5
528.2038	24.00	-3.77	23512.000	1.0	42438.820	2.0
528.2058	17.00	-2.27	82918.893	2.5	101845.640	1.5
528.2060	23.01	-3.00	30641.710	3.0	49568.450	3.0
528.2110	24.01	-4.49	70399.040	5.5	89325.600	4.5
528.2211	17.01	-2.90	131754.800	1.0	150681.000	2.0
528.2228	6.00	-3.52	69710.660	2.0	88636.800	2.0
528.2239	8.01	-4.31	255813.100	2.5	274739.200	2.5
528.2297	26.02	.11	147326.850	4.0	166252.740	3.0
528.2313	9.00	-2.40	117164.006	2.5	136089.840	1.5
528.2380	22.00	-2.32	8492.421	1.0	27418.015	2.0
528.2395	18.01	-1.87	200234.860	2.5	219160.400	2.5
528.2398	6.00	-3.39	69689.480	1.0	88615.010	1.0
528.2480	64.00	-.47	10485.478	0.0	29415.980	0.0
528.2498	23.00	-1.20	18302.270	3.5	37227.440	2.5
528.2515	25.02	-4.49	176390.670	2.5	195315.780	2.5
528.2526	21.00	-1.65	18855.760	1.5	37780.830	1.5
528.2540	22.00	-4.36	29914.720	3.0	48839.740	3.0
528.2579	26.02	-3.97	105929.160	3.0	124854.040	3.0
528.2669	23.01	-3.78	36425.070	4.0	55349.630	3.0
528.2817	24.00	-3.15	35501.260	3.0	54425.290	4.0
528.2820	63.00	.20	15486.244	0.0	34415.528	0.0
528.2850	28.01	-1.31	101357.200	4.5	120281.110	4.5
528.2910	62.00	-.33	1451.835	0.0	20380.797	0.0
528.2962	9.01	-3.29	264451.000	4.0	283374.510	3.0
528.2987	27.00	-3.80	28470.510	1.5	47393.930	2.5
528.2990	9.01	-4.86	264451.100	2.0	283374.510	3.0
528.2990	9.01	-3.84	264451.100	3.0	283374.510	3.0
528.3012	23.00	-1.47	13801.530	1.5	32724.860	.5
528.3080	64.00	-.08	7904.437	0.0	26832.789	0.0
528.3121	24.00	-1.29	29584.620	2.0	48507.560	1.0
528.3154	24.00	-1.92	35813.730	3.0	54736.550	4.0
528.3199	28.01	-1.76	115000.250	3.5	133922.910	4.5
528.3328	25.02	-.97	174575.870	3.5	193498.070	3.5
528.3433	18.00	-2.18	107289.747	2.0	126211.570	1.0
528.3441	22.00	-.45	15156.787	4.0	34078.580	3.0
528.3456	18.01	-2.47	186074.350	2.5	204996.090	3.5
528.3484	27.00	-1.36	33173.360	3.5	52095.000	3.5
528.3501	25.01	-3.53	79540.760	1.0	98462.340	2.0
528.3536	18.00	-1.73	107131.755	1.0	126053.210	2.0
528.3628	26.00	-.70	26140.164	3.0	45061.287	3.0
528.3663	25.01	-3.84	79540.760	1.0	98461.760	1.0
528.3747	23.03	-1.48	265019.700	1.0	283940.400	2.0
528.3752	24.00	-2.48	35897.870	2.0	54818.550	2.0
528.3825	28.01	-1.55	116732.510	2.5	135652.930	1.5
528.3840	42.00	-.66	26455.667	0.0	45381.297	0.0
528.3890	76.00	-1.28	19277.147	0.0	38202.598	0.0
528.3914	28.00	-2.09	31786.210	3.0	50706.310	4.0
528.3918	22.00	-4.94	26892.926	3.0	45813.010	2.0
528.3970	13.01	-3.09	125719.000	2.0	144638.900	1.0
528.3970	13.01	-1.91	125719.000	2.0	144638.900	2.0
528.3970	13.01	-1.17	125719.000	2.0	144638.900	3.0
528.4080	44.00	-1.73	6452.602	0.0	25377.372	0.0
528.4095	26.01	-7.80	23317.600	2.5	42237.050	3.5
528.4132	27.00	-.69	33150.680	1.5	52070.000	2.5
528.4179	28.01	-4.55	101247.370	2.5	120166.520	1.5
528.4196	25.00	-.05	43595.500	2.5	62514.590	2.5
528.4207	23.00	-4.07	24992.880	3.5	43911.930	3.5
528.4282	26.00	-3.42	29320.050	1.0	48238.832	2.0
528.4319	25.01	-2.88	79544.510	2.0	98463.160	3.0
528.4347	9.01	-4.24	264455.960	4.0	283374.510	3.0
528.4375	24.00	-2.93	33113.270	4.0	52031.720	3.0
528.4382	22.00	-2.65	8436.618	0.0	27355.042	1.0
528.4411	26.00	-2.31	29313.008	6.0	48231.330	5.0
528.4548	25.01	-3.26	79544.510	2.0	98462.340	2.0
528.4601	26.00	-1.50	33765.291	2.0	52682.930	2.0
528.4601	28.01	-3.84	97273.830	2.5	116191.470	2.5
528.4710	25.01	-4.26	79544.510	2.0	98461.760	1.0
528.4827	26.02	-.66	179904.560	6.0	198821.390	6.0
528.4827	26.02	.52	179904.560	7.0	198821.390	6.0
528.4831	22.00	-3.71	17423.853	2.0	36340.670	2.0
528.4847	6.00	-3.98	68856.330	1.0	87773.090	2.0
528.4970	21.00	-.44	20237.100	4.5	39153.420	4.5
528.5098	24.00	-3.58	35884.400	5.0	54800.260	6.0
528.5103	26.00	-2.04	35767.546	4.0	54683.390	4.0
528.5120	22.00	-2.98	27614.667	4.0	46530.450	4.0
528.5246	28.01	-1.05	101357.200	4.5	120272.530	4.5
528.5263	6.00	-4.78	69689.480	1.0	88604.750	2.0
528.5266	20.01	-1.17	60533.020	.5	79448.280	.5
528.5300	24.00	-3.75	33762.740	6.0	52677.880	7.0
528.5367	23.00	-3.21	15571.900	2.5	34486.800	2.5
528.5400	24.00	-1.47	35884.400	5.0	54799.180	5.0
528.5442	18.01	-1.02	184093.060	.5	203007.690	1.5
528.5523	6.00	-3.63	69710.660	2.0	88625.000	3.0
528.5553	9.00	-2.61	117164.006	2.5	136078.240	2.5
528.5582	28.01	-3.65	116468.400	1.5	135382.530	1.5
528.5629	23.00	-2.42	13810.900	.5	32724.860	.5
528.5649	24.00	-1.51	27163.200	0.0	46077.090	1.0
528.5652	25.01	-2.50	79550.280	3.0	98464.160	4.0
528.5758	21.00	.43	20239.920	3.5	39153.420	4.5
528.5758	13.01	-1.15	125866.700	1.0	144780.200	2.0
528.5830	28.01	-1.05	101357.200	4.5	120270.440	5.5
528.5897	17.01	-2.83	131768.000	2.0	150681.000	2.0
528.5931	25.01	-3.05	79550.280	3.0	98463.160	3.0
528.5937	28.01	-4.28	115870.280	2.5	134783.140	2.5
528.6064	18.00	-2.75	106237.597	2.0	125150.000	3.0
528.6090	72.00	-.67	23310.023	0.0	42227.597	0.0
528.6160	25.01	-4.07	79550.280	3.0	98462.340	2.0
528.6286	28.01	-1.84	101357.200	4.5	120268.810	3.5
528.6401	12.02	-.75	545820.400	2.0	564731.600	1.0
528.6417	23.01	-4.23	18293.870	2.0	37205.010	3.0
528.6518	27.00	-.94	33945.900	2.5	52856.680	3.5
528.6717	22.00	-3.64	27740.190	2.0	46650.260	3.0
528.6792	8.01	-2.21	255829.400	3.5	274739.200	2.5
528.6887	18.01	-1.82	139258.250	.5	158167.710	1.5
528.6940	24.00	-3.75	31355.210	2.0	50264.480	3.0
528.7186	28.01	-4.31	118874.110	3.5	137782.500	4.5
528.7200	24.00	-1.09	27728.870	2.0	46637.210	3.0
528.7203	25.02	-3.47	176683.760	2.5	195592.090	1.5
528.7250	63.00	-.55	13147.176	0.0	32060.600	0.0
528.7351	28.01	-.50	116838.330	1.5	135746.130	1.5
528.7553	27.00	-1.16	29294.520	3.5	48201.600	3.5
528.7570	21.01	-3.62	39344.900	2.0	58251.920	2.0
528.7611	9.00	-2.02	117164.006	2.5	136070.880	3.5
528.7625	24.00	-.27	35897.870	2.0	54804.690	1.0
528.7639	25.01	-2.35	79558.380	4.0	98465.150	5.0
528.7687	25.02	-1.38	173835.070	.5	192741.670	.5
528.7687	9.01	-4.94	264451.100	1.0	283357.700	2.0
528.7687	9.01	-3.94	264451.100	2.0	283357.700	2.0
528.7687	9.01	-3.56	264451.100	3.0	283357.700	2.0
528.7746	24.01	-4.98	67875.680	3.5	86782.070	3.5
528.7751	28.01	-3.96	110573.360	2.5	129479.730	1.5
528.7782	27.00	-.29	32654.500	2.5	51560.760	2.5
528.7822	18.01	-1.12	190507.360	1.5	209413.480	1.5
528.7902	28.01	-2.57	101366.140	2.5	120271.970	2.5
528.7916	25.01	-3.21	79558.380	4.0	98464.160	4.0
528.8118	25.02	-4.15	94771.470	2.5	113676.530	2.5
528.8120	24.00	-2.19	27176.220	1.0	46081.270	0.0
528.8187	28.00	-3.14	31441.665	2.0	50346.477	2.0
528.8196	25.01	-4.39	79558.380	4.0	98463.160	3.0
528.8229	26.00	-4.09	29056.312	3.0	47960.973	4.0
528.8308	23.01	-2.42	30306.400	3.0	49210.780	3.0
528.8316	6.00	-3.12	69710.660	2.0	88615.010	1.0
528.8371	26.00	-4.52	24118.815	4.0	43022.969	4.0
528.8400	92.01	-2.41	5323.396	0.0	24232.707	0.0
528.8450	26.00	-2.53	35257.309	4.0	54161.182	3.0
528.8509	24.00	-3.76	27816.880	5.0	46720.540	4.0
528.8538	26.00	-1.92	29798.960	4.0	48702.518	4.0
528.8626	18.01	-2.02	186074.350	2.5	204977.590	2.5
528.8783	9.01	-4.14	264451.100	1.0	283353.780	1.0
528.8783	9.01	-3.84	264451.100	2.0	283353.780	1.0
528.8786	28.01	-3.81	101366.140	2.5	120268.810	3.5
528.8828	25.02	-1.50	174332.910	1.5	193235.430	2.5
528.8862	25.00	.01	43524.080	3.5	62426.480	3.5
528.8887	26.02	-.48	186791.780	2.0	205694.090	1.0
528.8892	18.01	-2.24	190511.190	2.5	209413.480	1.5
528.9111	9.01	-4.37	264456.190	2.0	283357.700	2.0
528.9111	9.01	-3.47	264456.190	3.0	283357.700	2.0
528.9119	29.01	-2.25	118142.970	3.0	137044.450	4.0
528.9198	26.02	-1.16	182392.550	2.0	201293.750	2.0
528.9250	63.00	.06	17583.339	0.0	36489.611	0.0
528.9271	22.00	-2.48	6742.757	4.0	25643.695	3.0
528.9279	28.01	-4.22	110573.360	2.5	129474.270	3.5
528.9290	24.00	-1.41	27176.220	1.0	46077.090	1.0
528.9304	26.02	-2.10	179757.980	4.0	198658.800	3.0
528.9379	25.00	.38	44523.450	3.5	63424.000	3.5
528.9407	25.00	.52	43672.660	.5	62573.110	1.5
528.9671	24.00	-2.99	36552.130	3.0	55451.640	3.0
528.9682	23.00	-1.49	18258.890	2.5	37158.360	1.5
528.9701	25.02	-1.64	174048.890	2.5	192948.290	1.5
528.9727	26.02	-.98	179759.490	2.0	198658.800	3.0
528.9820	39.01	-2.24	8227.067	0.0	27131.302	0.0
528.9987	24.01	-3.08	70427.220	3.5	89325.600	4.5
529.0060	28.01	-4.76	116732.510	2.5	135630.630	2.5
529.0062	18.01	-.90	196076.390	1.5	214974.500	2.5
529.0071	26.02	-1.44	179760.720	3.0	198658.800	3.0
529.0158	23.00	-2.80	15078.250	.5	33976.020	1.5
529.0208	9.01	-3.88	264456.190	2.0	283353.780	1.0
529.0256	23.00	-2.04	15270.420	1.5	34167.840	2.5
529.0270	28.01	-3.15	118809.340	1.5	137706.710	2.5
529.0306	26.02	-2.66	179876.710	4.0	198773.950	5.0
529.0404	28.01	-4.57	116732.510	2.5	135629.400	3.5
529.0474	27.00	-1.69	33173.360	3.5	52070.000	2.5
529.0475	22.00	-7.39	8602.340	2.0	27498.975	3.0
529.0541	19.02	-1.35	225051.000	2.5	243947.400	1.5
529.0569	30.02	-.34	217663.700	1.0	236560.000	0.0
529.0594	28.01	-3.90	99418.610	3.5	118314.820	2.5
529.0614	6.00	-4.26	69710.660	2.0	88606.800	3.0
529.0650	25.01	-4.02	82605.290	4.0	101501.300	3.0
529.0728	22.00	-1.03	29829.097	0.0	48724.830	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
529.0754	28.01	-3.14	113225.060	.5	132120.700	.5
529.0791	26.00	-4.47	34843.980	6.0	53739.488	5.0
529.0840	57.01	-2.66	0.000	0.0	18900.590	0.0
529.0846	23.01	-3.15	30673.140	2.0	49568.450	3.0
529.0849	23.00	-3.04	15724.220	3.5	34619.520	2.5
529.0860	23.01	-3.18	30306.400	3.0	49201.660	2.0
529.0941	22.00	-3.76	6598.749	2.0	25493.722	2.0
529.0950	18.01	-.85	194996.490	1.5	213891.430	2.5
529.0995	6.00	-3.75	69689.480	1.0	88584.260	2.0
529.1009	18.01	-1.59	194996.490	1.5	213891.220	1.5
529.1017	13.01	-4.70	123468.100	3.0	142362.800	2.0
529.1102	26.00	-3.88	39625.784	4.0	58520.180	4.0
529.1160	44.00	-1.94	9033.642	0.0	27933.089	0.0
529.1180	18.01	-1.80	196103.310	4.5	214997.430	4.5
529.1188	6.00	-3.01	69710.660	2.0	88604.750	2.0
529.1233	28.01	-4.02	97273.830	2.5	116167.760	1.5
529.1260	63.00	.55	19115.832	0.0	38014.922	0.0
529.1286	25.01	-3.55	82605.290	4.0	101499.030	4.0
529.1294	28.01	-2.65	117872.780	2.5	136766.490	2.5
529.1314	23.00	-4.10	25111.500	4.5	44005.140	4.5
529.1323	26.00	-3.89	31805.059	3.0	50698.666	2.0
529.1356	18.01	-3.45	196103.310	4.5	214996.800	3.5
529.1468	24.00	-2.33	36558.550	2.0	55451.640	3.0
529.1502	28.01	-2.04	101357.200	4.5	120250.170	3.5
529.1558	6.00	-3.17	69744.030	3.0	88636.800	2.0
529.1588	23.02	-2.55	141987.320	3.5	160879.980	4.5
529.1673	23.00	-3.83	8578.520	2.5	27470.880	3.5
529.1731	23.01	-3.33	30318.630	4.0	49210.780	3.0
529.1773	29.01	-1.50	118142.970	3.0	137034.970	3.0
529.1843	28.01	-4.44	120211.300	5.5	139103.050	5.5
529.1944	18.01	-3.19	189437.690	.5	208329.080	.5
529.1945	28.00	-3.19	31786.210	3.0	50677.599	3.0
529.2039	23.01	-6.09	20343.000	2.0	39234.050	3.0
529.2080	42.00	-1.40	16696.107	0.0	35592.269	0.0
529.2100	59.01	-1.14	5000.766	0.0	23896.856	0.0
529.2140	45.00	-2.03	12663.231	0.0	31559.179	0.0
529.2205	27.00	-.57	33150.680	1.5	52041.140	.5
529.2210	24.01	-3.82	70584.640	2.5	89475.080	2.5
529.2308	28.01	-4.89	116732.510	2.5	135622.600	3.5
529.2350	28.01	-4.96	96052.480	2.5	114942.420	1.5
529.2457	22.00	-3.70	27355.042	1.0	46244.600	2.0
529.2471	28.01	-2.94	118892.990	5.5	137782.500	4.5
529.2517	29.00	-.44	43474.403	0.0	62369.005	0.0
529.2566	23.02	-4.13	162760.280	4.5	181649.450	3.5
529.2586	29.01	-2.25	120092.200	2.0	138981.300	2.0
529.2630	59.01	-1.12	5162.081	0.0	24056.279	0.0
529.2762	23.00	-2.61	15078.250	.5	33966.720	.5
529.2866	24.00	-2.77	27816.880	5.0	46704.980	5.0
529.2872	25.00	-2.74	27781.850	.5	46169.930	.5
529.2902	28.01	-1.67	115085.360	3.5	133973.330	2.5
529.3014	26.00	-2.52	35379.189	5.0	54266.760	5.0
529.3062	28.01	-4.84	116732.510	2.5	135619.910	1.5
529.3170	60.01	-.55	6533.259	0.0	25425.530	0.0
529.3309	24.00	-2.79	31377.960	4.0	50264.480	3.0
529.3322	22.00	-2.34	26803.417	2.0	45689.690	3.0
529.3370	28.01	-2.54	118848.920	7.5	137735.220	6.5
529.3396	24.00	-1.23	27223.050	2.0	46109.260	2.0
529.3410	23.00	-4.29	25253.530	5.5	44139.690	5.5
529.3460	42.01	-1.44	18389.915	0.0	37281.151	0.0
529.3539	15.00	-1.30	57876.700	.5	76762.400	.5
529.3575	28.01	-4.61	116732.510	2.5	135618.080	2.5
529.3680	63.00	-.20	15486.244	0.0	34376.694	0.0
529.3721	23.00	-3.91	23519.840	4.5	42404.690	3.5
529.3746	18.01	-2.09	186171.260	.5	205056.220	1.5
529.3780	26.02	-1.40	182408.910	3.0	201293.750	2.5
529.3783	28.01	-2.60	120218.220	6.5	139103.050	5.5
529.3822	18.01	-.74	196089.870	2.5	214974.560	3.5
529.3833	23.00	-4.46	26171.960	4.5	45056.610	3.5
529.3839	18.01	-2.05	196089.870	2.5	214974.500	2.5
529.3861	17.00	-2.05	82918.893	2.5	101803.442	2.5
529.3944	26.00	-1.58	33412.706	3.0	52296.960	2.0
529.3996	28.01	-2.31	116786.420	.5	135670.490	.5
529.4007	28.01	-1.76	101366.140	2.5	120250.170	3.5
529.4010	24.01	-4.08	47372.750	1.5	66256.770	.5
529.4010	23.00	-1.37	18438.070	4.5	37322.090	3.5
529.4010	25.01	-3.97	82605.290	4.0	101489.310	5.0
529.4161	28.01	-3.00	99559.330	2.5	118442.810	1.5
529.4200	25.01	.01	79540.760	1.0	98424.100	2.0
529.4259	18.01	-4.44	161048.640	1.5	179931.770	1.5
529.4296	29.01	-4.95	129759.600	1.0	148642.600	2.0
529.4394	15.01	-2.20	105550.450	2.0	124433.100	1.0
529.4413	27.00	-1.28	33150.680	1.5	52033.260	1.5
529.4478	25.00	-3.44	27201.540	2.5	46083.890	1.5
529.4495	25.02	-.02	174874.500	4.5	193756.790	4.5
529.4556	22.00	-6.47	6556.828	1.0	25438.898	2.0
529.4561	26.00	-4.31	29356.760	2.0	48238.632	2.0
529.4640	63.00	.36	17583.339	0.0	36470.364	0.0
529.4713	23.00	-2.22	19078.150	3.5	37959.660	2.5
529.4784	22.00	-1.15	28896.062	5.0	47777.320	5.0
529.4797	22.00	-3.83	25699.950	2.0	44581.160	2.0
529.4820	40.00	-1.49	7985.094	0.0	26871.477	0.0
529.4865	6.00	-3.67	69744.030	3.0	88625.000	3.0
529.4870	72.00	-2.23	4516.821	0.0	23403.026	0.0
529.4969	19.02	-.39	243947.400	1.5	262828.000	1.5
529.5010	73.00	-1.94	9194.957	0.0	28080.663	0.0
529.5027	26.02	-.68	179893.560	5.0	198773.950	5.0
529.5137	11.02	-2.95	444748.100	1.5	463628.100	2.5
529.5204	28.01	-3.56	118874.110	3.5	137753.870	4.5
529.5252	25.01	.41	79544.510	2.0	98424.100	2.0
529.5280	25.01	.41	79544.510	2.0	98424.000	3.0
529.5285	26.00	-1.63	35611.608	3.0	54491.080	3.0
529.5303	21.01	-3.19	10944.510	2.0	29823.920	2.0
529.5342	23.01	-2.66	36425.070	4.0	55304.340	4.0
529.5426	6.00	-2.81	68856.330	1.0	87735.300	1.0
529.5470	42.00	-.98	20164.380	0.0	39048.445	0.0
529.5515	28.01	-3.31	118828.610	2.5	137707.260	3.5
529.5527	28.01	-3.67	118897.940	2.5	137776.550	3.5
529.5583	18.01	-3.42	196119.020	3.5	214997.430	4.5
529.5630	46.00	.51	35731.281	0.0	54614.776	0.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
529.5650	76.00	-1.67	16131.504	0.0	35014.927	0.0
529.5670	28.01	-3.26	118828.610	2.5	137706.710	2.5
529.5759	18.01	-1.90	196119.020	3.5	214996.800	3.5
529.5780	22.00	-2.11	8602.340	2.0	27480.047	3.0
529.5891	18.01	-2.55	194996.490	1.5	213873.800	2.5
529.6051	18.01	-1.64	186074.350	2.5	204951.090	3.5
529.6093	26.00	-3.70	34692.130	1.0	53566.720	2.0
529.6093	15.01	-.21	87125.400	2.0	106001.990	1.0
529.6113	25.00	-3.19	38351.780	.5	57226.300	.5
529.6291	18.00	-2.75	106237.597	2.0	125113.480	2.0
529.6318	25.02	-4.97	115762.600	1.5	134638.390	1.5
529.6340	41.00	-1.20	14115.066	0.0	32996.029	0.0
529.6351	18.01	-2.09	196103.310	4.5	214978.980	4.5
529.6382	28.01	-2.58	99418.610	3.5	118294.170	3.5
529.6448	26.00	-3.95	26406.490	1.0	45281.816	2.0
529.6453	24.00	-2.82	31377.960	4.0	50253.270	5.0
529.6658	22.00	-2.98	17423.853	2.0	36296.430	1.0
529.6691	24.00	-1.57	7927.470	2.0	26801.930	1.0
529.6746	22.00	-3.73	17540.205	3.0	36414.470	3.0
529.6789	18.01	-2.65	192712.000	1.5	211586.110	2.5
529.6790	40.00	-1.19	7985.094	0.0	26864.453	0.0
529.6845	24.00	-1.46	36577.730	4.0	55451.640	3.0
529.6871	25.01	-.17	79550.280	3.0	98424.100	2.0
529.6896	24.00	-3.18	35862.820	4.0	54736.550	4.0
529.6899	25.01	.47	79550.280	3.0	98424.000	3.0
529.6930	26.01	-4.49	66589.170	4.5	85462.780	3.5
529.6932	6.00	-2.64	69710.660	2.0	88584.260	2.0
529.6949	27.00	-3.50	26232.050	3.5	45105.590	3.5
529.6955	25.01	.67	79550.280	3.0	98423.800	4.0
529.7101	23.03	-.57	265067.400	2.0	283940.400	2.0
529.7236	22.00	-.57	15108.121	3.0	33980.639	2.0
529.7252	23.00	-3.60	15664.750	1.5	34537.210	1.5
529.7367	25.00	-2.47	43428.580	4.5	62300.630	4.5
529.7376	24.00	-.20	23386.350	3.0	42258.370	4.0
529.7398	23.02	-1.70	141507.700	3.5	160379.640	2.5
529.7418	21.00	-.27	21085.840	3.5	39957.710	4.5
529.7421	28.01	-3.62	97273.830	2.5	116145.690	3.5
529.7533	20.02	-.30	344149.810	2.0	363021.270	2.0
529.7564	25.00	-4.15	41230.300	3.5	60101.650	2.5
529.7592	18.01	-3.37	196103.310	4.5	214974.560	3.5
529.7609	7.00	-2.33	96750.810	1.5	115622.000	2.5
529.7713	29.01	-3.59	117928.480	1.0	136799.300	2.0
529.7740	90.00	-1.31	8711.012	0.0	27586.966	0.0
529.7904	25.00	.67	43644.450	1.5	62514.590	2.5
529.7968	24.00	.09	23386.350	3.0	42256.260	3.0
529.7979	21.00	-.41	21032.780	2.5	39902.650	3.5
529.7996	18.01	-.93	190507.360	1.5	209377.170	2.5
529.8060	22.00	-2.36	29855.248	1.0	48724.830	1.0
529.8060	72.01	-1.52	15163.614	0.0	34038.447	0.0
529.8095	17.00	-3.32	83130.900	1.5	102000.360	1.5
529.8110	59.01	-1.31	5081.424	0.0	23956.079	0.0
529.8114	26.02	.43	179904.560	6.0	198773.950	5.0
529.8190	6.00	-3.71	69689.480	1.0	88558.600	1.0
529.8190	10.00	-1.90	150858.508	2.0	169727.630	1.0
529.8198	22.00	-1.23	29855.248	1.0	48724.340	2.0
529.8277	24.00	-1.39	7927.470	2.0	26796.280	2.0
529.8294	18.01	-2.68	183675.570	3.5	202544.320	2.5
529.8319	22.00	-4.35	29971.078	4.0	48839.740	3.0
529.8429	22.00	-.22	20209.444	2.0	39077.713	1.0
529.8457	24.00	-.33	23386.350	3.0	42254.520	2.0
529.8460	28.01	-3.63	118914.340	4.5	137782.500	4.5
529.8538	28.00	.11	43089.636	5.0	61957.517	6.0
529.8580	64.00	-.74	10162.848	0.0	29035.829	0.0
529.8683	26.00	-4.88	27543.000	1.0	46410.366	1.0
529.8701	27.01	-6.96	27585.300	1.0	46452.600	2.0
529.8732	7.00	-2.37	96750.810	1.5	115618.000	.5
529.8732	7.00	-2.19	96750.810	1.5	115618.000	1.5
529.8732	7.00	-3.54	96750.810	1.5	115618.000	2.5
529.8780	76.00	.10	28149.475	0.0	47021.744	0.0
529.8793	26.00	-2.50	29371.860	3.0	48238.832	2.0
529.8808	28.01	-3.44	100010.170	.5	118877.090	1.5
529.8847	25.00	.54	43428.580	4.5	62295.360	5.5
529.8888	8.00	-2.36	88630.599	1.0	107497.236	1.0
529.8923	28.01	-.07	116786.420	.5	135652.930	1.5
529.8971	25.00	-2.75	44978.980	1.5	63845.320	1.5
529.8982	17.02	-1.06	198983.900	1.5	217850.200	2.5
529.8999	24.00	-2.97	35934.020	6.0	54800.260	6.0
529.9044	25.00	-.16	43428.580	4.5	62294.660	3.5
529.9045	8.00	-2.14	88631.158	2.0	107497.236	1.0
529.9061	24.00	-1.55	35870.530	4.0	54736.550	4.0
529.9072	18.01	-2.89	190511.190	2.5	209377.170	2.5
529.9089	8.00	-2.84	88631.315	0.0	107497.236	1.0
529.9092	28.01	-3.42	114869.350	1.5	133735.260	2.5
529.9168	9.02	-3.90	413195.000	2.5	432060.640	1.5
529.9173	25.01	-.37	79558.380	4.0	98424.000	3.0
529.9229	25.01	.45	79558.380	4.0	98423.800	4.0
529.9235	19.02	-2.07	225082.000	1.5	243947.400	1.5
529.9257	25.01	.87	79558.380	4.0	98423.700	5.0
529.9262	9.00	-2.70	118936.797	1.5	137802.100	2.5
529.9277	25.01	-3.55	86190.180	2.0	105055.430	2.0
529.9302	24.00	-2.74	35934.020	6.0	54799.180	5.0
529.9373	9.02	-3.75	441276.720	2.5	460141.630	2.5
529.9417	18.01	-2.71	200138.850	3.5	219003.600	2.5
529.9493	18.01	-1.17	190732.970	.5	209597.450	1.5
529.9926	26.02	-.17	147281.690	1.0	166144.630	2.0
529.9973	6.00	-2.55	69744.030	3.0	88606.800	3.0
530.0016	22.00	-2.83	8492.421	1.0	27355.042	1.0
530.0125	6.00	-2.99	68856.330	1.0	87718.560	1.0
530.0131	28.01	-4.97	118914.340	4.5	137776.550	3.5
530.0156	23.02	-2.75	141714.500	2.5	160576.620	3.5
530.0249	28.01	-3.58	118892.990	5.5	137754.780	5.5
530.0319	28.01	-3.26	118893.240	6.5	137754.780	5.5
530.0409	26.00	-2.58	37046.000	4.0	55907.220	5.0
530.0505	28.01	-3.31	118892.990	5.5	137753.670	4.5
530.0550	6.00	-4.19	69744.030	3.0	88604.750	2.0
530.0580	60.00	-1.21	1048.548	0.0	19914.408	0.0
530.0665	18.01	-2.00	195031.120	2.5	213891.430	2.5
530.0676	18.01	-2.86	192712.000	1.5	211572.270	1.5
530.0724	18.01	-2.55	195031.120	2.5	213891.220	1.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
530.0744	24.00	-2.30	7927.470	2.0	26787.500	3.0
530.0763	28.01	-2.72	117872.780	2.5	136732.740	1.5
530.0763	18.01	-.45	196119.020	3.5	214978.980	4.5
530.0789	24.00	-2.25	31393.400	5.0	50253.270	5.0
530.0870	6.00	-2.76	69689.480	1.0	88549.060	1.0
530.0876	26.00	-3.29	37046.000	4.0	55905.560	4.0
530.0949	28.01	-4.06	118923.200	3.5	137782.500	4.5
530.0950	70.01	-.78	37344.432	0.0	56208.975	0.0
530.1020	78.00	.75	36618.514	0.0	55482.808	0.0
530.1039	27.00	-2.23	13795.520	2.5	32654.500	2.5
530.1101	27.00	-1.75	17233.680	3.5	36092.440	2.5
530.1109	23.00	-2.83	13801.530	1.5	32660.260	2.5
530.1146	15.01	-3.34	110252.000	1.0	129110.600	1.0
530.1269	25.02	-4.81	115780.230	2.5	134638.390	1.5
530.1311	26.00	-2.85	35379.189	5.0	54237.200	4.0
530.1323	20.02	.41	341349.190	1.0	360207.160	2.0
530.1528	17.00	-1.67	83130.900	1.5	101988.140	2.5
530.1579	24.01	-3.44	70317.040	2.5	89174.100	3.5
530.1635	23.00	-4.13	15571.900	2.5	34428.760	1.5
530.1666	28.01	-3.66	101366.140	2.5	120222.890	1.5
530.1670	64.00	-.14	7420.492	0.0	26282.473	0.0
530.1806	28.01	-4.43	114858.880	5.5	133715.130	4.5
530.1898	9.00	-2.33	118936.797	1.5	137792.720	2.5
530.1944	21.00	-2.83	0.000	1.5	18855.760	1.5
530.1970	40.00	-.30	17663.997	0.0	36524.911	0.0
530.1980	57.01	-1.86	3226.301	0.0	22087.179	0.0
530.2006	18.01	-4.85	196119.020	3.5	214974.560	3.5
530.2023	28.01	-3.32	118927.020	4.5	137782.500	4.5
530.2023	18.01	-3.48	196119.020	3.5	214974.500	2.5
530.2147	6.00	-4.32	68856.330	1.0	87711.370	0.0
530.2163	23.00	-1.21	18372.460	3.5	37227.440	2.5
530.2200	7.00	-2.67	97770.150	.5	116625.000	1.5
530.2242	25.01	-.77	79569.100	5.0	98423.800	4.0
530.2270	25.01	.27	79569.100	5.0	98423.700	5.0
530.2280	60.01	-.59	11292.053	0.0	30151.864	0.0
530.2290	26.02	-.26	186882.980	3.0	205737.510	2.0
530.2307	26.00	-.99	26479.366	1.0	45333.834	2.0
530.2326	25.01	1.04	79569.100	5.0	98423.500	6.0
530.2350	42.00	-.84	25729.749	0.0	44589.311	0.0
530.2361	6.00	-2.58	69689.480	1.0	88543.760	0.0
530.2411	28.01	-.50	101357.200	4.5	120211.300	5.5
530.2428	24.00	-2.33	27223.050	2.0	46077.090	1.0
530.2563	18.01	-2.19	186340.480	1.5	205194.040	1.5
530.2564	22.00	-.46	29986.185	3.0	48839.740	3.0
530.2580	76.00	-1.46	19277.147	0.0	38135.891	0.0
530.2597	14.02	-3.58	230267.700	2.0	249121.140	3.0
530.2602	26.02	-.12	147291.210	2.0	166144.630	2.0
530.2620	57.01	-.63	16454.134	0.0	35312.736	0.0
530.2622	28.01	-3.12	118923.200	3.5	137776.550	3.5
530.2760	64.00	-.37	6452.602	0.0	25310.706	0.0
530.2856	14.02	-2.06	230268.620	3.0	249121.140	3.0
530.2870	6.00	-1.84	69744.030	3.0	88596.500	4.0
530.2959	24.00	-3.61	35884.400	5.0	54736.550	4.0
530.3013	18.01	-4.08	200151.640	1.5	219003.600	2.5
530.3024	28.01	-2.62	108368.050	2.5	127219.970	3.5
530.3024	6.00	-3.28	69689.480	1.0	88541.400	2.0
530.3036	6.00	-3.96	68856.330	1.0	87708.210	2.0
530.3040	90.01	-2.07	12824.546	0.0	31681.654	0.0
530.3114	27.01	-5.88	27469.200	5.0	46320.800	4.0
530.3114	38.01	-.49	55769.700	0.0	74626.545	0.0
530.3249	23.01	-2.17	18353.890	3.0	37205.010	3.0
530.3283	25.02	-1.25	176464.780	3.5	195315.780	2.5
530.3310	9.00	-2.33	118936.797	1.5	137787.700	1.5
530.3429	14.02	-.97	230270.660	4.0	249121.140	3.0
530.3477	26.01	-2.03	66012.830	4.5	84863.140	5.5
530.3519	18.01	-2.76	200151.640	1.5	219001.800	1.5
530.3530	26.00	-3.22	36940.600	2.0	55790.720	3.0
530.3550	57.01	-2.24	2581.041	0.0	21436.336	0.0
530.3575	28.01	-3.59	118892.990	5.5	137742.950	5.5
530.3646	28.01	-2.85	118893.240	6.5	137742.950	5.5
530.3696	28.01	-2.99	118927.020	4.5	137776.550	3.5
530.3736	26.02	-.65	186882.980	3.0	205732.370	3.0
530.3786	23.00	-3.94	21603.170	4.5	40452.380	5.5
530.3831	26.02	-1.35	182444.700	3.0	201293.750	2.0
530.3850	63.00	.10	16534.792	0.0	35389.021	0.0
530.3900	7.03	-.75	465301.000	0.0	484155.051	0.0
530.3995	23.02	-.75	141531.170	1.5	160379.640	2.5
530.4012	23.00	-3.09	15688.800	2.5	34537.210	1.5
530.4020	57.00	-.91	7420.492	0.0	26274.116	0.0
530.4101	26.00	-3.72	31686.342	2.0	50534.435	3.0
530.4183	24.00	-.38	27935.260	4.0	46783.060	4.0
530.4256	26.01	-3.86	47674.780	1.5	66522.320	2.5
530.4400	25.01	-5.00	86208.400	1.0	105055.430	2.0
530.4400	71.00	-.92	20325.695	0.0	39177.969	0.0
530.4405	10.01	-2.58	294333.220	.5	313180.230	1.5
530.4453	26.01	-4.86	54904.500	3.5	73751.340	4.5
530.4484	26.02	-3.25	117950.320	4.0	136797.050	3.0
530.4538	24.00	-2.77	31364.330	3.0	50210.870	4.0
530.4630	90.01	-1.84	14679.669	0.0	33531.125	0.0
530.4636	7.00	-4.69	96750.810	1.5	115597.000	1.5
530.4757	10.00	-2.28	150121.592	1.0	168967.353	1.0
530.4762	22.00	-.84	26910.705	6.0	45756.450	5.0
530.4860	44.00	-1.58	9517.587	0.0	28368.226	0.0
530.4957	26.01	-3.45	61332.820	1.5	80177.870	1.5
530.4971	14.03	-1.45	313914.920	1.5	332759.920	1.5
530.4971	14.03	-.50	313914.920	2.5	332759.920	1.5
530.5101	27.00	-3.04	25937.590	4.5	44782.130	4.5
530.5197	12.02	-.90	545820.400	2.0	564664.600	2.0
530.5250	25.02	-2.41	176464.780	3.5	195308.790	4.5
530.5315	23.00	-4.24	23519.840	4.5	42363.620	3.5
530.5371	26.02	-3.61	205195.150	5.0	224038.730	5.0
530.5391	28.01	-3.38	109148.050	4.5	127991.560	3.5
530.5428	26.00	-4.50	29320.050	1.0	48163.427	2.0
530.5478	28.01	-3.45	115209.850	3.5	134053.050	2.5
530.5543	28.01	-3.29	118939.530	5.5	137782.500	4.5
530.5570	90.01	-2.35	9356.272	0.0	28204.388	0.0
530.5625	18.01	-1.40	195031.120	2.5	213873.800	2.5
530.5633	9.00	-2.29	117308.558	1.5	136151.210	.5
530.5658	25.02	-2.28	176270.250	2.5	195112.810	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
530.5687	18.01	-2.05	161089.310	.5	179931.770	1.5
530.5822	28.01	-3.26	118893.240	6.5	137735.220	6.5
530.5855	24.01	-2.25	30864.610	2.5	49706.470	2.5
530.6129	26.02	-.92	179876.710	4.0	198717.600	4.0
530.6255	28.01	-4.51	118914.340	4.5	137754.780	5.5
530.6260	42.00	-1.45	20164.380	0.0	39010.045	0.0
530.6315	6.00	-1.94	69744.030	3.0	88584.260	2.0
530.6337	22.00	-5.08	6598.749	2.0	25438.898	2.0
530.6351	25.03	-4.49	152858.200	3.0	171698.300	2.0
530.6413	18.01	-3.25	186340.480	1.5	205180.360	.5
530.6470	60.01	-1.32	6855.889	0.0	25700.809	0.0
530.6512	28.01	-3.14	118914.340	4.5	137753.870	4.5
530.6529	7.01	-.59	211103.630	3.0	229943.100	4.0
530.6588	28.01	-3.62	58493.210	2.5	77332.470	2.5
530.6700	64.00	-.92	6936.547	0.0	25780.650	0.0
530.6709	24.01	-3.70	50667.330	3.5	69506.160	3.5
530.6757	26.02	-.34	147305.970	3.0	166144.630	2.0
530.6774	7.01	-2.27	186511.580	2.0	205350.180	2.0
530.6805	10.01	-3.05	303509.520	2.5	322348.010	3.5
530.6830	6.00	-2.29	69710.660	2.0	88549.060	1.0
530.6847	24.00	-4.88	24286.540	1.0	43124.880	2.0
530.6903	28.01	-4.13	120002.860	3.5	138841.000	3.5
530.7120	69.00	-1.42	0.000	0.0	18842.611	0.0
530.7126	28.01	-1.69	101366.140	2.5	120203.490	2.5
530.7129	27.00	-1.69	32430.590	5.5	51267.930	4.5
530.7216	27.00	-1.20	34133.590	3.5	52970.620	2.5
530.7224	20.01	-.87	60611.280	1.5	79448.280	.5
530.7269	24.00	-.81	29824.750	3.0	48661.590	3.0
530.7300	64.00	-.19	7017.204	0.0	25859.176	0.0
530.7363	26.00	-3.12	12968.552	2.0	31805.059	3.0
530.7365	27.01	-4.50	27484.300	3.0	46320.800	4.0
530.7447	25.01	-2.21	56883.380	1.0	75719.590	1.0
530.7449	14.02	-2.02	230267.700	2.0	249103.900	2.0
530.7537	25.00	-3.15	27248.000	1.5	46083.890	1.5
530.7571	27.00	-4.50	36329.860	2.5	55165.630	2.5
530.7671	17.00	-2.16	82918.893	2.5	101754.307	3.5
530.7672	28.01	-2.90	118442.810	1.5	137278.220	1.5
530.7709	14.02	-1.14	230268.620	3.0	249103.900	2.0
530.7813	18.01	-4.76	196076.390	1.5	214911.300	2.5
530.7820	72.00	-.52	23310.023	0.0	42150.149	0.0
530.7971	7.00	-4.15	96787.650	1.5	115622.000	2.5
530.8002	6.00	-2.75	69710.660	2.0	88544.900	3.0
530.8013	17.01	-3.62	140740.000	1.0	159574.200	2.0
530.8070	18.01	-3.78	172335.520	2.5	191169.520	1.5
530.8309	28.01	-3.06	118874.110	3.5	137707.260	3.5
530.8340	28.01	-1.97	101366.140	2.5	120199.180	1.5
530.8377	24.00	-3.20	31377.960	4.0	50210.870	4.0
530.8377	24.01	-1.98	32836.840	3.5	51669.750	2.5
530.8420	60.01	-1.52	10082.190	0.0	28920.187	0.0
530.8430	10.01	-1.12	303237.910	1.5	322070.630	2.5
530.8431	22.00	-3.65	6661.003	3.0	25493.722	2.0
530.8462	28.01	-3.38	120270.440	5.5	139103.050	5.5
530.8464	28.01	-3.67	118874.110	3.5	137706.710	2.5
530.8473	27.00	-2.15	27497.060	2.5	46329.630	2.5
530.8483	22.00	-1.50	18911.399	2.0	37743.933	3.0
530.8540	92.00	-1.38	3710.246	0.0	22547.817	0.0
530.8586	27.00	-3.77	35450.560	3.5	54282.730	2.5
530.8588	28.01	-2.01	116838.330	1.5	135670.490	.5
530.8589	9.00	-2.84	117622.923	2.5	136455.080	1.5
530.8625	28.01	-2.59	99040.750	1.5	117872.780	2.5
530.8691	26.00	-2.16	34328.733	3.0	53160.530	3.0
530.8698	25.00	-4.38	45013.550	2.5	63845.320	1.5
530.8724	24.00	-4.19	31352.420	1.0	50184.100	2.0
530.8831	15.04	-1.41	448061.700	2.5	466893.000	2.5
530.8831	15.04	-.11	448061.700	3.5	466893.000	2.5
530.8831	15.04	-.27	448061.700	2.5	466893.000	1.5
530.8839	25.02	-1.09	174048.890	2.5	192880.160	3.5
530.8921	25.00	.44	43595.500	2.5	62426.480	3.5
530.8932	24.01	-2.99	50667.330	3.5	69498.270	4.5
530.8960	59.01	-2.16	6371.944	0.0	25208.025	0.0
530.8989	6.00	-3.19	69710.660	2.0	88541.400	2.0
530.9008	28.01	-4.36	118923.200	3.5	137753.870	4.5
530.9051	28.01	-4.97	120272.530	4.5	139103.050	5.5
530.9059	25.01	-3.00	86190.180	2.0	105020.670	1.0
530.9099	7.00	-4.25	96787.650	1.5	115618.000	1.5
530.9099	7.00	-4.02	96787.650	1.5	115618.000	2.5
530.9223	25.01	-2.99	83875.460	4.0	102705.370	3.0
530.9270	44.00	-1.32	7420.492	0.0	26255.473	0.0
530.9304	28.01	-4.83	118877.090	1.5	137706.710	2.5
530.9338	23.03	-2.17	265271.600	3.0	284101.100	3.0
530.9364	24.01	-3.30	70679.220	4.5	89508.630	5.5
530.9370	18.01	-.69	195031.120	2.5	213860.510	3.5
530.9409	22.00	-6.44	14028.470	2.0	32857.721	3.0
530.9423	24.00	-2.29	33762.740	6.0	52591.940	5.0
530.9493	22.00	-2.66	26892.926	3.0	45721.878	4.0
530.9494	14.03	-.75	313914.920	1.5	332743.870	.5
530.9507	18.00	-3.84	106237.597	2.0	125066.501	2.0
530.9510	24.00	-4.75	31355.210	2.0	50184.100	2.0
530.9513	22.00	-3.61	18825.890	1.0	37654.770	2.0
530.9589	28.01	-3.85	118914.340	4.5	137742.950	5.5
530.9602	9.00	-1.94	117622.923	2.5	136451.490	2.5
530.9629	21.00	-4.98	21032.780	2.5	39861.250	2.5
530.9680	20.02	-.87	328588.760	3.0	347417.050	3.0
530.9680	72.00	-1.24	16050.847	0.0	34884.374	0.0
530.9722	25.00	-4.48	49888.080	3.5	68716.220	4.5
530.9778	22.00	-3.42	26657.409	4.0	45485.350	5.0
530.9795	25.01	-2.84	83875.460	4.0	102703.340	4.0
530.9829	28.01	-4.59	118927.020	4.5	137754.780	5.5
530.9849	24.00	-3.69	35501.260	3.0	54328.950	3.0
530.9849	27.00	-.74	32733.070	3.5	51560.760	2.5
530.9895	28.00	-4.71	40361.254	3.0	59188.780	3.0
530.9922	26.02	.28	182379.860	5.0	201207.290	4.0
530.9970	25.02	-3.95	121117.140	3.5	139944.400	3.5
531.0015	17.01	-2.03	139350.000	1.0	158177.100	1.0
531.0086	28.01	-3.62	118927.020	4.5	137753.870	4.5
531.0160	22.00	-2.58	27418.015	2.0	46244.600	2.0
531.0204	28.01	-4.54	115956.710	2.5	134783.140	2.5
531.0213	26.00	-3.82	34328.733	3.0	53155.130	4.0
531.0213	27.00	-.39	33945.900	2.5	52772.300	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
531.0269	8.01	-4.89	255913.000	1.5	274739.200	2.5
531.0337	26.02	-3.90	183456.690	3.0	202282.650	2.0
531.0382	14.02	-1.29	230267.700	2.0	249093.500	1.0
531.0540	24.00	-4.19	27597.220	3.0	46422.460	4.0
531.0554	23.00	-3.89	9636.960	1.5	28462.150	2.5
531.0610	24.00	-4.47	24299.890	2.0	43124.880	2.0
531.0655	24.01	-2.37	32844.920	1.5	51669.750	2.5
531.0776	23.03	-.10	236322.400	2.0	255146.800	2.0
531.0828	23.00	-3.67	9544.540	.5	28368.760	1.5
531.0828	23.00	-5.00	23353.090	3.5	42177.310	4.5
531.0870	23.01	-3.99	32299.240	1.0	51123.310	2.0
531.0878	26.02	.27	179893.560	5.0	198717.600	4.0
531.0943	18.02	-1.94	207532.150	1.0	226355.960	2.0
531.0946	13.01	-2.17	125700.500	0.0	144524.300	1.0
531.1120	59.01	-1.24	8872.327	0.0	27700.747	0.0
531.1341	28.01	-4.45	96052.480	2.5	114874.880	2.5
531.1400	40.00	-1.71	4113.534	0.0	22940.962	0.0
531.1440	23.00	-4.77	15664.750	1.5	34486.800	2.5
531.1460	60.01	-.89	7904.437	0.0	26731.652	0.0
531.1471	28.01	-4.46	120281.110	4.5	139103.050	5.5
531.1513	28.01	-1.93	115108.090	2.5	133929.880	3.5
531.1600	72.01	-1.57	14276.381	0.0	33103.100	0.0
531.1615	18.01	-4.82	196089.870	2.5	214911.300	2.5
531.1742	25.02	-2.56	173920.690	1.5	192741.670	.5
531.1753	24.00	-3.58	24303.940	3.0	43124.880	2.0
531.1880	92.01	-2.20	4355.506	0.0	23181.232	0.0
531.1942	10.01	-4.22	303527.740	4.5	322348.010	4.5
531.1956	25.00	-1.51	43314.230	5.5	62134.450	5.5
531.2000	90.00	-1.86	3629.588	0.0	22454.889	0.0
531.2001	18.01	-.52	196621.880	3.5	215441.940	4.5
531.2069	18.01	-2.07	196621.880	3.5	215441.700	3.5
531.2081	28.01	-3.25	99559.330	2.5	118379.110	2.5
531.2083	24.00	-3.48	31364.330	3.0	50184.100	2.0
531.2124	22.00	-4.59	29768.655	2.0	48588.280	3.0
531.2165	10.01	-3.85	303528.530	3.5	322348.010	4.5
531.2174	6.00	-4.15	61981.820	1.0	80801.270	2.0
531.2230	62.01	-2.40	2661.698	0.0	21486.184	0.0
531.2247	7.00	-1.86	97805.810	1.5	116625.000	1.5
531.2247	7.00	-1.71	97805.810	1.5	116625.000	2.5
531.2256	28.01	-1.45	100078.780	1.5	118897.940	2.5
531.2330	59.01	-1.84	5000.766	0.0	23824.898	0.0
531.2433	24.01	-3.27	50687.630	2.5	69506.160	3.5
531.2483	22.00	-2.11	26892.926	3.0	45711.280	4.0
531.2530	90.00	-1.63	5484.711	0.0	24308.134	0.0
531.2555	13.01	-1.70	125706.200	1.0	144524.300	1.0
531.2570	46.00	-.29	35973.254	0.0	54796.535	0.0
531.2628	28.01	-3.00	113407.310	2.5	132225.150	1.5
531.2645	27.00	-2.12	33945.900	2.5	52763.680	3.5
531.2679	28.01	-4.62	99154.810	4.5	117972.470	3.5
531.2708	22.00	-.91	29907.273	2.0	48724.830	1.0
531.2730	92.01	-2.43	5726.684	0.0	24549.398	0.0
531.2730	25.00	-4.27	38669.600	3.5	57487.080	2.5
531.2733	24.00	-1.88	31393.400	5.0	50210.870	4.0
531.2846	22.00	-.89	29907.273	2.0	48724.340	2.0
531.2868	10.01	-4.04	294086.490	1.5	312903.480	2.5
531.2871	24.00	-1.09	27820.230	3.0	46637.210	3.0
531.2919	21.00	-1.82	21085.840	3.5	39902.650	3.5
531.3023	28.01	-2.87	113408.710	1.5	132225.150	1.5
531.3088	26.02	-2.04	186378.940	4.0	205195.150	5.0
531.3122	24.01	-4.97	67875.680	3.5	86691.770	2.5
531.3153	18.01	-4.72	184191.710	.5	203007.690	1.5
531.3167	28.01	-4.50	118927.020	4.5	137742.950	5.5
531.3221	9.00	-2.83	117308.558	1.5	136124.300	.5
531.3239	22.00	-2.87	8602.340	2.0	27418.015	2.0
531.3291	22.00	-2.02	25438.898	2.0	44254.390	3.0
531.3320	26.00	-3.64	28604.610	2.0	47420.000	2.0
531.3343	27.00	-2.14	33449.180	.5	52264.490	1.5
531.3359	28.01	-3.63	118939.530	5.5	137754.780	5.5
531.3425	7.01	-.87	225603.500	1.0	244418.520	1.0
531.3526	24.01	-1.76	32855.090	2.5	51669.750	2.5
531.3543	28.01	-1.32	116838.330	1.5	135652.930	1.5
531.3616	28.01	-3.13	118939.530	5.5	137753.870	4.5
531.3628	17.00	-3.55	83130.900	1.5	101945.200	.5
531.3628	17.00	-3.51	83130.900	1.5	101945.200	1.5
531.3659	23.02	-3.34	141507.700	3.5	160321.890	2.5
531.3761	22.01	-4.49	12676.990	4.5	31490.820	3.5
531.3800	26.00	-3.85	36940.600	2.0	55754.290	2.0
531.3828	24.00	-2.71	31009.000	3.0	49822.590	2.0
531.3848	10.01	-1.64	303237.910	1.5	322051.430	2.5
531.3873	23.01	-4.87	53868.630	2.0	72682.060	2.0
531.3890	42.00	-1.20	18389.915	0.0	37208.521	0.0
531.3984	10.01	-2.78	303237.910	1.5	322050.950	1.5
531.3986	26.02	-2.48	182480.720	2.0	201293.750	2.0
531.4094	23.00	-3.18	15664.750	1.5	34477.400	.5
531.4114	28.01	-4.86	116786.420	.5	135599.000	.5
531.4122	27.00	-4.21	36092.440	2.5	54904.990	2.5
531.4167	23.00	-4.54	2220.130	2.5	21032.520	3.5
531.4201	25.01	-3.40	86208.400	1.0	105020.670	1.0
531.4255	22.00	-2.29	29912.262	3.0	48724.340	2.0
531.4264	18.01	-1.54	189437.690	.5	208249.740	1.5
531.4299	9.00	-3.35	117622.923	2.5	136434.850	2.5
531.4376	23.00	-4.47	23353.090	3.5	42164.740	3.5
531.4385	28.01	-4.02	75917.630	3.5	94729.250	2.5
531.4424	23.00	-3.18	14548.830	2.5	33360.310	3.5
531.4602	7.00	-2.68	97770.150	.5	116581.000	.5
531.4636	24.01	-3.43	50667.330	3.5	69478.060	2.5
531.4676	21.00	-1.93	15756.510	2.5	34567.100	3.5
531.4766	20.02	-1.06	328606.780	2.0	347417.050	3.0
531.4786	10.00	-2.66	150917.431	0.0	169727.630	1.0
531.4790	45.00	.16	31295.118	0.0	50110.537	0.0
531.4876	28.01	-3.08	115120.000	2.5	133929.880	3.5
531.4950	22.00	-4.62	29914.720	3.0	48724.340	2.0
531.5026	7.00	-2.98	96787.650	1.5	115597.000	1.5
531.5040	42.00	-1.22	20245.038	0.0	39059.572	0.0
531.5051	26.00	-1.34	35257.309	4.0	54066.570	4.0
531.5085	6.00	-3.13	69689.480	1.0	88498.620	2.0
531.5190	28.01	-4.68	118897.940	2.5	137706.710	2.5
531.5215	18.01	-.63	196633.020	2.5	215441.700	3.5
531.5230	23.00	-1.00	18513.460	4.5	37322.090	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
531.5270	92.00	-1.25	7581.807	0.0	26395.527	0.0
531.5330	44.00	-.97	20809.640	0.0	39623.147	0.0
531.5354	27.00	-2.11	35450.560	3.5	54256.750	2.5
531.5549	21.00	-1.84	15672.550	1.5	34480.050	2.5
531.5550	41.00	-2.02	5887.999	0.0	24700.728	0.0
531.5591	26.02	-2.19	182486.400	1.0	201293.750	2.0
531.5600	26.01	-2.09	66377.370	3.5	85184.690	4.5
531.5693	26.02	-4.20	166144.630	2.0	184951.620	3.0
531.5733	22.00	-.95	27025.652	4.0	45832.500	5.0
531.5789	24.01	-3.37	54678.950	4.5	73485.600	3.5
531.5790	26.00	-2.76	29356.780	2.0	48163.427	2.0
531.5828	17.00	-3.19	82918.893	2.5	101725.370	1.5
531.5908	29.01	-2.86	120092.200	2.0	138898.430	1.0
531.5914	9.00	-1.32	117622.923	2.5	136429.130	3.5
531.6044	15.01	-.23	86744.700	1.0	105550.450	2.0
531.6171	13.01	-1.47	125719.000	2.0	144524.300	1.0
531.6179	20.02	-2.08	328090.990	2.0	346896.260	2.0
531.6184	9.00	-2.69	117308.558	1.5	136113.810	1.5
531.6332	24.01	-2.34	59130.510	1.5	77935.240	2.5
531.6573	9.00	-2.85	117622.923	2.5	136426.800	1.5
531.6575	7.01	-.99	211103.630	3.0	229907.500	4.0
531.6620	26.01	-2.08	25428.800	5.5	44232.510	4.5
531.6691	24.00	-3.84	31009.000	3.0	49812.460	3.0
531.6702	28.01	-3.22	118939.530	5.5	137742.950	5.5
531.6765	27.00	-.84	32464.730	4.5	51267.930	4.5
531.6784	26.01	-3.10	25981.650	3.5	44784.780	2.5
531.6793	11.02	-3.37	444825.000	2.5	463628.100	2.5
531.6805	10.00	-3.01	150121.592	1.0	168924.651	2.0
531.6847	23.00	-2.46	15571.900	2.5	34374.810	3.5
531.6996	9.00	-1.99	117164.006	2.5	135966.390	1.5
531.7010	41.00	-1.89	10969.423	0.0	29776.986	0.0
531.7090	18.01	-3.49	200138.850	3.5	218940.900	4.5
531.7093	25.00	-2.27	27281.850	.5	46083.890	1.5
531.7200	27.00	-1.28	33462.830	2.5	52264.490	1.5
531.7280	75.00	-.76	26536.324	0.0	45342.932	0.0
531.7361	28.01	-4.78	51557.850	3.5	70358.940	4.5
531.7423	9.00	-2.92	117308.558	1.5	136109.430	.5
531.7424	6.00	-3.79	69744.030	3.0	88544.900	3.0
531.7451	26.00	-4.57	26627.612	4.0	45428.385	4.0
531.7475	6.00	-3.61	61981.820	1.0	80782.510	1.0
531.7528	26.00	-1.71	33412.706	3.0	52213.207	3.0
531.7538	22.00	-2.65	17540.205	3.0	36340.670	2.0
531.7566	26.00	-2.60	36079.353	3.0	54879.720	2.0
531.7698	24.01	-4.53	67868.050	2.5	86667.950	1.5
531.7701	26.01	-4.79	66248.670	.5	85048.560	1.5
531.7723	18.00	-1.59	107289.747	2.0	126089.560	3.0
531.7754	29.01	-4.91	129759.600	1.0	148559.300	2.0
531.7941	23.00	-4.66	26122.040	3.5	44921.080	2.5
531.7998	25.02	-.98	174436.590	2.5	193235.430	2.5
531.8009	8.01	-1.93	255983.600	4.5	274782.400	3.5
531.8034	28.00	-4.56	15609.861	2.0	34408.574	1.0
531.8036	26.00	-4.12	24338.766	3.0	43137.472	3.0
531.8114	27.00	-3.97	23184.230	2.5	41982.660	1.5
531.8128	26.02	-2.22	182408.910	3.0	201207.290	4.0
531.8148	28.01	-1.13	100078.780	1.5	118877.090	1.5
531.8235	23.00	-3.37	15688.800	2.5	34486.800	2.5
531.8235	28.01	-2.92	98276.700	4.5	117074.700	3.5
531.8283	28.00	-2.48	30979.789	4.0	49777.619	3.0
531.8295	24.00	-3.43	38537.680	5.0	57335.470	4.0
531.8345	21.01	-1.94	10944.510	2.0	29742.120	1.0
531.8380	24.01	-3.38	29952.080	.5	48749.570	.5
531.8528	22.00	-1.92	26892.926	3.0	45689.890	3.0
531.8546	8.01	-4.63	256123.100	3.5	274920.000	2.5
531.8600	41.00	-1.88	1532.493	0.0	20334.433	0.0
531.8609	23.01	-5.43	18353.890	3.0	37150.570	4.0
531.8670	73.00	-.36	25003.831	0.0	43805.524	0.0
531.8688	25.00	-3.28	41031.480	4.5	59827.880	5.5
531.8787	28.01	-3.51	120044.950	4.5	138841.000	3.5
531.8810	24.00	-.74	27728.870	2.0	46524.840	2.0
531.8870	74.00	-.29	27504.214	0.0	46305.200	0.0
531.8889	28.01	-4.24	118939.530	5.5	137735.220	6.5
531.8940	25.01	-4.55	55115.800	2.0	73911.310	1.0
531.9027	12.02	-.53	562939.500	2.0	581734.700	1.0
531.9027	12.02	-.53	562939.500	2.0	581734.700	1.0
531.9030	23.00	-2.14	15270.420	1.5	34065.610	2.5
531.9110	28.01	-3.06	115108.090	2.5	133903.000	1.5
531.9155	20.02	-.97	328588.760	3.0	347383.510	4.0
531.9186	26.02	-.54	182412.650	4.0	201207.290	4.0
531.9211	26.00	-2.94	32873.623	4.0	51668.175	4.0
531.9294	24.00	-3.62	31028.330	2.0	49822.590	2.0
531.9310	8.01	-4.51	256125.800	2.5	274920.000	1.5
531.9490	41.00	-1.69	8630.355	0.0	27429.150	0.0
531.9554	24.01	-3.52	53923.570	4.5	72716.910	4.5
531.9627	26.00	-4.54	24118.815	4.0	42911.897	5.0
531.9673	28.01	-3.19	118914.340	4.5	137707.260	3.5
531.9792	26.01	-4.88	66078.340	2.5	84870.840	2.5
531.9820	60.01	-.96	4355.506	0.0	23153.134	0.0
531.9848	28.01	-4.73	116838.330	1.5	135630.630	2.5
531.9854	18.01	-3.15	196119.020	3.5	214911.300	2.5
531.9890	42.01	-.18	31295.118	0.0	50092.499	0.0
531.9967	26.01	-3.72	61093.440	2.5	79885.320	2.5
532.0056	26.00	-2.02	29371.860	3.0	48163.427	2.0
532.0160	57.00	-1.87	3468.273	0.0	22264.700	0.0
532.0202	7.01	-.39	225627.470	2.0	244418.520	1.0
532.0228	25.01	-3.01	83912.380	5.0	102703.340	4.0
532.0296	23.02	-2.16	141531.170	1.5	160321.890	2.5
532.0389	26.01	-3.40	66672.390	3.5	85462.780	3.5
532.0429	20.02	-4.47	325467.670	2.0	344257.920	1.0
532.0435	24.00	-2.50	27176.220	1.0	45966.450	2.0
532.0442	28.00	-2.85	30163.140	2.0	48953.344	1.0
532.0576	22.00	-2.70	22404.690	3.0	41194.420	3.0
532.0600	62.00	-.35	2258.411	0.0	21053.284	0.0
532.0602	27.00	-6.51	7442.410	3.5	26232.050	3.5
532.0695	16.01	.49	121529.490	2.5	140318.800	3.5
532.0757	26.02	-1.75	186303.440	3.0	205092.530	4.0
532.0780	39.01	-2.32	8630.355	0.0	27424.592	0.0
532.0854	25.01	-3.65	82712.550	3.0	101501.300	3.0
532.0899	26.02	-1.16	182418.700	4.0	201207.290	4.0
532.0959	7.01	-.39	225603.500	1.0	244391.880	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
532.1078	6.00	-4.20	69710.660	2.0	88498.620	2.0
532.1090	59.01	-1.84	4032.876	0.0	22826.018	0.0
532.1093	26.00	-1.73	35767.546	4.0	54555.450	4.0
532.1174	23.00	-4.24	25130.960	2.5	43918.580	2.5
532.1227	24.01	-4.32	69638.770	1.5	88426.200	.5
532.1250	64.00	-1.07	6452.602	0.0	25245.179	0.0
532.1260	40.00	-2.25	5000.766	0.0	23793.308	0.0
532.1267	25.01	-4.96	82712.550	3.0	101499.840	2.0
532.1280	75.00	-1.99	14518.354	0.0	33310.825	0.0
532.1287	20.02	.64	341601.460	2.0	360388.680	3.0
532.1497	25.01	-3.06	82712.550	3.0	101499.030	4.0
532.1500	64.00	-.61	6291.287	0.0	25082.981	0.0
532.1597	26.00	-3.64	28819.966	5.0	47606.092	5.0
532.1600	92.01	-2.44	5565.369	0.0	24356.710	0.0
532.1655	25.00	-3.93	44978.980	1.5	63764.900	2.5
532.1661	12.02	-2.94	564664.600	2.0	583450.500	1.0
532.1661	12.02	-2.94	564664.600	2.0	583450.500	1.0
532.1712	27.00	-.41	33674.380	2.5	52460.100	2.5
532.1780	64.00	-.23	6694.574	0.0	25485.279	0.0
532.1786	26.02	-.33	182392.550	2.0	201178.010	1.0
532.1810	59.01	-1.76	7581.807	0.0	26372.406	0.0
532.1842	28.01	-4.73	116838.330	1.5	135623.590	1.5
532.2012	27.00	-2.21	23184.230	2.5	41968.890	2.5
532.2046	26.00	-2.66	18378.187	2.0	37162.729	3.0
532.2106	24.00	-1.51	36034.220	3.0	54818.550	2.0
532.2145	7.00	-2.39	96750.810	1.5	115535.000	2.5
532.2157	28.01	-4.99	96052.480	2.5	114836.630	3.5
532.2162	24.00	-2.03	31028.330	2.0	49812.460	3.0
532.2278	7.00	-3.30	95475.280	.5	114259.000	1.5
532.2289	9.00	-1.79	117308.558	1.5	136092.240	2.5
532.2324	22.00	-4.19	25797.600	3.0	44581.160	2.0
532.2338	28.01	-4.84	118923.200	3.5	137706.710	2.5
532.2370	64.00	-.75	10162.848	0.0	28951.470	0.0
532.2375	37.00	-2.50	12578.950	0.0	31367.555	0.0
532.2485	28.01	-3.38	108548.610	1.5	127331.600	2.5
532.2604	29.01	-4.13	117231.690	1.0	136014.260	2.0
532.2690	64.00	-.58	10485.478	0.0	29272.971	0.0
532.2740	26.02	.28	179876.710	4.0	198658.800	3.0
532.2780	59.01	-1.19	3871.561	0.0	22658.736	0.0
532.2823	23.01	-1.51	36425.070	4.0	55206.870	5.0
532.2882	6.00	-3.55	70743.950	1.0	89525.540	1.0
532.2969	9.00	-2.19	117308.558	1.5	136089.840	1.5
532.3010	25.02	-.88	174975.650	5.5	193756.790	4.5
532.3046	21.00	-2.69	14926.240	2.5	33707.250	2.5
532.3061	24.00	-3.97	23512.000	1.0	42292.960	1.0
532.3112	23.01	-4.72	20622.990	3.0	39403.770	4.0
532.3217	28.01	-1.59	116732.510	2.5	135512.920	2.5
532.3236	7.00	-2.87	95493.660	1.5	114274.000	2.5
532.3240	22.00	-1.72	27750.124	5.0	46530.450	4.0
532.3276	19.00	-2.29	12985.170	.5	31765.370	.5
532.3279	25.00	-3.88	34343.900	4.5	53124.090	3.5
532.3435	24.01	-4.98	70394.460	4.5	89174.100	3.5
532.3499	22.00	-.89	30060.328	4.0	48839.740	3.0
532.3559	7.01	-3.56	186570.980	3.0	205350.180	2.0
532.3562	7.00	-4.02	96750.810	1.5	115530.000	.5
532.3562	7.00	-2.61	96750.810	1.5	115530.000	1.5
532.3570	57.00	-.95	8388.382	0.0	27172.769	0.0
532.3602	27.00	-1.67	32781.710	2.5	51560.760	2.5
532.3715	26.00	-3.53	36975.640	3.0	55754.290	2.0
532.3772	6.00	-2.39	70743.950	1.0	89522.400	2.0
532.3930	22.00	-2.39	6661.003	3.0	25438.898	2.0
532.4064	6.00	-3.54	68856.330	1.0	87633.750	2.0
532.4095	24.00	-1.93	27223.050	2.0	46000.360	3.0
532.4186	26.00	-.37	25899.974	4.0	44676.963	4.0
532.4260	72.01	-2.21	14276.381	0.0	33058.334	0.0
532.4311	25.00	.91	43524.080	3.5	62300.630	4.5
532.4359	29.01	-1.87	118142.970	3.0	136919.350	3.0
532.4470	42.00	-.67	26455.667	0.0	45236.879	0.0
532.4600	23.00	-3.16	21603.170	4.5	40378.700	4.5
532.4694	13.01	-1.68	125866.700	1.0	144641.900	0.0
532.4697	7.00	-2.98	97805.810	1.5	116581.000	.5
532.4697	7.00	-4.72	97805.810	1.5	116581.000	1.5
532.4697	7.00	-3.92	97805.810	1.5	116581.000	2.5
532.4779	27.00	-2.60	23207.760	1.5	41982.660	1.5
532.4818	28.01	-2.74	103025.580	2.5	121800.340	1.5
532.4821	18.00	-2.67	107289.747	2.0	126064.500	2.0
532.4844	24.00	-1.55	36212.150	4.0	54986.820	3.0
532.4918	27.00	-1.33	34196.210	1.5	52970.620	2.5
532.5026	24.00	-1.78	35897.870	2.0	54671.900	1.0
532.5091	26.02	-1.46	182392.550	2.0	201166.350	3.0
532.5108	24.00	-4.61	31048.850	1.0	49822.590	2.0
532.5230	28.01	-3.61	116191.470	2.5	134964.780	1.5
532.5264	7.00	-3.38	96750.810	1.5	115524.000	.5
532.5264	7.00	-3.49	96750.810	1.5	115524.000	1.5
532.5264	7.00	-2.53	96750.810	1.5	115524.000	2.5
532.5266	17.00	-3.68	83364.927	.5	102138.110	.5
532.5272	27.00	.24	32430.590	5.5	51203.750	5.5
532.5545	13.01	-3.97	125866.700	1.0	144638.900	2.0
532.5545	13.01	-4.45	125866.700	1.0	144638.900	1.0
532.5553	26.01	-3.38	25981.650	3.5	44753.820	3.5
532.5636	20.02	-1.44	340748.720	2.0	359520.600	2.0
532.5692	28.01	-2.66	115081.360	4.5	133853.040	4.5
532.5698	26.02	-.54	182392.550	2.0	201164.210	2.0
532.5709	23.01	-6.53	16421.510	4.0	35193.130	5.0
532.5709	23.01	-4.35	18269.490	1.0	37041.110	2.0
532.5715	25.01	-2.15	83933.770	3.0	102705.370	3.0
532.5848	24.00	-3.97	27597.220	3.0	46368.350	3.0
532.5868	23.00	-6.37	9824.580	2.5	28595.640	3.5
532.5924	28.00	-2.15	33500.854	3.0	52271.716	2.0
532.5942	27.00	.24	33945.900	2.5	52716.700	3.5
532.6004	25.00	.09	43524.080	3.5	62294.660	3.5
532.6061	23.00	-2.69	19189.280	1.5	37959.660	2.5
532.6078	25.00	-2.83	35689.980	1.5	54460.300	2.5
532.6139	26.00	-1.56	28819.966	5.0	47590.070	4.0
532.6146	20.02	-.98	327962.110	1.0	346732.190	1.0
532.6223	27.00	-1.03	29948.760	2.5	48718.570	2.5
532.6259	9.00	-4.58	117308.558	1.5	136078.240	2.5
532.6291	25.01	-2.96	83933.770	3.0	102703.340	4.0
532.6319	28.01	-3.90	115081.360	4.5	133850.830	3.5

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
532.6413	23.00	-4.28	9544.540	.5	28313.680	.5
532.6419	28.01	-2.65	118442.810	1.5	137211.930	.5
532.6450	24.01	-4.37	70852.240	3.5	89621.250	3.5
532.6450	29.01	-4.22	110084.290	1.0	128853.300	2.0
532.6526	18.01	-3.33	200234.860	2.5	219003.600	2.5
532.6784	26.00	-3.36	35611.608	3.0	54379.440	3.0
532.6819	25.01	-2.29	83912.380	5.0	102680.090	5.0
532.6827	28.01	-4.09	115085.360	3.5	133853.040	4.5
532.6935	26.02	-1.19	200325.560	4.0	219092.860	5.0
532.6980	90.00	-1.19	8065.752	0.0	26836.115	0.0
532.6995	26.02	-1.31	200395.330	5.0	219162.420	6.0
532.7018	28.00	-3.78	30392.052	1.0	49159.060	2.0
532.7037	18.01	-2.95	200234.860	2.5	219001.800	1.5
532.7060	42.00	-.83	23390.681	0.0	42162.762	0.0
532.7168	6.00	-4.37	70743.950	1.0	89510.430	2.0
532.7266	26.00	-3.44	29356.780	2.0	48122.913	3.0
532.7301	25.01	-3.34	82735.290	2.0	101501.300	3.0
532.7320	64.00	-.21	10243.505	0.0	29014.669	0.0
532.7350	27.00	-4.88	23152.570	3.5	41918.410	3.5
532.7460	75.00	-1.94	13711.778	0.0	32482.449	0.0
532.7492	7.00	-3.30	95493.660	1.5	114259.000	1.5
532.7704	28.01	-3.67	100010.170	.5	118774.760	.5
532.7715	22.00	-1.71	27480.047	3.0	46244.600	2.0
532.7716	25.01	-3.94	82735.290	2.0	101499.840	2.0
532.7756	7.01	-1.12	225627.470	2.0	244391.880	2.0
532.7821	28.01	-3.45	118803.820	6.5	137568.000	7.5
532.7840	26.00	-2.49	35611.608	3.0	54375.719	2.0
532.7869	23.00	-3.38	15664.750	1.5	34428.760	1.5
532.8025	18.00	-2.69	107289.747	2.0	126053.210	2.0
532.8042	26.00	-1.55	7376.762	4.0	26140.164	3.0
532.8057	20.02	.50	344257.920	1.0	363021.270	2.0
532.8167	27.00	-1.45	27497.060	2.5	46260.020	1.5
532.8272	26.02	-2.66	182444.700	3.0	201207.290	4.0
532.8275	23.00	-4.12	15724.220	3.5	34486.800	2.5
532.8284	7.01	-3.77	170572.610	2.0	189335.160	3.0
532.8292	22.00	-2.40	27887.740	3.0	46650.260	3.0
532.8300	64.00	-.45	10162.848	0.0	28930.560	0.0
532.8377	24.00	.49	23498.840	4.0	42261.060	5.0
532.8380	73.00	-2.90	1935.780	0.0	20703.210	0.0
532.8400	27.00	-3.61	23207.760	1.5	41969.900	.5
532.8440	25.02	-4.42	176209.150	1.5	194971.150	2.5
532.8480	27.00	-3.95	15184.040	2.5	33945.900	2.5
532.8534	26.00	-2.10	12560.933	3.0	31322.603	3.0
532.8622	26.00	-4.04	31937.308	1.0	50698.666	2.0
532.8687	27.00	-3.18	23207.760	1.5	41968.890	2.5
532.8702	28.00	-1.89	30192.268	0.0	48953.344	1.0
532.8728	22.00	-3.12	6556.828	1.0	25317.813	1.0
532.8738	18.01	-2.30	190507.360	1.5	209268.310	1.5
532.8795	28.01	-1.90	116732.510	2.5	135493.260	1.5
532.8818	22.00	-2.80	25493.722	2.0	44254.390	3.0
532.8832	23.00	-.84	18680.120	5.5	37440.740	4.5
532.8895	22.00	-4.74	29912.262	3.0	48672.660	4.0
532.9116	23.00	-3.95	15270.420	1.5	34030.040	1.5
532.9124	26.02	.18	200656.020	6.0	219415.610	5.0
532.9142	24.00	-.02	23498.840	4.0	42258.370	4.0
532.9219	9.00	-2.25	117391.950	.5	136151.210	.5
532.9260	92.01	-1.85	0.000	0.0	18764.331	0.0
532.9267	23.00	-3.41	15770.720	4.5	34529.810	4.5
532.9352	26.02	-2.25	179579.830	5.0	198338.620	4.0
532.9468	7.00	-2.36	95532.120	2.5	114290.500	2.5
532.9581	7.00	-2.68	96864.020	2.5	115622.000	2.5
532.9681	25.01	-2.80	62564.700	1.0	81322.330	1.0
532.9689	18.01	-2.19	195123.540	5.5	213881.140	5.5
532.9712	18.01	-.30	195123.540	5.5	213881.060	6.5
532.9735	26.02	-1.32	182408.910	3.0	201166.350	3.0
532.9740	45.00	.42	28956.050	0.0	47718.691	0.0
532.9741	24.00	-.75	23498.840	4.0	42256.260	3.0
532.9820	38.00	-.54	20003.065	0.0	38765.425	0.0
532.9826	18.01	-2.41	190511.190	2.5	209268.310	1.5
532.9843	25.00	-4.75	23296.670	3.5	42053.730	2.5
532.9883	7.00	-3.58	95475.280	.5	114232.200	1.5
532.9900	27.00	-1.69	33945.900	2.5	52702.760	1.5
532.9931	26.02	-1.91	179579.830	5.0	198336.580	5.0
532.9972	26.00	-.84	32873.623	4.0	51630.230	5.0
533.0062	28.01	-4.22	104081.040	4.5	122837.330	4.5
533.0142	24.00	-3.36	35572.940	2.0	54328.950	3.0
533.0215	9.02	-4.42	441385.880	1.5	460141.630	2.5
533.0343	26.02	-1.00	182408.910	3.0	201164.210	2.0
533.0383	23.00	-2.66	8715.720	3.5	27470.880	3.5
533.0580	58.01	-.74	6936.547	0.0	25696.232	0.0
533.0636	18.01	-2.14	183675.570	3.5	202429.840	3.5
533.0679	28.01	-3.07	115108.090	2.5	133862.210	1.5
533.0718	7.00	-4.85	96864.020	2.5	115618.000	1.5
533.0718	7.00	-2.55	96864.020	2.5	115618.000	2.5
533.0733	26.02	-.03	179579.830	5.0	198333.760	6.0
533.0798	26.02	-.22	182412.650	4.0	201166.350	3.0
533.0814	28.00	-.44	43089.636	5.0	61843.280	5.0
533.0829	24.00	-3.56	38597.060	1.0	57350.650	2.0
533.0840	40.00	-2.85	564.603	0.0	19323.373	0.0
533.0963	24.00	-4.14	31352.420	1.0	50105.540	1.0
533.0980	24.01	-3.55	70584.640	2.5	89337.700	1.5
533.1031	25.01	-2.79	86302.550	3.0	105055.430	2.0
533.1034	18.01	-.38	195128.270	4.5	213881.140	5.5
533.1046	25.00	-2.80	41031.480	4.5	59784.310	3.5
533.1080	45.00	-.05	28956.050	0.0	47713.975	0.0
533.1082	22.00	-3.90	8602.340	2.0	27355.042	1.0
533.1270	22.00	-6.57	14105.680	3.0	32857.721	3.0
533.1415	26.02	-2.60	181772.590	6.0	200524.120	5.0
533.1452	27.00	-2.24	14399.280	.5	33150.680	1.5
533.1466	25.00	-2.76	45013.550	2.5	63764.900	2.5
533.1480	26.00	-4.74	20874.482	3.0	39625.784	4.0
533.1480	59.01	-1.83	5162.081	0.0	23918.599	0.0
533.1549	24.00	-2.68	46000.360	3.0	64751.420	4.0
533.1551	26.00	-3.84	29371.860	3.0	48122.913	3.0
533.1586	24.00	-4.71	35501.260	3.0	54252.190	2.0
533.1765	21.00	-.79	15672.550	1.5	34422.850	1.5
533.1813	25.01	-3.47	62572.200	2.0	81322.330	1.0
533.1899	28.01	-3.63	100078.780	1.5	118826.610	2.5
533.1900	75.00	-2.10	15647.559	0.0	34402.599	0.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
533.2220	23.00	-1.78	15270.420	1.5	34019.120	1.5
533.2397	10.01	-4.50	303599.930	3.5	322348.010	3.5
533.2397	10.01	-3.97	303599.930	3.5	322348.010	4.5
533.2519	26.02	-.91	182418.700	4.0	201166.350	3.0
533.2533	29.01	-2.99	116388.000	2.0	135135.600	1.0
533.2604	25.02	-2.09	121197.050	2.5	139944.400	3.5
533.2604	7.00	-2.48	96787.650	1.5	115535.000	2.5
533.2635	23.01	-2.67	18293.870	2.0	37041.110	2.0
533.2647	27.00	-.93	28777.270	3.5	47524.470	4.5
533.2655	26.00	-1.33	33765.291	2.0	52512.460	1.0
533.2715	18.01	-2.67	183797.360	2.5	202544.320	2.5
533.2738	24.01	-3.28	70427.220	3.5	89174.100	3.5
533.2752	24.00	-2.86	31355.210	2.0	50102.040	3.0
533.2902	26.00	-3.07	12560.933	3.0	31307.235	4.0
533.2930	44.00	-1.39	13550.463	0.0	32301.881	0.0
533.2938	26.00	-4.50	32133.977	2.0	50880.152	1.0
533.2982	23.00	-3.31	14949.300	4.5	33695.320	5.5
533.3102	15.01	-2.04	112607.700	2.0	131353.300	2.0
533.3105	24.00	-2.65	45966.450	2.0	64712.040	3.0
533.3150	27.00	-4.36	14036.280	1.5	32781.710	2.5
533.3187	18.01	-3.17	195128.270	4.5	213873.570	3.5
533.3240	14.00	-.02	45276.188	1.0	64021.300	2.0
533.3300	64.00	.06	10808.108	0.0	29558.225	0.0
533.3352	26.00	-4.43	37046.000	4.0	55790.720	3.0
533.3375	28.01	-3.60	114869.350	1.5	133613.990	1.5
533.3392	28.01	-4.06	118828.610	2.5	137573.190	3.5
533.3581	17.00	-2.43	83364.927	.5	102108.840	1.5
533.3591	24.00	-2.69	46058.200	4.0	64802.080	5.0
533.3608	26.02	-4.07	183456.690	3.0	202200.510	3.0
533.3645	27.00	-1.24	32430.590	5.5	51174.280	5.5
533.3653	20.02	-.39	344149.810	2.0	362893.470	2.0
533.3727	17.01	-2.55	126725.100	1.0	145468.500	1.0
533.3728	24.00	-1.74	27223.050	2.0	45966.450	2.0
533.3736	22.00	-3.02	18911.399	2.0	37654.770	2.0
533.3739	26.02	-4.60	183457.150	4.0	202200.510	3.0
533.3771	26.00	-4.47	24335.764	2.0	43079.013	1.0
533.3775	22.00	-3.00	27907.026	2.0	46650.260	3.0
533.3850	75.00	-.70	27020.269	0.0	45768.453	0.0
533.3875	7.00	-2.30	95532.120	2.5	114275.000	3.5
533.3889	28.00	-1.44	43089.636	5.0	61832.470	4.0
533.4026	7.00	-4.49	96787.650	1.5	115530.000	.5
533.4026	7.00	-2.97	96787.650	1.5	115530.000	1.5
533.4040	18.01	-4.84	196089.870	2.5	214832.170	3.5
533.4155	28.02	-4.89	121802.800	3.0	140544.700	3.0
533.4160	7.00	-2.46	95532.120	2.5	114274.000	2.5
533.4226	21.01	-2.29	12074.000	0.0	30815.650	1.0
533.4291	23.00	-2.24	19023.470	4.5	37764.890	5.5
533.4309	26.00	-2.08	33095.922	4.0	51837.279	3.0
533.4330	60.00	-1.36	0.000	0.0	18746.497	0.0
533.4496	25.02	-3.19	121117.140	3.5	139857.840	4.5
533.4527	28.01	-4.14	104081.040	4.5	122821.630	5.5
533.4621	26.02	-.42	186454.890	5.0	205195.150	5.0
533.4621	26.00	-3.95	39969.830	3.0	58710.090	3.0
533.4707	23.00	-4.09	15688.800	2.5	34428.760	1.5
533.4790	42.00	-1.12	23551.996	0.0	42296.876	0.0
533.4823	27.00	-.42	32430.590	5.5	51170.140	4.5
533.4832	24.01	-1.79	32844.920	1.5	51584.440	1.5
533.4869	25.00	-4.35	27201.540	2.5	45940.930	2.5
533.4870	41.00	-1.50	8952.985	0.0	27697.584	0.0
533.4963	24.01	-3.47	70317.040	2.5	89056.100	2.5
533.4974	27.00	-.06	32464.730	4.5	51203.750	5.5
533.5097	18.01	-1.85	186340.480	1.5	205079.070	2.5
533.5111	7.00	-2.52	95493.660	1.5	114232.200	1.5
533.5150	70.01	-.18	30407.885	0.0	49151.500	0.0
533.5221	22.00	-.85	29986.185	3.0	48724.340	2.0
533.5347	24.00	-3.14	31364.330	3.0	50102.040	3.0
533.5417	22.00	-3.34	25643.695	3.0	44381.160	4.0
533.5587	25.01	-4.32	52653.270	4.0	71390.140	3.0
533.5590	18.01	-3.08	195123.540	5.5	213860.400	4.5
533.5720	22.00	-1.95	25107.417	2.0	43843.820	3.0
533.5735	7.00	-3.25	96787.650	1.5	115524.000	1.5
533.5735	7.00	-2.76	96787.650	1.5	115524.000	2.5
533.5889	18.01	-3.19	195123.540	5.5	213859.350	4.5
533.5920	18.01	-1.37	195123.540	5.5	213859.240	5.5
533.5930	44.00	-1.56	8711.012	0.0	27451.888	0.0
533.6071	9.02	-1.27	441406.460	3.5	460141.630	2.5
533.6116	28.01	-3.29	115000.250	3.5	133735.260	2.5
533.6130	73.00	-1.95	12743.888	0.0	31484.061	0.0
533.6159	24.00	-3.35	35398.020	4.0	54132.880	3.0
533.6162	27.00	-.89	32464.730	4.5	51199.580	3.5
533.6196	28.01	-2.28	115000.250	3.5	133734.980	3.5
533.6202	23.01	-4.00	32040.760	2.0	50775.470	2.0
533.6230	76.00	-1.83	15324.929	0.0	34064.751	0.0
533.6276	25.00	-2.67	35725.850	2.5	54460.300	2.5
533.6353	27.00	-4.36	23184.230	2.5	41918.410	3.5
533.6455	24.00	-1.61	29824.750	3.0	48558.570	2.0
533.6469	26.02	-.12	186998.600	4.0	205732.370	3.0
533.6484	7.00	-3.29	95475.280	.5	114209.000	.5
533.6495	26.02	-1.83	186268.790	2.0	205002.470	3.0
533.6550	60.01	-1.71	4355.506	0.0	23094.204	0.0
533.6695	7.00	-3.57	96864.020	2.5	115597.000	1.5
533.6717	28.01	-4.06	53037.930	2.5	71770.830	2.5
533.6783	22.01	-1.53	12758.150	2.5	31490.820	3.5
533.6810	41.00	-2.99	645.260	0.0	19383.045	0.0
533.6860	30.02	.31	214878.000	3.0	233610.400	2.0
533.6874	28.01	-.25	116732.510	2.5	135464.860	3.5
533.6875	9.00	-3.21	117391.950	.5	136124.300	.5
533.6885	23.00	-3.50	21646.390	3.5	40378.700	4.5
533.6919	7.00	-3.65	96750.810	1.5	115483.000	.5
533.6919	7.00	-2.95	96750.810	1.5	115483.000	1.5
533.6919	7.00	-2.82	96750.810	1.5	115483.000	2.5
533.6936	18.01	-4.73	195128.270	4.5	213860.400	4.5
533.7016	7.00	-2.50	97770.150	.5	116502.000	.5
533.7016	7.00	-2.02	97770.150	.5	116502.000	1.5
533.7031	23.00	-4.19	9636.960	1.5	28368.760	1.5
533.7200	42.00	-1.02	24358.571	0.0	43094.987	0.0
533.7235	18.01	-1.46	195128.270	4.5	213859.350	4.5
533.7267	18.01	-3.14	195128.270	4.5	213859.240	5.5
533.7310	27.00	-3.16	34133.590	3.5	52864.410	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
533.7316	22.00	-2.22	27025.652	4.0	45756.450	5.0
533.7370	74.00	-.48	26052.379	0.0	44788.198	0.0
533.7384	28.01	-3.39	100078.780	1.5	118809.340	1.5
533.7478	20.02	-1.34	327962.110	1.0	346692.340	0.0
533.7504	23.00	-3.02	14910.040	3.5	33640.180	4.5
533.7530	64.00	-.51	10243.505	0.0	28978.763	0.0
533.7720	26.01	-4.07	26055.400	2.5	44784.780	2.5
533.7721	26.00	-4.34	31805.059	3.0	50534.435	3.0
533.7729	24.01	-2.12	32855.090	2.5	51584.440	1.5
533.7774	7.00	-3.38	96750.810	1.5	115480.000	.5
533.7774	7.00	-3.77	96750.810	1.5	115480.000	1.5
533.7817	28.01	-.93	116732.510	2.5	135461.550	2.5
533.7868	18.01	-3.92	196103.310	4.5	214832.170	3.5
533.7988	14.00	-.02	45293.629	2.0	64022.070	3.0
533.7994	26.01	-4.45	61156.900	3.5	79885.320	2.5
533.8096	17.00	-1.61	83130.900	1.5	101858.960	2.5
533.8105	18.01	-2.32	189414.960	3.5	208142.990	3.5
533.8196	25.00	-.12	44696.290	2.5	63424.000	3.5
533.8207	14.00	-.63	45293.629	2.0	64021.300	2.0
533.8304	22.00	-2.82	6661.003	3.0	25388.334	4.0
533.8407	29.01	-3.88	120092.200	2.0	138819.170	3.0
533.8430	40.00	-2.58	4839.451	0.0	23571.550	0.0
533.8433	7.00	-4.54	95532.120	2.5	114259.000	1.5
533.8464	29.01	-3.85	117231.690	1.0	135958.460	1.0
533.8627	23.00	-1.47	19026.340	2.5	37752.540	2.5
533.8684	13.01	-2.67	121365.200	0.0	140091.200	1.0
533.8729	7.01	-.38	225627.470	2.0	244353.310	3.0
533.8749	14.00	-2.90	45293.629	2.0	64019.400	3.0
533.8912	17.01	-2.66	126743.300	2.0	145468.500	1.0
533.8938	25.01	-3.89	82774.730	1.0	101499.840	2.0
533.9189	20.01	-1.86	68056.910	3.5	86781.140	3.5
533.9189	20.01	-.32	68056.910	3.5	86781.140	4.5
533.9189	20.01	-.43	68056.910	2.5	86781.140	3.5
533.9231	24.00	-2.82	31377.960	4.0	50102.040	3.0
533.9323	18.01	-1.66	186470.280	1.5	205194.040	1.5
533.9385	21.00	-.64	15756.510	2.5	34480.050	2.5
533.9387	26.00	-1.88	35767.546	4.0	54491.080	3.0
533.9494	28.01	-3.18	99040.750	1.5	117763.910	1.5
533.9514	27.00	-.14	34133.590	3.5	52856.680	3.5
533.9528	23.02	-.87	141421.220	.5	160144.260	1.5
533.9685	19.00	-1.99	13042.880	1.5	31765.370	.5
533.9739	27.00	-.66	33439.720	4.5	52162.020	3.5
533.9782	21.00	-4.75	21032.780	2.5	39754.930	2.5
533.9784	25.02	-4.19	176390.670	2.5	195112.810	3.5
533.9865	9.00	-2.54	117391.950	.5	136113.810	1.5
533.9924	26.02	-1.61	182444.700	3.0	201166.350	3.0
533.9937	26.00	-.91	26339.682	2.0	45061.287	3.0
534.0067	23.00	-7.26	2311.370	3.5	21032.520	3.5
534.0067	28.01	-2.78	110573.360	2.5	129294.510	2.5
534.0081	26.01	-4.43	66463.590	5.5	85184.690	4.5
534.0144	29.01	-4.18	115639.020	2.0	134359.900	1.0
534.0207	7.01	-.38	225671.220	3.0	244391.880	2.0
534.0386	28.01	-4.63	115209.850	3.5	133929.880	3.5
534.0472	24.00	-.70	27728.870	2.0	46448.600	1.0
534.0478	27.00	-1.32	34196.210	1.5	52915.920	.5
534.0535	26.02	-.11	182444.700	3.0	201164.210	2.0
534.0652	28.01	-.06	118848.920	7.5	137568.020	8.5
534.0657	28.01	-.96	118848.920	7.5	137568.000	7.5
534.0657	28.01	-2.23	109148.050	4.5	127867.130	4.5
534.0662	22.00	-3.18	6598.749	2.0	25317.813	1.0
534.0670	57.01	-.58	18147.942	0.0	36872.184	0.0
534.0708	12.02	-1.77	564731.600	1.0	583450.500	1.0
534.0708	12.02	-1.77	564731.600	1.0	583450.500	1.0
534.0740	77.00	-1.03	23148.708	0.0	41872.705	0.0
534.0789	24.00	-3.26	27703.840	4.0	46422.460	4.0
534.0800	41.00	-1.40	10969.423	0.0	29693.210	0.0
534.0937	24.01	-4.51	45730.740	2.5	64448.840	2.5
534.1025	26.00	-2.14	12968.552	2.0	31686.342	2.0
534.1045	7.00	-3.98	95475.280	.5	114193.000	1.5
534.1050	73.00	-2.40	3871.561	0.0	22594.471	0.0
534.1051	21.00	-.46	15672.550	1.5	34390.250	.5
534.1057	25.00	-1.33	17052.290	4.5	35769.970	3.5
534.1114	9.00	-2.76	117391.950	.5	136109.430	.5
534.1170	64.00	-1.13	7017.204	0.0	25739.694	0.0
534.1268	23.01	-1.85	36425.070	4.0	55142.010	3.0
534.1290	62.00	-.84	241.973	0.0	18964.042	0.0
534.1325	27.00	.10	33439.720	4.5	52156.460	4.5
534.1374	28.01	-2.02	117872.780	2.5	136589.350	3.5
534.1551	25.00	.13	43314.230	5.5	62030.180	4.5
534.1570	7.00	-2.03	95532.120	2.5	114248.000	3.5
534.1610	18.01	-3.88	186340.480	1.5	205056.220	1.5
534.1622	28.01	-4.39	98122.630	.5	116838.330	1.5
534.1702	26.02	-3.55	181808.700	5.0	200524.120	5.0
534.1724	7.00	-4.23	95493.660	1.5	114209.000	.5
534.1791	18.00	-2.62	107496.463	1.0	126211.570	1.0
534.1800	9.00	-2.55	117872.916	1.5	136587.990	1.5
534.1810	64.00	-1.79	1693.808	0.0	20414.055	0.0
534.1856	28.01	-4.49	115000.250	3.5	133715.130	4.5
534.1896	17.00	-3.78	83130.900	1.5	101845.640	1.5
534.2050	21.01	-3.11	12101.450	1.0	30815.650	1.0
534.2078	11.02	-4.43	444748.100	1.5	463462.200	1.5
534.2104	21.00	-3.88	21085.840	3.5	39799.850	3.5
534.2224	26.02	-.41	186378.940	4.0	205092.530	4.0
534.2250	26.01	-3.98	83871.310	4.5	102584.610	5.5
534.2250	73.00	-2.41	9920.875	0.0	28639.580	0.0
534.2290	28.01	-.17	121120.880	5.5	139834.240	6.5
534.2375	28.01	-1.72	115209.850	3.5	133922.910	4.5
534.2375	6.01	-1.86	168978.340	3.5	187691.400	3.5
534.2375	6.01	-.32	168978.340	3.5	187691.400	4.5
534.2375	6.01	-.43	168978.340	2.5	187691.400	3.5
534.2690	28.01	-1.30	116732.510	2.5	135444.470	3.5
534.2695	27.00	.71	32430.590	5.5	51142.530	6.5
534.2770	24.00	-3.49	46000.360	3.0	64712.040	3.0
534.2775	23.00	-2.19	21603.170	4.5	40314.830	3.5
534.2798	24.00	-2.51	37233.500	5.0	55945.080	5.0
534.2801	23.00	-5.01	8476.200	1.5	27187.770	2.5
534.2811	9.00	-1.20	117872.916	1.5	136584.450	2.5
534.2849	22.00	-3.88	30060.328	4.0	48771.730	5.0
534.2914	22.00	-1.48	18911.399	2.0	37622.573	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
534.2955	21.00	-2.34	0.000	1.5	18711.030	.5
534.2970	19.00	-2.36	12985.170	.5	31696.150	1.5
534.3000	8.04	-.41	689586.000	0.0	708302.077	0.0
534.3000	64.00	.35	11211.395	0.0	29927.472	0.0
534.3112	28.01	-.11	120218.220	6.5	138928.700	7.5
534.3227	18.01	-2.19	186470.280	1.5	205180.360	.5
534.3341	25.01	-3.99	53597.130	2.0	72306.810	2.0
534.3358	24.00	-1.36	37205.880	3.0	55915.500	4.0
534.3378	27.00	-.19	32464.730	4.5	51174.280	5.5
534.3580	90.00	-1.64	3629.588	0.0	22343.634	0.0
534.3705	28.00	-2.46	30619.440	2.0	49327.845	2.0
534.3826	25.00	-.18	44523.450	3.5	63231.430	4.5
534.3863	26.02	-2.41	179630.770	4.0	198338.620	4.0
534.3932	27.00	-3.28	35450.560	3.5	54158.170	4.5
534.4149	8.01	-4.04	185235.360	.5	203942.210	.5
534.4152	28.01	-.89	116786.420	.5	135493.260	1.5
534.4170	41.00	-1.47	2742.356	0.0	21454.336	0.0
534.4269	28.01	-2.32	100609.010	2.5	119315.440	2.5
534.4286	24.00	-3.57	23512.000	1.0	42218.370	0.0
534.4290	18.00	-2.89	107496.463	1.0	126202.820	0.0
534.4309	26.02	-3.66	179630.770	4.0	198337.060	3.0
534.4426	9.00	-3.34	119081.820	.5	137787.700	1.5
534.4429	25.00	1.02	43428.580	4.5	62134.450	5.5
534.4446	26.02	-.14	179630.770	4.0	198336.580	5.0
534.4455	25.01	-3.23	86208.400	1.0	104914.180	0.0
534.4460	26.02	-3.83	181808.700	5.0	200514.460	4.0
534.4506	23.00	-2.72	15270.420	1.5	33976.020	1.5
534.4531	18.01	-1.05	189040.870	1.5	207746.380	2.5
534.4560	27.00	-.15	32464.730	4.5	51170.140	4.5
534.4572	25.02	-2.68	176265.780	1.5	194971.150	2.5
534.4623	24.00	-3.03	31352.420	1.0	50057.610	2.0
534.4709	15.01	-.39	86598.300	0.0	105303.190	1.0
534.4789	24.00	-.47	27820.230	3.0	46524.840	2.0
534.4821	28.00	-3.69	40484.282	2.0	59188.780	3.0
534.4938	25.00	-3.28	45060.810	3.5	63764.900	2.5
534.5100	46.00	-.25	39683.500	0.0	58392.224	0.0
534.5120	6.00	-4.48	70743.950	1.0	89447.400	2.0
534.5130	64.00	-.77	6452.602	0.0	25161.221	0.0
534.5192	17.02	-1.19	185838.000	1.5	204541.200	2.5
534.5249	23.03	-.81	265019.700	1.0	283722.700	1.0
534.5258	28.01	-3.85	116261.810	.5	134964.780	1.5
534.5300	9.01	-1.49	246654.740	0.0	265357.560	1.0
534.5421	24.00	-3.34	31355.210	2.0	50057.610	2.0
534.5438	7.00	-2.16	95493.660	1.5	114196.000	2.5
534.5549	24.00	-.43	27935.260	4.0	46637.210	3.0
534.5565	14.00	-4.60	60962.105	2.0	79664.000	1.0
534.5575	29.01	-2.60	118071.340	1.0	136773.200	1.0
534.5589	18.01	-3.25	155708.020	.5	174409.830	1.5
534.5655	16.01	.33	121528.200	1.5	140229.780	2.5
534.5670	70.01	-.63	34844.049	0.0	53550.778	0.0
534.5680	64.00	-1.51	967.890	0.0	19674.584	0.0
534.5710	60.01	-1.19	8952.985	0.0	27659.574	0.0
534.5712	28.01	-4.91	94705.930	3.5	113407.310	2.5
534.5796	18.00	-2.32	106087.305	1.0	124788.390	1.0
534.5801	24.00	-1.19	8095.210	3.0	26796.280	2.0
534.5824	25.01	-2.60	65567.070	2.0	84268.060	1.0
534.5835	15.00	-.88	58174.450	1.5	76875.400	1.5
534.5846	24.00	-2.43	37244.170	4.0	55945.080	5.0
534.5849	25.02	-.80	176270.250	2.5	194971.150	2.5
534.5872	25.00	-4.87	34423.270	3.5	53124.090	3.5
534.5918	25.02	-1.85	174247.630	.5	192948.290	1.5
534.5975	25.00	-3.89	41031.480	4.5	59731.940	4.5
534.5976	12.00	-3.31	41197.403	1.0	59897.860	0.0
534.5976	12.00	-2.84	41197.403	1.0	59897.660	1.0
534.5976	12.00	-2.62	41197.403	1.0	59897.860	2.0
534.6024	16.01	-.81	121529.490	2.5	140229.780	2.5
534.6030	76.00	-2.53	11292.053	0.0	29997.522	0.0
534.6043	14.00	-.80	45321.848	3.0	64022.070	3.0
534.6052	24.01	-2.89	30864.610	2.5	49564.800	1.5
534.6084	7.00	-2.54	95532.120	2.5	114232.200	1.5
534.6263	14.00	-1.95	45321.848	3.0	64021.300	2.0
534.6295	7.00	-3.88	95493.660	1.5	114193.000	1.5
534.6300	72.01	-.61	28310.790	0.0	47015.315	0.0
534.6338	27.00	-1.00	33462.830	2.5	52162.020	3.5
534.6343	26.00	-3.94	29056.312	3.0	47755.485	3.0
534.6347	25.00	-2.25	43595.500	2.5	62294.660	3.5
534.6370	28.01	-2.92	118874.110	3.5	137573.190	4.5
534.6370	28.01	-3.33	118874.110	3.5	137573.190	3.5
534.6384	26.02	-.47	186303.440	3.0	205002.470	3.0
534.6427	26.02	-4.10	166252.740	3.0	184951.620	3.0
534.6450	25.01	-2.96	52379.380	2.0	71078.180	1.0
534.6521	24.01	-3.23	30307.600	1.5	49006.150	1.5
534.6550	26.02	-4.27	181825.670	4.0	200524.120	5.0
534.6558	26.01	-5.28	26055.400	2.5	44753.820	3.5
534.6576	28.01	-3.77	110573.360	2.5	129271.720	3.5
534.6604	14.00	-2.04	45321.848	3.0	64020.110	4.0
534.6661	23.01	-4.14	32040.760	2.0	50738.820	1.0
534.6710	9.00	-2.73	117391.950	.5	136089.840	1.5
534.6727	26.01	-4.90	66012.830	4.5	84710.660	3.5
534.6807	14.00	-4.22	45321.848	3.0	64019.400	3.0
534.6813	26.02	-.31	200395.330	5.0	219092.860	5.0
534.6882	26.02	-1.30	182480.720	2.0	201178.010	1.0
534.7008	7.00	-2.63	97770.150	.5	116467.000	1.5
534.7008	7.00	-2.33	97770.150	.5	116467.000	.5
534.7013	28.01	-3.37	120144.170	2.5	138841.000	3.5
534.7071	28.00	-.48	33500.854	3.0	52197.482	3.0
534.7136	23.03	-1.07	236766.900	3.0	255463.300	2.0
534.7165	23.00	-3.39	15270.420	1.5	33966.720	.5
534.7186	22.00	-3.85	27025.652	4.0	45721.878	4.0
534.7196	7.00	-2.81	97805.810	1.5	116502.000	.5
534.7196	7.00	-2.58	97805.810	1.5	116502.000	1.5
534.7220	70.01	-.34	34844.049	0.0	53545.355	0.0
534.7256	28.01	-1.18	100078.780	1.5	118774.760	.5
534.7379	9.01	-1.01	246662.010	1.0	265357.560	1.0
534.7404	18.00	-2.52	106087.305	1.0	124782.770	1.0
534.7437	7.00	-2.65	96787.650	1.5	115483.000	.5
534.7437	7.00	-3.95	96787.650	1.5	115483.000	1.5
534.7494	27.00	-2.44	33466.870	3.5	52162.020	3.5
534.7594	8.01	-4.67	256087.600	2.5	274782.400	3.5
534.7674	16.01	-3.21	133399.820	1.5	152094.340	2.5
534.7679	29.01	-3.21	115665.400	1.0	134359.900	1.0
534.7685	23.00	-3.86	15000.840	5.5	33695.320	5.5
534.7705	28.00	-2.31	30619.440	2.0	49313.851	3.0
534.7777	23.02	-1.79	141987.320	3.5	160681.480	3.5
534.8029	24.00	-2.74	31364.330	3.0	50057.610	2.0
534.8046	24.00	-3.44	46058.200	4.0	64751.420	4.0
534.8080	62.00	-1.41	241.973	0.0	18940.272	0.0
534.8129	25.00	-1.90	27248.000	1.5	45940.930	2.5
534.8283	18.01	-.79	196305.040	3.5	214997.430	4.5
534.8294	7.00	-2.99	96787.650	1.5	115480.000	.5
534.8294	7.00	-3.38	96787.650	1.5	115480.000	1.5
534.8312	24.00	-1.50	8095.210	3.0	26787.500	3.0
534.8335	25.01	-4.26	62587.500	3.0	81279.710	4.0
534.8463	18.01	-2.34	196305.040	3.5	214996.800	3.5
534.8506	26.02	-.55	182486.400	1.0	201178.010	1.0
534.8569	28.01	-4.29	114836.630	3.5	133528.020	3.5
534.8603	18.01	-1.57	190507.360	1.5	209198.630	2.5
534.8670	64.00	-.42	6291.287	0.0	24987.524	0.0
534.8715	23.00	-3.23	14949.300	4.5	33640.180	4.5
534.8715	16.01	-2.56	133268.530	.5	151959.410	1.5
534.8873	25.00	-2.57	35769.970	3.5	54460.300	2.5
534.8950	74.00	-.27	26052.379	0.0	44747.637	0.0
534.9036	28.01	-4.31	115120.000	2.5	133809.760	3.5
534.9084	27.00	-.66	33466.870	3.5	52156.460	4.5
534.9090	73.00	-2.59	5968.656	0.0	24663.425	0.0
534.9120	71.00	-.86	18389.915	0.0	37084.579	0.0
534.9140	62.00	-1.25	806.575	0.0	19501.169	0.0
534.9153	27.00	-2.38	27497.060	2.5	46186.410	1.5
534.9202	10.00	-2.16	151038.452	1.0	169727.630	1.0
534.9305	21.00	-.09	14926.240	2.5	33615.060	1.5
534.9310	45.00	-.22	28956.050	0.0	47650.050	0.0
534.9313	26.02	-3.89	181825.670	4.0	200514.460	4.0
534.9442	7.00	-3.46	95493.660	1.5	114182.000	2.5
534.9465	20.00	.40	21849.634	2.0	40537.893	3.0
534.9465	20.00	.10	21849.634	2.0	40537.893	3.0
534.9570	73.00	-1.75	12743.888	0.0	31436.979	0.0
534.9580	60.00	-1.10	1048.548	0.0	19741.604	0.0
534.9620	7.00	-3.17	95475.280	.5	114163.000	1.5
534.9674	6.00	-3.27	70743.950	1.0	89431.480	2.0
534.9700	18.01	-1.15	190511.190	2.5	209198.630	2.5
534.9706	21.00	-2.23	168.340	2.5	18855.760	1.5
534.9717	26.00	-1.38	35379.189	5.0	54066.570	4.0
534.9763	23.01	-3.16	18353.890	3.0	37041.110	2.0
534.9800	7.03	-1.93	465463.000	0.0	484155.288	0.0
534.9866	25.00	1.24	43314.230	5.5	62001.090	6.5
534.9908	9.00	-2.32	117308.558	1.5	135995.270	.5
534.9976	22.00	-4.14	29986.185	3.0	48672.660	4.0
535.0090	40.01	-1.14	14195.724	0.0	32886.998	0.0
535.0129	25.00	-4.15	34423.270	3.5	53109.210	2.5
535.0138	20.02	-1.23	322663.280	0.0	341349.190	1.0
535.0218	26.02	-2.89	182480.720	2.0	201166.350	3.0
535.0219	22.00	-2.24	27025.652	4.0	45711.280	4.0
535.0301	21.00	-.72	15881.760	3.5	34567.100	3.5
535.0350	40.01	-1.09	14599.011	0.0	33289.377	0.0
535.0373	23.01	-2.88	18269.490	1.0	36954.580	1.0
535.0380	64.00	.50	12421.258	0.0	31111.519	0.0
535.0410	63.00	-.23	17825.312	0.0	36515.468	0.0
535.0440	74.00	-.03	29198.022	0.0	47888.074	0.0
535.0460	81.00	-.04	7743.122	0.0	26433.104	0.0
535.0479	7.00	-2.83	95475.280	.5	114160.000	1.5
535.0559	26.02	-2.95	181830.020	3.0	200514.460	4.0
535.0580	18.00	-3.23	106087.305	1.0	124771.670	2.0
535.0627	26.00	-4.63	24338.766	3.0	43022.969	4.0
535.0731	20.02	.09	343110.240	0.0	361794.080	1.0
535.0740	41.00	-1.69	2097.096	0.0	20786.100	0.0
535.0771	26.02	-.56	182486.400	1.0	201170.100	0.0
535.0831	26.02	-1.51	182480.720	2.0	201164.210	2.0
535.0900	40.00	-.59	18631.887	0.0	37320.332	0.0
535.1006	28.01	-3.69	97273.830	2.5	115956.710	2.5
535.1014	24.01	-4.36	36101.820	3.5	54784.670	3.5
535.1037	29.01	-4.07	118071.340	1.0	136754.110	2.0
535.1080	22.00	.06	22404.690	3.0	41087.410	3.0
535.1114	24.01	-3.72	69954.200	2.5	88636.700	1.5
535.1215	28.01	-3.99	118892.990	5.5	137575.140	5.5
535.1218	20.02	-2.18	325467.670	2.0	344149.810	2.0
535.1232	7.01	-.08	225671.220	3.0	244353.310	3.0
535.1258	24.00	-3.76	37233.500	5.0	55915.500	4.0
535.1286	28.01	-1.71	118893.240	6.5	137575.140	5.5
535.1330	70.00	-.81	24600.544	0.0	43287.487	0.0
535.1404	27.00	-1.82	33439.720	4.5	52121.210	4.5
535.1461	18.01	-.91	196315.510	2.5	214996.800	3.5
535.1542	22.00	-4.49	29907.273	2.0	48588.280	3.0
535.1673	29.01	-3.11	118532.150	2.0	137212.700	1.0
535.1685	18.01	-1.02	190732.970	.5	209413.480	1.5
535.1690	63.00	-.14	15324.929	0.0	34010.615	0.0
535.1773	28.01	-1.79	118892.990	5.5	137573.190	4.5
535.1799	24.00	-3.99	35398.020	4.0	54076.130	5.0
535.1799	25.01	-2.68	56883.380	1.0	75563.490	0.0
535.1841	28.00	-2.39	31786.210	3.0	50466.172	4.0
535.1900	74.00	-.38	27584.872	0.0	46269.625	0.0
535.2000	8.04	-.41	689700.000	0.0	708384.604	0.0
535.2008	23.00	-.79	21646.390	3.5	40325.770	2.5
535.2025	26.02	-3.60	181825.670	4.0	200504.990	3.0
535.2031	29.01	-1.34	117231.690	1.0	135910.990	2.0
535.2045	24.00	-3.73	35572.940	2.0	54252.190	2.0
535.2045	27.00	.01	28845.220	5.5	47524.470	4.5
535.2114	26.01	-4.05	67000.630	2.5	85679.640	2.5
535.2126	26.02	-.74	200325.560	4.0	219004.530	4.0
535.2231	23.03	.40	236766.900	3.0	255445.500	3.0
535.2250	76.00	-1.68	17583.339	0.0	36267.070	0.0
535.2278	28.00	-3.97	40361.254	3.0	59039.693	4.0
535.2346	28.02	-4.33	97996.300	3.0	116674.500	4.0
535.2350	42.00	-.53	27584.872	0.0	46268.254	0.0
535.2400	59.01	-1.52	3871.561	0.0	22554.769	0.0
535.2458	26.02	-1.43	182486.400	1.0	201164.210	2.0
535.2650	26.02	-.22	179661.480	3.0	198338.620	4.0
535.2666	29.00	-1.67	43716.376	0.0	62398.655	0.0
535.2739	18.01	-4.94	172335.520	2.5	191012.350	1.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
535.2770	23.00	-3.59	9636.960	1.5	28313.680	.5
535.2840	63.00	-.13	17825.312	0.0	36506.984	0.0
535.2882	26.02	-3.88	181828.660	2.0	200504.990	3.0
535.2960	70.01	-.26	30085.255	0.0	48766.508	0.0
535.3097	26.02	-1.32	179661.480	3.0	198337.060	3.0
535.3120	23.03	-.02	236148.600	1.0	254824.100	1.0
535.3131	9.01	-.79	246682.100	2.0	265357.560	1.0
535.3183	23.00	-4.41	2153.200	1.5	20828.480	2.5
535.3192	28.01	-.72	118897.940	2.5	137573.190	3.5
535.3260	64.00	.31	11775.998	0.0	30456.204	0.0
535.3280	41.00	-.32	20567.668	0.0	39247.804	0.0
535.3332	28.01	-.18	118893.240	6.5	137568.000	7.5
535.3362	26.00	-1.35	33095.922	4.0	51770.577	3.0
535.3367	25.02	-4.65	176641.140	3.5	195315.780	2.5
535.3372	24.00	-1.17	37233.500	5.0	55908.120	6.0
535.3381	28.01	-.71	116838.330	1.5	135512.920	2.5
535.3391	28.00	-2.83	15734.018	1.0	34408.574	1.0
535.3415	26.02	-.66	186268.790	2.0	204943.260	2.0
535.3432	22.00	-2.06	25227.217	3.0	43901.630	4.0
535.3435	27.01	-7.50	28111.900	2.0	46786.300	1.0
535.3438	23.00	-.29	19078.150	3.5	37752.540	2.5
535.3496	27.00	.59	33439.720	4.5	52113.910	5.5
535.3530	58.01	-.35	7017.204	0.0	25696.468	0.0
535.3719	26.02	-1.53	186998.600	4.0	205672.010	4.0
535.3780	10.01	-2.15	302750.810	3.5	321424.010	4.5
535.3968	17.00	-2.02	83130.900	1.5	101803.442	2.5
535.4009	27.00	-3.93	16778.160	2.5	35450.560	3.5
535.4029	26.01	-2.80	66012.830	4.5	84685.160	3.5
535.4069	25.01	-3.56	62564.700	1.0	81236.890	1.0
535.4101	26.02	-3.66	179661.480	3.0	198333.560	2.0
535.4256	20.02	.13	346692.340	0.0	365363.880	1.0
535.4316	24.00	-2.53	37244.170	4.0	55915.500	4.0
535.4400	45.00	1.13	31456.433	0.0	50132.662	0.0
535.4416	7.00	-4.87	96864.020	2.5	115535.000	2.5
535.4416	7.00	-2.32	96864.020	2.5	115535.000	3.5
535.4454	7.00	-3.68	97770.150	.5	116441.000	.5
535.4454	7.00	-2.04	97770.150	.5	116441.000	1.5
535.4460	74.00	-2.62	9436.930	0.0	28112.950	0.0
535.4485	29.01	-1.45	117231.690	1.0	135902.430	0.0
535.4539	25.01	-4.66	82830.750	4.0	101501.300	3.0
535.4680	73.00	-2.49	5968.656	0.0	24643.908	0.0
535.4730	72.00	.26	25326.461	0.0	44001.539	0.0
535.4732	10.01	-4.04	302750.810	3.5	321420.690	2.5
535.4761	18.01	-3.02	183797.360	2.5	202467.140	1.5
535.4798	24.01	-4.07	31168.780	3.5	49838.430	4.5
535.4835	18.01	-1.76	196305.040	3.5	214974.560	3.5
535.4852	18.01	-3.19	196305.040	3.5	214974.500	2.5
535.4880	42.00	-.44	23390.681	0.0	42065.236	0.0
535.4887	7.00	-3.66	95493.660	1.5	114163.000	1.5
535.4950	29.00	-1.06	44926.239	0.0	63600.550	0.0
535.5004	26.02	-4.75	168329.670	3.0	186998.600	4.0
535.5038	22.01	-4.68	43740.770	3.5	62409.580	3.5
535.5042	23.03	-1.79	265271.600	3.0	283940.400	2.0
535.5100	63.00	.09	16534.792	0.0	35208.580	0.0
535.5145	23.00	-3.23	21646.390	3.5	40314.830	3.5
535.5191	25.01	-4.38	82830.750	4.0	101499.030	4.0
535.5225	28.01	-.38	116732.510	2.5	135400.670	3.5
535.5260	74.00	-1.62	19438.462	0.0	38111.692	0.0
535.5310	41.00	-1.56	12259.943	0.0	30932.998	0.0
535.5371	25.02	-4.28	176641.140	3.5	195308.790	4.5
535.5422	10.00	-2.47	151038.452	1.0	169705.925	0.0
535.5446	26.00	-4.66	28604.610	2.0	47271.999	1.0
535.5510	42.00	.09	31940.378	0.0	50612.736	0.0
535.5700	41.00	-1.44	11453.368	0.0	30125.064	0.0
535.5736	24.00	-3.33	31352.420	1.0	50018.800	1.0
535.5747	21.00	-.26	15756.510	2.5	34422.850	1.5
535.5747	7.00	-3.26	95493.660	1.5	114160.000	1.5
535.5747	7.00	-2.17	95493.660	1.5	114160.000	2.5
535.5844	18.01	-4.76	187589.230	2.5	206255.230	2.5
535.5850	7.00	-4.02	96864.020	2.5	115530.000	1.5
535.5887	7.00	-1.67	97770.150	.5	116436.000	1.5
535.6005	28.01	-2.18	117662.110	1.5	136327.550	1.5
535.6054	21.00	.09	15041.980	3.5	33707.250	2.5
535.6091	23.02	-1.60	141714.500	2.5	160379.640	2.5
535.6221	25.01	-3.86	62572.200	2.0	81236.890	1.0
535.6272	24.00	-4.08	27703.840	4.0	46368.350	3.0
535.6350	22.00	-2.90	27025.652	4.0	45689.890	3.0
535.6429	22.00	-4.59	29855.248	1.0	48519.210	2.0
535.6453	7.00	-2.47	95532.120	2.5	114196.000	2.5
535.6470	45.00	.39	31456.433	0.0	50125.444	0.0
535.6480	42.00	.43	32424.323	0.0	51093.300	0.0
535.6536	24.00	-3.21	31355.210	2.0	50018.800	1.0
535.6752	28.01	-2.06	119833.000	5.5	138495.840	4.5
535.6838	29.01	-4.01	116080.460	3.0	134743.000	4.0
535.6861	26.02	-3.49	117950.320	4.0	136612.780	4.0
535.6980	60.01	-.70	10082.190	0.0	28749.424	0.0
535.7120	74.00	-2.12	15324.929	0.0	33991.675	0.0
535.7191	21.01	-2.18	12154.340	2.0	30615.650	1.0
535.7225	7.00	-1.93	97805.810	1.5	116467.000	1.5
535.7225	7.00	-2.63	97805.810	1.5	116467.000	.5
535.7314	7.00	-4.93	95532.120	2.5	114193.000	1.5
535.7337	28.01	-.47	118914.340	4.5	137575.140	5.5
535.7337	28.00	-1.21	33610.916	2.0	52271.716	2.0
535.7357	24.01	-4.12	50687.630	2.5	69348.360	1.5
535.7363	23.01	-3.40	18293.870	2.0	36954.580	1.0
535.7518	26.02	-.45	179676.890	2.0	198337.060	3.0
535.7529	23.01	-7.48	16533.000	5.0	35193.130	5.0
535.7573	7.00	-4.78	96864.020	2.5	115524.000	1.5
535.7573	7.00	-3.82	96864.020	2.5	115524.000	2.5
535.7573	7.00	-3.30	96864.020	2.5	115524.000	3.5
535.7610	63.00	.48	13389.148	0.0	32054.187	0.0
535.7693	25.02	-1.06	174575.870	3.5	193235.430	2.5
535.7699	18.01	-2.16	190106.230	1.5	208765.770	.5
535.7768	8.01	-3.99	256123.100	3.5	274782.400	3.5
535.7790	64.01	-1.52	9275.615	0.0	27940.027	0.0
535.7840	18.01	-3.17	196315.510	2.5	214974.560	3.5
535.7857	18.01	-1.89	196315.510	2.5	214974.500	2.5
535.7860	57.00	-.54	7581.807	0.0	26245.975	0.0
535.7897	28.01	-3.93	118914.340	4.5	137573.190	3.5
535.7897	28.01	-2.90	118914.340	4.5	137573.190	4.5
535.7980	25.01	-2.77	82830.750	4.0	101489.310	5.0
535.8012	27.00	-1.32	28470.510	1.5	47128.960	2.5
535.8115	26.00	-2.95	26623.726	2.0	45281.816	2.0
535.8190	9.00	-2.51	117308.558	1.5	135966.390	1.5
535.8196	10.01	-3.09	302750.810	3.5	321408.620	2.5
535.8248	10.01	-2.58	302750.810	3.5	321468.440	3.5
535.8256	13.01	-4.23	125866.700	1.0	144524.300	1.0
535.8268	18.01	-1.20	189934.550	.5	208592.110	.5
535.8362	18.01	-1.65	189934.550	.5	208591.780	1.5
535.8523	26.02	-1.40	179676.890	2.0	198333.560	2.0
535.8543	8.01	-4.29	256125.800	2.5	274782.400	3.5
535.8607	18.01	-2.69	190592.170	1.5	209248.550	2.5
535.8618	18.01	-1.08	187589.230	2.5	206245.570	3.5
535.8660	70.01	-.62	34844.049	0.0	53505.431	0.0
535.8687	27.02	-4.59	91715.100	2.5	110371.200	2.5
535.8793	25.02	-1.38	173920.690	1.5	192576.420	2.5
535.8917	23.03	-1.58	265067.400	2.0	283722.700	1.0
535.8922	27.00	-1.49	33439.720	4.5	52095.000	3.5
535.8925	24.00	-1.82	36552.130	3.0	55207.400	4.0
535.8963	10.01	-2.24	302750.810	3.5	321405.950	3.5
535.8977	23.00	-2.63	20767.570	3.5	39422.660	2.5
535.9023	28.01	-1.34	116838.330	1.5	135493.260	1.5
535.9026	23.00	-5.55	13801.530	1.5	32456.450	1.5
535.9061	18.01	-.86	190942.650	.5	209597.450	1.5
535.9084	7.00	-3.52	95475.280	.5	114130.000	.5
535.9106	23.01	-2.57	30613.970	4.0	49268.610	4.0
535.9147	17.01	-4.95	158768.600	2.0	177423.100	1.0
535.9164	10.01	-1.50	302750.810	3.5	321405.250	4.5
535.9190	41.00	-1.94	8630.355	0.0	27289.891	0.0
535.9192	27.00	.21	33466.870	3.5	52121.210	4.5
535.9336	24.00	-4.68	46058.200	4.0	64712.040	3.0
535.9480	58.01	-1.12	11292.053	0.0	29950.580	0.0
535.9494	25.01	-3.23	89519.250	2.0	108172.540	1.0
535.9499	19.00	-3.03	13042.880	1.5	31696.150	1.5
535.9574	19.00	-2.07	13042.880	1.5	31695.890	2.5
535.9577	25.01	-4.31	72648.800	4.0	91301.800	5.0
535.9616	7.00	-2.36	95493.660	1.5	114146.525	2.5
535.9735	23.00	-1.88	18805.050	.5	37457.500	1.5
535.9738	28.01	-3.90	116312.340	1.5	134964.780	1.5
535.9825	28.00	-2.95	30619.440	2.0	49271.578	3.0
535.9979	8.01	-3.64	256087.600	2.5	274739.200	2.5
536.0010	10.00	-2.04	150315.861	2.0	168967.353	1.0
536.0030	29.00	-1.70	45813.471	0.0	64470.083	0.0
536.0066	30.02	-4.84	219684.900	3.0	238336.200	2.0
536.0095	25.01	-3.48	89519.250	2.0	108170.450	2.0
536.0115	22.01	-3.77	20951.770	2.5	39602.900	1.5
536.0221	25.00	-2.83	50065.460	3.5	68716.220	4.5
536.0261	26.02	-.63	179682.940	1.0	198333.560	2.0
536.0270	23.00	-3.50	15724.220	3.5	34374.810	3.5
536.0368	25.01	-4.33	53597.130	2.0	72247.380	3.0
536.0434	28.01	-2.96	116732.510	2.5	135382.530	1.5
536.0442	28.01	-.54	118923.200	3.5	137573.190	4.5
536.0442	28.01	-.77	118923.200	3.5	137573.190	3.5
536.0474	7.00	-3.13	95532.120	2.5	114182.000	2.5
536.0523	28.01	-4.08	115592.250	1.5	134241.960	.5
536.0560	42.00	.73	26133.037	0.0	44787.804	0.0
536.0830	63.00	-.27	15002.299	0.0	33656.127	0.0
536.0905	25.01	-4.49	62572.200	2.0	81220.580	3.0
536.0980	28.01	-1.98	118927.020	4.5	137575.140	5.5
536.1006	25.02	-.69	176464.780	3.5	195112.810	3.5
536.1170	60.01	-2.00	4436.164	0.0	23088.809	0.0
536.1282	24.01	-2.70	59130.510	1.5	77777.580	.5
536.1355	56.01	-.91	45949.496	0.0	64601.497	0.0
536.1470	60.01	-1.08	5404.054	0.0	24055.655	0.0
536.1480	24.01	-3.42	70679.220	4.5	89325.600	4.5
536.1512	28.01	-1.78	118631.950	.5	137278.220	1.5
536.1532	8.01	-3.17	256136.200	4.5	274782.400	3.5
536.1541	28.01	-1.61	118927.020	4.5	137573.190	3.5
536.1541	28.01	-.76	118927.020	4.5	137573.190	4.5
536.1569	7.01	-1.03	211103.630	3.0	229749.700	4.0
536.1604	9.02	-2.23	441158.600	1.5	459804.550	1.5
536.1615	26.00	-1.96	35611.608	3.0	54257.520	2.0
536.1635	25.00	-2.33	34463.370	1.5	53109.210	2.5
536.1660	64.00	-.51	10243.505	0.0	28894.445	0.0
536.1671	26.00	-3.09	39625.784	4.0	58271.500	5.0
536.1676	23.00	-2.09	19189.280	1.5	37834.980	1.5
536.1711	22.00	-2.84	6742.757	4.0	25388.334	4.0
536.1719	23.00	-3.08	13810.900	.5	32456.450	1.5
536.1759	9.01	-3.93	236960.830	1.0	255606.240	1.0
536.1800	7.01	-1.91	211103.630	3.0	229748.900	3.0
536.1906	23.00	-4.32	23519.840	4.5	42164.740	3.5
536.2010	41.00	-3.21	322.630	0.0	18972.353	0.0
536.2107	21.00	-2.38	18504.050	.5	37148.250	1.5
536.2234	24.00	-2.94	31009.000	3.0	49652.760	2.0
536.2271	25.00	-1.05	50072.590	4.5	68716.220	4.5
536.2273	22.00	-4.73	18911.399	2.0	37555.021	3.0
536.2275	7.00	-1.88	95532.120	2.5	114175.736	3.5
536.2536	22.00	-3.65	27887.740	3.0	46530.450	4.0
536.2560	40.00	-1.87	4355.506	0.0	23003.316	0.0
536.2599	37.00	-1.94	12578.950	0.0	31226.624	0.0
536.2700	16.01	-.85	133268.530	.5	151910.670	1.5
536.2774	27.00	.40	34133.590	3.5	52775.470	4.5
536.2835	28.01	-4.22	115739.150	4.5	134380.820	3.5
536.2864	26.01	-2.92	25805.320	4.5	44446.890	3.5
536.2890	24.00	-2.35	37233.500	5.0	55874.980	5.0
536.2964	24.00	-1.55	31009.000	3.0	49650.220	3.0
536.2971	20.02	-2.19	328090.990	2.0	346732.190	1.0
536.3350	40.00	-2.54	5162.081	0.0	23807.144	0.0
536.3367	26.02	.03	186303.440	3.0	204943.260	2.0
536.3367	25.00	-2.78	34463.370	1.5	53103.190	1.5
536.3505	23.00	-4.36	15000.840	5.5	33640.180	4.5
536.3574	8.01	-2.80	256143.300	3.5	274782.400	3.5
536.3687	27.00	-4.35	34133.590	3.5	52772.300	2.5
536.3761	26.00	-4.89	34636.820	2.0	53275.270	2.0
536.3793	26.02	-.12	186268.790	2.0	204907.130	1.0
536.3820	92.01	-2.39	5565.369	0.0	24208.798	0.0
536.3905	25.00	-3.69	34463.370	1.5	53101.320	.5
536.3994	26.02	.30	186454.890	5.0	205092.530	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
536.4015	23.00	-3.58	9824.580	2.5	28462.150	2.5
536.4049	28.01	-3.72	116145.690	3.5	134783.140	2.5
536.4135	9.02	-2.02	441167.400	.5	459804.550	1.5
536.4147	18.01	-2.65	186340.480	1.5	204977.590	2.5
536.4193	25.01	-3.79	89465.300	4.0	108102.250	3.0
536.4228	25.02	-1.30	174243.330	3.5	192880.160	3.5
536.4240	22.00	-1.31	20062.980	1.0	38699.767	2.0
536.4280	42.00	.05	26133.037	0.0	44774.868	0.0
536.4320	77.00	-1.01	19438.462	0.0	38080.154	0.0
536.4368	7.00	-2.82	95493.660	1.5	114130.000	.5
536.4475	25.00	-2.60	23296.670	3.5	41932.640	3.5
536.4524	29.01	-2.67	118163.500	2.0	136799.300	2.0
536.4579	28.01	-.67	118939.530	5.5	137575.140	5.5
536.4596	20.02	-4.11	344257.920	1.0	362893.470	2.0
536.4630	17.00	-2.32	83364.927	.5	102000.360	1.5
536.4700	7.00	-3.99	97805.810	1.5	116441.000	.5
536.4700	7.00	-2.50	97805.810	1.5	116441.000	1.5
536.4700	7.00	-2.06	97805.810	1.5	116441.000	2.5
536.4780	25.00	-.01	50081.310	5.5	68716.220	4.5
536.4812	27.00	-1.20	30443.630	1.5	49078.430	1.5
536.4842	26.00	-.22	35856.386	2.0	54491.080	3.0
536.5106	28.00	-4.36	40484.282	2.0	59118.060	2.0
536.5134	24.00	-3.60	35618.510	1.0	54252.190	2.0
536.5140	28.01	-3.40	118939.530	5.5	137573.190	4.5
536.5178	23.00	-2.87	20789.130	2.5	39422.660	2.5
536.5380	64.00	-.23	10485.478	0.0	29123.487	0.0
536.5406	26.00	-1.81	28819.966	5.0	47452.702	4.0
536.5480	21.00	-1.49	18515.770	1.5	37148.250	1.5
536.5480	18.01	-3.05	183797.360	2.5	202429.840	3.5
536.5526	26.01	-4.58	66078.340	2.5	84710.660	3.5
536.5549	29.01	-1.12	117231.690	1.0	135863.930	1.0
536.5569	27.00	-1.55	33462.830	2.5	52095.000	3.5
536.5612	26.01	-4.02	60807.280	4.5	79439.300	3.5
536.5612	25.02	-.21	176683.760	2.5	195315.780	2.5
536.5641	28.01	-4.54	99340.550	3.5	117972.470	3.5
536.5708	20.02	-3.17	346732.190	1.0	365363.880	1.0
536.5728	24.00	-3.95	35501.260	3.0	54132.880	3.0
536.5890	57.00	-1.32	6936.547	0.0	25572.784	0.0
536.5921	24.00	-4.46	23933.900	4.0	42564.850	4.0
536.5941	7.00	-3.13	95532.120	2.5	114163.000	1.5
536.5950	73.00	-1.72	17260.709	0.0	35896.738	0.0
536.5961	24.00	-1.29	37244.170	4.0	55874.980	5.0
536.6030	24.00	-3.60	38730.670	2.0	57361.240	3.0
536.6125	28.01	-2.03	100309.290	5.5	118939.530	5.5
536.6140	7.00	-2.13	97805.810	1.5	116436.000	1.5
536.6140	7.00	-1.06	97805.810	1.5	116436.000	2.5
536.6168	27.00	-2.65	34133.590	3.5	52763.680	3.5
536.6289	24.00	-2.14	36577.730	4.0	55207.400	4.0
536.6307	29.01	-3.63	117130.360	2.0	135759.970	2.0
536.6482	25.02	-1.47	176265.780	1.5	194894.780	1.5
536.6563	28.01	-2.49	117662.110	1.5	136290.830	.5
536.6574	24.01	-3.66	70879.950	5.5	89508.630	5.5
536.6600	22.01	-3.40	43780.990	4.5	62409.580	3.5
536.6636	22.00	-2.52	6598.749	2.0	25227.217	3.0
536.6733	27.00	-.21	33466.870	3.5	52095.000	3.5
536.6805	7.00	-3.63	95532.120	2.5	114160.000	2.5
536.6978	25.02	-1.20	175918.500	.5	194545.780	.5
536.7010	28.01	-2.36	115108.090	2.5	133735.260	2.5
536.7087	23.01	-3.07	30641.710	3.0	49268.610	4.0
536.7090	28.01	-2.76	115108.090	2.5	133734.980	3.5
536.7110	42.00	-.50	26133.037	0.0	44765.038	0.0
536.7197	28.01	-4.36	58705.950	1.5	77332.470	2.5
536.7205	28.01	-3.20	117662.110	1.5	136288.600	2.5
536.7280	24.00	-3.24	24282.340	4.0	42908.570	4.0
536.7464	26.00	.00	35611.608	3.0	54237.200	4.0
536.7531	23.01	-4.08	18293.870	2.0	36919.230	3.0
536.7551	24.00	-4.73	35572.940	2.0	54198.230	1.0
536.7700	64.00	-.74	10243.505	0.0	28873.458	0.0
536.7770	25.02	-.00	176270.250	2.5	194894.780	1.5
536.7799	24.00	-1.72	31028.330	2.0	49652.760	2.0
536.7943	22.01	-4.64	12676.990	4.5	31300.920	4.5
536.8047	25.02	-.82	174874.500	4.5	193498.070	3.5
536.8059	26.02	.15	186378.940	4.0	205002.470	3.0
536.8082	23.00	-3.12	20767.570	3.5	39391.020	4.5
536.8148	28.01	-.81	116838.330	1.5	135461.550	2.5
536.8257	24.01	-3.81	70852.240	3.5	89475.080	2.5
536.8360	62.00	-.26	3952.218	0.0	22579.881	0.0
536.8381	29.01	-1.01	118142.970	3.0	136765.380	4.0
536.8523	25.01	-4.01	53698.700	2.0	72320.620	1.0
536.8531	24.00	-.97	31028.330	2.0	49650.220	3.0
536.8563	28.01	-4.06	100010.170	.5	118631.950	.5
536.8667	25.00	-4.81	41031.480	4.5	59652.900	5.5
536.8700	74.00	-.55	28068.817	0.0	46695.300	0.0
536.8790	64.00	-1.03	7904.437	0.0	26530.608	0.0
536.8805	23.00	-3.98	19023.470	4.5	37644.410	4.5
536.8895	27.00	-.85	28470.510	1.5	47091.140	.5
536.8952	25.00	-2.89	50072.590	4.5	68693.020	5.5
536.8990	78.00	-1.94	15405.586	0.0	34031.063	0.0
536.9004	26.02	-1.51	200384.280	3.0	219004.530	4.0
536.9082	24.00	-4.27	38730.670	2.0	57350.650	2.0
536.9145	23.00	-2.24	19145.130	2.5	37764.890	3.5
536.9370	7.00	-3.00	96864.020	2.5	115483.000	1.5
536.9379	25.01	-4.77	49291.310	3.0	67910.260	4.0
536.9382	24.01	-3.05	31219.490	4.5	49838.430	4.5
536.9390	40.00	-2.44	4839.451	0.0	23463.541	0.0
536.9480	75.00	-.80	24277.914	0.0	42901.691	0.0
536.9590	27.00	-1.87	14036.280	1.5	32654.500	2.5
536.9595	27.00	-.77	34352.420	1.5	52970.620	2.5
536.9610	64.00	-.67	10808.108	0.0	29431.434	0.0
536.9731	28.01	2.42	100309.290	5.5	118927.020	4.5
536.9768	23.00	4.12	14910.040	3.5	33527.640	2.5
536.9800	75.00	1.95	13711.778	0.0	32334.446	0.0
536.9920	64.00	-.70	6694.574	0.0	25316.625	0.0
536.9930	10.01	1.88	302816.980	1.5	321434.020	1.5
536.9936	28.01	.18	103653.030	3.5	122270.050	3.5
536.9941	23.01	.56	20617.050	2.0	39234.050	3.0
536.9944	26.00	.08	35257.309	4.0	53874.300	5.0
536.9976	28.01	.65	117972.470	3.5	136589.350	3.5
536.9996	17.00	-3.55	84485.309	1.5	103102.120	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
537.0056	22.00	-3.05	25227.217	3.0	43843.820	3.0
537.0099	9.00	-1.41	116987.394	3.5	135603.850	2.5
537.0201	8.01	-4.18	256123.100	3.5	274739.200	2.5
537.0221	17.00	-3.61	84485.309	1.5	103101.340	2.5
537.0236	7.00	-2.42	96864.020	2.5	115480.000	1.5
537.0342	27.00	-1.46	30102.960	2.5	48718.570	2.5
537.0409	25.02	-1.34	174332.910	1.5	192948.290	1.5
537.0443	28.01	-4.53	115120.000	2.5	133735.260	2.5
537.0524	28.01	-4.65	115120.000	2.5	133734.980	3.5
537.0630	64.00	-.09	10162.848	0.0	28782.637	0.0
537.0690	7.00	-1.99	95532.120	2.5	114146.525	2.5
537.0885	25.02	-.82	176695.060	4.5	195308.790	4.5
537.0980	8.01	-3.24	256125.800	2.5	274739.200	2.5
537.0998	26.00	-4.22	34547.192	2.0	53160.530	3.0
537.1069	23.02	-1.18	141531.170	1.5	160144.260	1.5
537.1119	24.01	-4.69	69388.400	6.5	88001.320	5.5
537.1288	22.00	-4.75	30060.328	4.0	48672.660	4.0
537.1325	28.00	-.38	35639.148	3.0	54251.353	3.0
537.1402	22.00	-4.80	29907.273	2.0	48519.210	2.0
537.1415	26.00	-1.56	35767.546	4.0	54379.440	3.0
537.1468	25.00	-1.15	50081.310	5.5	68693.020	5.5
537.1473	24.00	-.63	31009.000	3.0	49620.690	4.0
537.1493	26.00	-1.72	7728.058	3.0	26339.682	2.0
537.1583	26.00	-1.08	34782.406	5.0	53393.715	4.0
537.1595	26.02	-.70	179725.310	6.0	198336.580	5.0
537.1632	29.01	-2.07	118142.970	3.0	136754.110	2.0
537.1655	23.01	-5.53	20622.990	3.0	39234.050	3.0
537.1701	13.01	-1.98	121480.300	3.0	140091.200	2.0
537.1761	22.00	-2.53	25643.695	3.0	44254.390	3.0
537.1875	13.01	-2.34	121480.900	2.0	140091.200	1.0
537.1875	13.01	-2.73	121480.900	2.0	140091.200	2.0
537.1940	60.01	-.63	11292.053	0.0	29907.302	0.0
537.1961	13.01	-2.82	121481.200	1.0	140091.200	1.0
537.1961	13.01	-2.61	121481.200	1.0	140091.200	0.0
537.1961	13.01	-3.91	121481.200	1.0	140091.200	2.0
537.2007	18.01	-1.04	195281.380	.5	213891.220	1.5
537.2022	26.00	-3.86	29356.780	2.0	47966.571	3.0
537.2057	23.00	-3.26	20812.990	1.5	39422.660	2.5
537.2178	23.00	-3.44	8578.520	2.5	27187.770	2.5
537.2192	26.02	-.83	200395.330	5.0	219004.530	4.0
537.2215	28.01	-4.98	114836.630	3.5	133445.750	4.5
537.2220	64.01	-1.32	11372.710	0.0	29986.989	0.0
537.2311	10.00	-2.22	150315.861	2.0	168924.651	2.0
537.2311	18.01	-1.51	186470.280	1.5	205079.070	2.5
537.2400	42.01	-.92	22745.421	0.0	41359.076	0.0
537.2409	26.02	.19	179725.310	6.0	198333.760	6.0
537.2438	23.00	-5.43	2220.130	2.5	20828.480	2.5
537.2605	26.01	-3.82	67516.370	5.5	86124.140	4.5
537.2645	25.00	-3.84	2424.890	4.5	21032.520	3.5
537.2680	14.01	-1.78	103556.290	3.5	122163.800	2.5
537.2700	28.01	-1.55	100332.090	4.5	118939.530	5.5
537.2715	23.02	-2.49	141714.500	2.5	160321.890	2.5
537.2718	14.01	-3.08	103556.420	2.5	122163.600	2.5
537.2734	28.00	-1.26	33590.159	4.0	52197.482	3.0
537.2735	14.01	-1.93	103556.420	2.5	122163.740	1.5
537.2778	27.00	-1.09	33462.830	2.5	52070.000	2.5
537.2856	17.01	-2.33	127726.900	1.0	146333.800	2.0
537.3009	28.01	-2.39	119889.470	5.5	138495.840	4.5
537.3041	18.01	-3.39	196305.040	3.5	214911.300	2.5
537.3203	20.02	-1.26	341601.460	2.0	360207.160	2.0
537.3237	24.00	-3.67	27816.880	5.0	46422.460	4.0
537.3237	23.01	-6.67	16340.970	3.0	34946.550	4.0
537.3391	28.01	-2.39	100309.290	5.5	118914.340	4.5
537.3431	24.00	-4.35	23933.900	4.0	42536.810	3.0
537.3488	18.00	-1.92	106087.305	1.0	124692.020	2.0
537.3512	24.00	-3.76	24303.940	3.0	42908.570	4.0
537.3624	28.01	-4.54	98969.440	5.5	117573.680	4.5
537.3668	23.00	-3.93	15770.720	4.5	34374.810	3.5
537.3683	26.00	-.94	36079.353	3.0	54683.390	4.0
537.3720	24.00	-1.15	31048.850	1.0	49652.760	2.0
537.3778	10.01	-1.87	302816.980	1.5	321420.690	2.5
537.3859	10.01	-2.20	302816.980	1.5	321420.410	1.5
537.3860	72.00	-2.57	2339.068	0.0	20947.666	0.0
537.3870	10.01	-2.46	302831.170	3.5	321434.560	2.5
537.3891	9.00	-2.46	117391.950	.5	135995.270	.5
537.3945	27.00	-1.01	33466.870	3.5	52070.000	2.5
537.3954	17.01	-1.07	127726.900	1.0	146330.000	1.0
537.4046	24.00	-2.24	46109.260	2.0	64712.040	3.0
537.4160	74.00	-1.29	20325.695	0.0	38933.254	0.0
537.4208	10.01	-1.46	302831.800	.5	321434.020	1.5
537.4244	22.00	-4.67	29986.185	3.0	48588.280	3.0
537.4257	28.01	-3.35	113623.100	.5	132225.150	1.5
537.4278	10.01	-2.40	302829.060	4.5	321431.040	5.5
537.4341	6.00	-2.31	71364.900	1.0	89966.660	2.0
537.4387	25.00	-.06	43428.580	4.5	62030.180	4.5
537.4407	8.01	-3.46	185340.680	1.5	203942.210	.5
537.4679	26.01	-3.33	65696.110	4.5	84296.700	5.5
537.4705	24.00	-1.40	36552.130	3.0	55152.630	2.0
537.4762	18.03	-3.02	268151.380	2.5	286751.680	2.5
537.4778	26.00	-3.82	28819.966	5.0	47420.215	5.0
537.5017	25.01	-3.36	89571.030	3.0	108170.450	2.0
537.5023	9.02	-.33	464921.740	3.5	483521.140	3.5
537.5138	10.01	-3.14	302829.060	4.5	321428.060	3.5
537.5270	41.00	-1.53	11130.738	0.0	29734.455	0.0
537.5306	25.00	.09	50094.600	6.5	68693.020	5.5
537.5344	21.00	-.06	15881.760	3.5	34480.050	2.5
537.5431	28.00	-3.24	35639.148	3.0	54237.136	4.0
537.5456	20.02	-.74	323003.560	1.0	341601.460	2.0
537.5471	26.02	.46	186597.300	6.0	205195.150	5.0
537.5566	26.02	-.29	200325.560	4.0	218923.080	3.0
537.5601	30.02	-.46	218909.400	1.0	237506.800	1.0
537.5690	16.01	-2.36	140229.780	2.5	158826.870	2.5
537.5748	10.01	-1.85	302831.170	3.5	321428.060	3.5
537.5760	7.00	-4.14	97770.150	.5	116367.000	.5
537.5760	7.00	-1.64	97770.150	.5	116367.000	1.5
537.5771	23.01	-3.25	30613.970	4.0	49210.760	3.0
537.5876	28.01	-2.63	97273.830	2.5	115870.280	2.5
537.5881	26.01	-3.90	65931.460	3.5	84527.890	4.5
537.5974	28.01	-4.28	116786.420	.5	135382.530	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
537.6000	8.04	-.54	689700.000	0.0	708301.190	0.0
537.6023	23.00	-3.10	15571.900	2.5	34167.840	2.5
537.6034	8.01	-4.00	256143.300	3.5	274739.200	2.5
537.6042	7.00	-2.41	95475.280	.5	114071.153	1.5
537.6066	18.01	-4.75	196315.510	2.5	214911.300	2.5
537.6089	16.01	-.87	114804.110	2.5	133399.820	1.5
537.6167	18.01	-3.85	200406.360	.5	219001.800	1.5
537.6254	29.01	-3.06	116080.460	3.0	134675.600	2.0
537.6306	18.01	-.84	189654.780	2.5	208249.740	1.5
537.6315	28.01	-.96	100332.090	4.5	118927.020	4.5
537.6370	10.01	-3.60	302839.280	2.5	321434.020	1.5
537.6378	26.00	-4.66	29371.860	3.0	47966.571	3.0
537.6448	17.00	-4.98	83130.900	1.5	101725.370	1.5
537.6477	25.00	-4.04	23549.200	2.5	42143.570	1.5
537.6532	10.01	-2.36	302829.060	4.5	321423.240	3.5
537.6535	10.01	-2.24	302829.060	4.5	321423.230	4.5
537.6561	24.00	-2.93	36558.550	2.0	55152.630	2.0
537.6587	22.00	-3.93	0.000	2.0	18593.990	3.0
537.6636	10.01	-.37	302829.060	4.5	321422.880	5.5
537.6645	10.01	-1.15	302829.060	4.5	321422.850	4.5
537.6697	18.01	-1.74	195297.610	1.5	213891.220	1.5
537.6700	29.01	-4.63	118484.000	3.0	137077.600	3.0
537.6729	26.00	-4.39	40231.312	2.0	58824.810	2.0
537.6790	76.00	-1.20	13953.751	0.0	32552.208	0.0
537.6838	26.00	-2.54	34636.820	2.0	53229.940	1.0
537.6867	29.00	-2.29	45894.129	0.0	64492.320	0.0
537.6889	26.00	-2.82	35856.386	2.0	54449.330	1.0
537.6940	63.00	.15	16534.792	0.0	35132.731	0.0
537.6944	22.00	-4.28	15108.121	3.0	33700.874	4.0
537.7049	26.00	-3.59	28604.610	2.0	47197.000	2.0
537.7090	57.01	-.45	18470.572	0.0	37067.992	0.0
537.7100	75.00	-1.22	17180.052	0.0	35777.437	0.0
537.7142	10.01	-1.33	302831.170	3.5	321423.240	3.5
537.7145	10.01	-.67	302831.170	3.5	321423.230	4.5
537.7174	27.00	-2.68	33449.180	.5	52041.140	.5
537.7255	10.01	-.88	302831.170	3.5	321422.850	4.5
537.7267	10.01	-1.93	302816.980	1.5	321408.620	2.5
537.7292	23.00	-3.62	15103.770	4.5	33695.320	5.5
537.7379	22.00	-3.02	20062.980	1.0	38654.230	1.0
537.7420	28.01	-1.68	100332.090	4.5	118923.200	3.5
537.7426	18.01	-3.80	196076.390	1.5	214667.480	2.5
537.7443	10.01	-2.57	302843.530	3.5	321434.560	2.5
537.7611	26.02	-.79	179748.170	5.0	198338.620	4.0
537.7611	10.01	-1.30	302844.110	2.5	321434.560	2.5
537.7637	25.00	-.14	31001.150	2.5	49591.510	1.5
537.7709	27.00	-.94	33674.380	2.5	52264.490	1.5
537.7840	44.00	.65	28310.790	0.0	46905.616	0.0
537.7897	24.01	-3.31	70584.640	2.5	89174.100	3.5
537.7943	23.02	-3.32	141987.320	3.5	160576.620	3.5
537.8007	24.00	-3.31	31009.000	3.0	49598.080	2.0
537.8065	24.01	-4.55	31117.590	2.5	49706.470	2.5
537.8077	18.01	-1.14	190106.230	1.5	208695.070	1.5
537.8143	10.01	-1.56	302831.800	.5	321420.410	1.5
537.8194	9.02	-1.30	464921.740	3.5	483510.170	2.5
537.8200	15.01	-.52	105303.190	1.0	123891.600	2.0
537.8201	26.02	.08	179748.170	5.0	198336.580	5.0
537.8247	27.00	-.76	324647.730	4.5	51052.980	3.5
537.8321	22.00	-4.56	27480.047	3.0	46068.040	4.0
537.8333	15.00	-1.61	58174.450	1.5	76762.400	.5
537.8493	25.00	-4.28	41230.300	3.5	59817.700	2.5
537.8562	24.00	-3.53	31048.000	7.0	49635.160	6.0
537.8734	28.00	-1.55	33610.916	2.0	52197.482	3.0
537.8915	18.01	-1.98	186470.280	1.5	205056.220	1.5
537.8921	6.00	-4.64	71385.380	2.0	89971.300	3.0
537.9017	26.02	-1.35	179748.170	5.0	198333.760	6.0
537.9100	45.00	.69	31456.433	0.0	50046.904	0.0
537.9130	38.01	-.23	56057.900	0.0	74648.267	0.0
537.9158	18.01	-3.94	191012.350	1.5	209597.450	1.5
537.9190	22.01	-3.95	20891.880	3.5	39476.870	2.5
537.9321	10.01	-2.63	302843.530	3.5	321428.070	2.5
537.9323	10.01	-1.49	302843.530	3.5	321428.060	3.5
537.9336	28.00	-1.05	43258.792	4.0	61843.280	5.0
537.9454	27.00	-2.46	33449.180	.5	52033.260	1.5
537.9488	10.01	-2.71	302844.110	2.5	321428.070	2.5
537.9491	28.01	-2.03	100309.290	5.5	118893.240	6.5
537.9491	10.01	-1.01	302844.110	2.5	321428.060	3.5
537.9564	28.01	-1.50	100309.290	5.5	118892.990	5.5
537.9586	26.00	-1.50	29798.960	4.0	48382.585	5.0
537.9604	22.00	-1.57	25797.600	3.0	44381.160	4.0
537.9674	25.02	-1.49	176265.780	1.5	194849.100	1.5
537.9715	22.00	-2.37	25388.334	4.0	43971.513	5.0
537.9723	24.01	-2.98	59130.510	1.5	77713.660	1.5
537.9735	27.00	-2.22	34133.590	3.5	52716.700	3.5
537.9767	25.01	-4.43	89519.250	2.0	108102.250	3.0
537.9781	25.01	-3.63	62564.700	1.0	81147.650	2.0
537.9908	28.01	-3.20	119913.330	4.5	138495.840	4.5
537.9984	28.01	-2.11	100332.090	4.5	118914.340	4.5
538.0009	9.00	-4.32	117872.916	1.5	136455.080	1.5
538.0010	57.00	-.96	9840.217	0.0	28427.543	0.0
538.0039	25.01	-3.05	82917.780	2.0	101499.840	2.0
538.0152	21.00	-2.08	18504.050	.5	37085.720	.5
538.0160	28.01	-1.95	118379.110	2.5	136960.750	2.5
538.0160	9.02	-1.72	464939.500	2.5	483521.140	3.5
538.0224	6.00	-2.03	71385.380	2.0	89966.800	3.0
538.0227	10.01	-3.21	302839.280	2.5	321420.690	2.5
538.0265	6.00	-2.82	71385.380	2.0	89966.660	2.0
538.0308	10.01	-3.54	302839.280	2.5	321420.410	1.5
538.0337	6.00	-1.92	61981.820	1.0	80562.850	1.0
538.0389	7.00	-3.86	97770.150	.5	116351.000	.5
538.0389	7.00	-1.84	97770.150	.5	116351.000	1.5
538.0418	28.01	-5.00	118379.110	2.5	136959.660	2.5
538.0450	26.02	-.02	179757.980	4.0	198338.620	4.0
538.0548	18.03	-3.41	268171.380	1.5	286751.680	2.5
538.0556	17.00	-4.17	83364.927	.5	101945.200	.5
538.0556	17.00	-4.00	83364.927	.5	101945.200	1.5
538.0620	39.00	-.73	15244.271	0.0	33829.490	0.0
538.0641	28.01	-4.70	118631.950	.5	137211.930	.5
538.0716	24.00	-3.89	35618.510	1.0	54198.230	1.0
538.0719	10.01	-1.40	302843.530	3.5	321423.240	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
538.0722	10.01	-.82	302843.530	3.5	321423.230	4.5
538.0832	10.01	-.75	302843.530	3.5	321422.850	4.5
538.0887	10.01	-.81	302844.110	2.5	321423.240	3.5
538.0902	26.02	-.61	179757.980	4.0	198337.060	3.0
538.0916	22.00	-3.67	27665.570	1.0	46244.600	2.0
538.0968	25.02	-.69	176270.250	2.5	194849.100	1.5
538.0990	57.01	-1.78	7339.834	0.0	25923.775	0.0
538.1020	22.01	-1.86	12628.770	1.5	31207.440	2.5
538.1041	26.02	-1.04	179757.980	4.0	198336.580	5.0
538.1048	9.00	-1.31	117872.916	1.5	136451.490	2.5
538.1104	27.00	-2.91	15774.040	1.5	34352.420	1.5
538.1209	25.01	-4.01	87941.080	4.0	106519.100	5.0
538.1243	26.02	-.96	179760.720	3.0	198338.620	4.0
538.1260	59.01	-2.55	4032.876	0.0	22615.884	0.0
538.1328	18.01	-3.65	196089.870	2.5	214667.480	2.5
538.1339	26.02	-1.05	179759.490	2.0	198337.060	3.0
538.1340	41.00	-2.13	5887.999	0.0	24470.731	0.0
538.1362	7.00	-2.90	95493.660	1.5	114071.153	1.5
538.1440	25.00	-4.52	38934.940	2.5	57512.160	1.5
538.1452	24.00	-3.83	27597.220	3.0	46174.400	3.0
538.1498	24.00	-2.83	46174.400	3.0	64751.420	4.0
538.1548	21.00	-4.06	18571.400	2.5	37148.250	1.5
538.1678	25.03	-3.95	152700.500	4.0	171276.900	3.0
538.1695	26.02	-.15	179760.720	3.0	198337.060	3.0
538.1739	18.01	-.79	195297.610	1.5	213873.800	2.5
538.1768	27.00	-.03	34196.210	1.5	52772.300	2.5
538.1920	57.01	-.84	17099.394	0.0	35680.124	0.0
538.1953	25.01	-2.80	62572.200	2.0	81147.650	2.0
538.1959	23.00	-4.63	2112.320	.5	20687.750	1.5
538.2046	27.00	-4.80	36329.860	2.5	54904.990	2.5
538.2245	9.00	-3.49	117391.950	.5	135966.390	1.5
538.2318	23.00	-3.69	20767.570	3.5	39341.760	3.5
538.2338	18.01	-1.28	189437.690	.5	208011.810	1.5
538.2353	26.02	-.21	179759.490	2.0	198333.560	2.0
538.2370	40.00	-2.37	5000.766	0.0	23579.942	0.0
538.2405	26.01	-3.23	47674.780	1.5	66248.670	.5
538.2467	28.00	-2.17	43258.792	4.0	61832.470	4.0
538.2474	26.00	-1.51	35257.309	4.0	53830.960	3.0
538.2515	26.01	-3.88	48039.230	2.5	66612.740	1.5
538.2709	26.02	-.82	179760.720	3.0	198333.560	2.0
538.2779	26.00	-4.16	28604.610	2.0	47177.210	1.0
538.2904	28.01	-3.18	52205.950	3.5	70778.120	3.5
538.2940	92.00	-2.33	564.603	0.0	19141.812	0.0
538.2950	22.00	-2.26	15108.121	3.0	33680.130	3.0
538.3057	9.02	-3.45	376814.020	2.5	395385.660	2.5
538.3124	23.00	-4.60	14910.040	3.5	33481.450	3.5
538.3127	21.00	-5.47	0.000	1.5	18571.400	2.5
538.3330	25.01	-3.46	100682.300	4.0	119253.000	3.0
538.3330	25.01	-2.29	100682.300	4.0	119253.000	4.0
538.3330	25.01	-1.42	100682.300	4.0	119253.000	5.0
538.3338	9.02	-.44	464939.500	2.5	483510.170	2.5
538.3355	26.00	.16	34782.406	5.0	53353.020	6.0
538.3388	24.00	-4.77	31987.060	4.0	50557.560	4.0
538.3408	27.00	-.64	33462.830	2.5	52033.260	1.5
538.3434	23.00	-.38	20828.480	2.5	39398.820	3.5
538.3449	25.00	-3.28	45013.550	2.5	63583.840	1.5
538.3547	21.00	-2.18	18515.770	1.5	37085.720	.5
538.3605	24.00	-3.83	31028.330	2.0	49598.080	2.0
538.3646	18.01	-1.87	190196.160	.5	208765.770	.5
538.3721	7.01	-1.22	168892.210	1.0	187461.560	2.0
538.3724	10.01	-2.58	302839.280	2.5	321408.620	2.5
538.3776	10.01	-2.50	302839.280	2.5	321408.440	3.5
538.3802	23.01	-2.68	30641.710	3.0	49210.780	3.0
538.3804	22.00	-2.30	27498.975	3.0	46068.040	4.0
538.3988	23.00	-4.70	26122.040	3.5	44690.470	3.5
538.4031	24.00	-4.94	31049.330	6.0	49617.610	5.0
538.4102	18.00	-1.81	107496.463	1.0	126064.500	2.0
538.4124	23.00	-2.56	19189.280	1.5	37757.240	.5
538.4150	64.00	-.55	10808.108	0.0	29381.142	0.0
538.4212	26.00	-3.99	29469.010	2.0	48036.667	2.0
538.4377	18.01	-.94	190106.230	1.5	208673.320	2.5
538.4385	25.01	-2.97	52373.180	3.0	70940.240	2.0
538.4498	10.01	-2.48	302839.280	2.5	321405.950	3.5
538.4617	23.00	-3.03	19078.150	3.5	37644.410	4.5
538.4630	22.00	-2.70	6661.003	3.0	25227.217	3.0
538.4745	10.01	-.95	303509.520	2.5	322075.340	3.5
538.4884	24.00	-4.63	31055.350	5.0	49620.690	4.0
538.4884	23.01	-2.53	18353.890	3.0	36919.230	3.0
538.4898	25.01	-3.63	82936.010	3.0	101501.300	3.0
538.5012	25.01	-3.16	100688.100	3.0	119253.000	2.0
538.5012	25.01	-2.14	100688.100	3.0	119253.000	3.0
538.5012	25.01	-1.59	100688.100	3.0	119253.000	4.0
538.5073	26.00	-4.58	32133.977	2.0	50696.666	2.0
538.5131	23.00	-.21	21032.520	3.5	39597.010	4.5
538.5140	40.00	-1.33	4113.534	0.0	22683.153	0.0
538.5215	17.01	-1.96	141010.000	2.0	159574.200	2.0
538.5264	24.00	-3.17	31009.000	3.0	49573.030	4.0
538.5322	25.01	-4.51	82936.010	3.0	101499.840	2.0
538.5377	28.01	-2.29	117763.910	1.5	136327.550	1.5
538.5418	27.00	-.75	34352.420	1.5	52915.920	.5
538.5447	38.01	-1.19	56057.900	0.0	74626.461	0.0
538.5487	23.00	-1.59	19189.280	1.5	37752.540	2.5
538.5540	92.00	-1.47	7581.807	0.0	26150.047	0.0
538.5557	25.01	-4.41	82936.010	3.0	101499.030	4.0
538.5574	26.00	-3.70	29798.960	4.0	48361.920	4.0
538.5872	9.00	-1.39	117872.916	1.5	136434.850	2.5
538.5880	44.00	-1.18	13550.463	0.0	32117.531	0.0
538.6058	28.00	-3.55	30392.052	1.0	48953.344	1.0
538.6088	7.00	-4.45	97805.810	1.5	116367.000	.5
538.6088	7.00	-2.73	97805.810	1.5	116367.000	1.5
538.6088	7.00	-1.49	97805.810	1.5	116367.000	2.5
538.6172	28.01	-.68	100332.090	4.5	118892.990	5.5
538.6184	25.01	-3.39	52379.380	2.0	70940.240	2.0
538.6248	24.00	-4.64	31028.330	2.0	49586.970	1.0
538.6317	25.01	-3.16	100692.600	2.0	119253.000	1.0
538.6317	25.01	-2.16	100692.600	2.0	119253.000	2.0
538.6317	25.01	-1.78	100692.600	2.0	119253.000	3.0
538.6332	26.00	-2.09	33507.102	3.0	52067.450	2.0
538.6356	28.00	-2.93	31786.210	3.0	50346.477	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
538.6390	25.01	-2.81	62587.500	3.0	81147.650	2.0
538.6425	26.01	-2.94	66612.740	1.5	85172.770	.5
538.6448	23.01	-2.99	30641.710	3.0	49201.660	2.0
538.6451	24.00	-4.81	35572.940	2.0	54132.680	3.0
538.6517	18.01	-1.18	187589.230	2.5	206148.940	3.5
538.6552	16.01	-3.43	133399.820	1.5	151959.410	1.5
538.6620	90.00	-1.71	4920.109	0.0	23484.626	0.0
538.6650	40.00	-2.17	5000.766	0.0	23565.180	0.0
538.6750	29.01	-4.27	117883.140	4.0	136442.050	3.0
538.6785	29.01	-3.35	116576.810	0.0	135135.600	1.0
538.6825	24.01	-2.77	52321.300	4.5	70879.950	5.5
538.6871	15.01	-.61	86744.700	1.0	105303.190	1.0
538.6898	10.01	-.64	303508.480	1.5	322066.880	2.5
538.6903	18.01	-3.05	183985.940	1.5	202544.320	2.5
538.6979	26.00	-2.84	29371.860	3.0	47929.981	4.0
538.6985	24.00	-.86	27176.220	1.0	45734.320	2.0
538.7098	28.01	-4.72	118379.110	2.5	136936.820	3.5
538.7101	25.01	-2.32	100695.300	1.0	119253.000	1.0
538.7101	25.01	-2.02	100695.300	1.0	119253.000	2.0
538.7147	24.00	-3.90	35640.690	0.0	54198.230	1.0
538.7200	10.01	-1.77	303509.520	2.5	322066.880	2.5
538.7208	10.01	-.66	303509.520	2.5	322066.850	3.5
538.7246	30.02	-.71	216895.300	1.0	235452.500	2.0
538.7246	23.03	-.61	264902.200	3.0	283459.400	3.0
538.7378	18.00	-4.08	107496.463	1.0	126053.210	2.0
538.7464	28.01	-4.63	98276.700	4.5	116833.150	4.5
538.7468	26.00	-2.06	33412.706	3.0	51969.140	3.0
538.7554	23.00	-1.57	15571.900	2.5	34128.040	3.5
538.7594	24.00	-1.07	27163.200	0.0	45719.200	1.0
538.7772	22.00	-2.79	20209.444	2.0	38764.832	3.0
538.8020	74.00	-1.39	19519.120	0.0	38078.814	0.0
538.8047	22.00	-1.77	25699.950	2.0	44254.390	3.0
538.8140	24.01	-3.69	52298.120	3.5	70852.240	3.5
538.8172	25.00	-3.84	41230.300	3.5	59784.310	3.5
538.8209	9.00	-2.64	117872.916	1.5	136426.800	1.5
538.8262	28.01	-4.61	115827.120	3.5	134380.820	3.5
538.8294	23.00	-.56	20687.750	1.5	39241.340	2.5
538.8300	41.00	-2.15	8952.985	0.0	27511.714	0.0
538.8340	28.00	-3.50	15609.861	2.0	34163.294	2.0
538.8381	28.01	-1.91	97273.830	2.5	115827.120	3.5
538.8411	7.00	-2.01	97805.810	1.5	116359.000	2.5
538.8416	28.01	-4.71	100078.780	1.5	118631.950	.5
538.8474	23.00	-3.81	26604.770	3.5	45157.740	4.5
538.8503	24.00	-3.66	28637.000	3.0	47189.870	4.0
538.8510	73.00	-.11	28633.420	0.0	47191.426	0.0
538.8544	25.00	-1.93	27201.540	2.5	45754.270	3.5
538.8573	23.00	-3.41	20789.130	2.5	39341.760	3.5
538.8588	18.01	-2.27	183914.560	.5	202467.140	1.5
538.8611	26.01	-4.38	61332.820	1.5	79885.320	2.5
538.8690	42.00	-.07	31133.803	0.0	49691.189	0.0
538.8830	28.00	-3.71	30619.440	2.0	49171.187	1.0
538.8902	13.01	-2.02	121365.200	0.0	139916.700	1.0
538.8938	7.00	-3.24	95475.280	.5	114026.654	.5
538.8938	14.00	-4.75	39760.285	1.0	58311.659	0.0
538.9111	22.00	-.37	28896.062	5.0	47446.840	6.0
538.9125	23.00	-3.64	26505.880	2.5	45056.610	3.5
538.9166	22.00	-2.42	6556.828	1.0	25107.417	2.0
538.9171	24.00	-2.63	38537.680	5.0	57088.250	5.0
538.9235	26.00	-3.28	39969.830	3.0	58520.180	4.0
538.9308	30.02	-.47	217073.800	2.0	235623.900	3.0
538.9314	27.00	-4.29	26232.050	3.5	44782.130	4.5
538.9340	72.00	-2.21	8872.327	0.0	27427.475	0.0
538.9375	21.01	-1.93	39001.590	0.0	57551.460	1.0
538.9413	24.00	-1.83	36552.130	3.0	55101.870	3.0
538.9461	26.00	-.83	35611.608	3.0	54161.182	3.0
538.9500	64.00	-.29	10485.478	0.0	29040.075	0.0
538.9561	24.00	-2.36	31048.850	1.0	49598.080	2.0
538.9784	18.01	-1.74	196119.020	3.5	214667.480	2.5
538.9870	70.01	-.91	34198.789	0.0	52752.112	0.0
538.9953	18.01	-3.30	200393.020	4.5	218940.900	4.5
538.9953	18.01	-1.56	200393.020	4.5	218940.900	5.5
538.9976	25.01	-3.43	59537.400	4.0	78085.200	5.0
538.9996	22.00	-1.09	15108.121	3.0	33655.853	2.0
538.9997	22.01	-4.07	25193.040	2.5	43740.770	3.5
539.0023	10.01	-1.44	303527.740	4.5	322075.380	4.5
539.0034	10.01	-4.20	303527.740	4.5	322075.340	3.5
539.0104	23.00	-2.66	13801.530	1.5	32348.890	.5
539.0167	9.00	-3.06	117872.916	1.5	136420.060	.5
539.0252	10.01	-.73	303528.530	3.5	322075.380	4.5
539.0264	28.01	-2.29	117972.470	3.5	136519.280	4.5
539.0264	10.01	-1.82	303528.530	3.5	322075.340	3.5
539.0273	22.00	-.24	29818.310	3.0	48365.090	3.0
539.0392	24.00	-1.23	27176.220	1.0	45722.590	0.0
539.0440	45.00	-1.52	10243.505	0.0	28794.866	0.0
539.0470	27.00	-.47	32654.500	2.5	51200.600	1.5
539.0484	22.00	-6.83	6556.828	1.0	25102.880	2.0
539.0562	37.00	-2.30	12816.545	0.0	31367.486	0.0
539.0683	22.00	-3.05	6842.964	5.0	25388.334	4.0
539.0688	7.01	-1.74	168892.210	1.0	187437.560	1.0
539.0735	7.00	-4.17	97805.810	1.5	116351.000	.5
539.0735	7.00	-2.45	97805.810	1.5	116351.000	1.5
539.0740	18.00	-2.65	106237.597	2.0	124782.770	1.0
539.0767	27.00	-.86	32654.500	2.5	51199.580	3.5
539.0790	78.00	.11	33956.816	0.0	52506.973	0.0
539.0970	21.00	-.84	16022.720	2.5	34567.100	3.5
539.1023	28.01	-3.36	116838.330	1.5	135382.530	1.5
539.1029	23.00	-3.68	9824.580	2.5	28368.760	1.5
539.1056	22.00	-2.35	15156.787	4.0	33700.874	4.0
539.1159	24.00	-4.11	39158.630	4.0	57702.360	5.0
539.1180	40.00	-2.43	5000.766	0.0	23549.581	0.0
539.1229	18.01	-2.94	161048.640	1.5	179592.130	2.5
539.1241	10.01	-3.34	302890.570	2.5	321434.020	1.5
539.1248	26.00	-3.09	28819.966	5.0	47363.390	6.0
539.1279	24.00	-3.00	36558.550	2.0	55101.670	3.0
539.1360	72.01	-1.62	17744.654	0.0	36292.850	0.0
539.1377	24.00	-1.33	27176.220	1.0	45719.200	1.0
539.1454	26.00	-1.29	33507.102	3.0	52049.820	2.0
539.1563	22.01	-1.57	44902.420	2.5	63444.760	3.5
539.1595	22.00	-3.51	7255.369	2.0	25797.600	3.0
539.1607	56.01	-.75	46154.890	0.0	64702.236	0.0
539.1620	29.00	-.75	44442.294	0.0	62989.595	0.0
539.1657	28.01	-3.39	100332.090	4.5	118874.110	3.5
539.1706	7.00	-3.57	97770.150	.5	116312.000	.5
539.1706	7.00	-4.47	97770.150	.5	116312.000	1.5
539.1876	17.00	-3.12	82918.893	2.5	101460.160	1.5
539.2000	28.01	-.75	101740.270	3.5	120281.110	4.5
539.2000	10.01	-.26	303527.740	4.5	322068.580	5.5
539.2075	21.00	.12	16026.520	4.5	34567.100	3.5
539.2157	17.01	.33	129065.400	2.0	147605.700	3.0
539.2209	24.00	-4.55	31048.850	1.0	49588.970	1.0
539.2327	28.00	-1.41	33500.854	3.0	52040.568	2.0
539.2355	28.00	-2.17	30619.440	2.0	49159.060	2.0
539.2503	10.01	-2.99	303527.740	4.5	322066.850	3.5
539.2506	28.01	-3.93	104298.230	4.5	122837.330	4.5
539.2526	7.00	-2.37	95532.120	2.5	114071.153	1.5
539.2593	26.02	-.63	200384.280	3.0	218923.080	3.0
539.2724	10.01	-3.46	303528.530	3.5	322066.880	2.5
539.2733	10.01	-2.15	303528.530	3.5	322066.850	3.5
539.2829	23.00	-2.67	13810.900	.5	32348.890	.5
539.2930	24.00	-4.17	46174.400	3.0	64712.040	3.0
539.2930	23.01	-3.12	30673.140	2.0	49210.780	3.0
539.2940	63.00	.04	15163.614	0.0	33706.375	0.0
539.3089	22.00	-4.98	24694.895	4.0	43231.990	4.0
539.3175	26.00	-1.01	26140.164	3.0	44676.963	4.0
539.3288	23.00	-1.56	15103.770	4.5	33640.180	4.5
539.3390	58.01	-.31	8791.670	0.0	27336.884	0.0
539.3524	26.01	-4.63	44929.590	2.5	63465.190	1.5
539.3562	28.01	-3.81	115739.150	4.5	134274.620	5.5
539.3599	18.01	-3.02	190732.970	.5	209268.310	1.5
539.3739	27.00	-.44	32733.070	3.5	51267.930	4.5
539.3742	7.00	-3.95	97770.150	.5	116305.000	.5
539.3742	7.00	-4.03	97770.150	.5	116305.000	1.5
539.3830	23.00	-4.92	2153.200	1.5	20687.750	1.5
539.3870	23.01	-2.46	30318.630	4.0	48853.040	5.0
539.3968	18.00	-2.35	106237.597	2.0	124771.670	2.0
539.3995	29.01	-2.95	117130.360	2.0	135664.340	1.0
539.4083	28.01	-.69	100389.520	2.5	118923.200	3.5
539.4211	22.00	-3.31	18825.890	1.0	37359.130	2.0
539.4240	24.00	-3.89	24056.110	5.0	42589.250	5.0
539.4282	7.00	-2.54	95493.660	1.5	114026.654	.5
539.4417	23.00	-4.46	19023.470	4.5	37556.000	3.5
539.4444	28.01	-3.88	115739.150	4.5	134271.590	4.5
539.4496	28.01	-.57	101740.270	3.5	120272.530	4.5
539.4505	28.01	-3.50	99340.550	3.5	117872.780	2.5
539.4520	42.00	-.86	20809.640	0.0	39346.970	0.0
539.4528	23.00	-4.04	14949.300	4.5	33481.450	3.5
539.4557	7.01	-3.06	202714.120	1.0	221246.170	1.0
539.4575	10.01	-.81	302902.570	1.5	321434.560	2.5
539.4659	28.01	-2.05	101740.270	3.5	120271.970	2.5
539.4668	26.00	-2.68	33765.291	2.0	52296.960	2.0
539.4677	25.00	-3.43	0.000	2.5	18531.640	3.5
539.4732	26.00	-4.44	28604.610	2.0	47136.058	2.0
539.4755	24.00	-3.64	35501.260	3.0	54032.630	2.0
539.4760	90.00	-2.33	3790.903	0.0	22327.409	0.0
539.4799	25.01	-3.83	89571.030	3.0	108102.250	3.0
539.4828	18.01	-2.11	187589.230	2.5	206120.350	2.5
539.4880	24.01	-2.57	52321.300	4.5	70852.240	3.5
539.4889	10.01	-1.73	302903.650	2.5	321434.560	2.5
539.5014	22.01	-3.52	43740.770	3.5	62271.250	2.5
539.5023	25.02	-1.71	173835.070	.5	192365.520	1.5
539.5070	26.02	-2.43	166421.330	4.0	184951.620	3.0
539.5119	10.01	-2.78	302890.570	2.5	321420.690	2.5
539.5154	25.01	-4.19	72648.800	4.0	91178.800	4.0
539.5201	10.01	-3.47	302890.570	2.5	321420.410	1.5
539.5220	26.00	-2.37	35856.386	2.0	54386.160	1.0
539.5240	46.00	.15	39683.500	0.0	58218.357	0.0
539.5253	23.00	-3.37	19026.340	2.5	37556.000	3.5
539.5268	28.01	-4.63	99442.860	4.5	117972.470	3.5
539.5544	24.01	-4.51	31117.590	2.5	49646.250	3.5
539.5579	28.01	-1.20	101740.270	3.5	120268.810	3.5
539.5585	23.01	-2.61	30673.140	2.0	49201.660	2.0
539.5786	9.02	-2.01	441276.720	2.5	459804.550	1.5
539.5860	41.00	-2.55	4920.109	0.0	23452.836	0.0
539.5873	25.02	-1.04	174048.890	2.5	192576.420	2.5
539.5880	40.00	-.86	17744.654	0.0	36277.312	0.0
539.5911	17.01	-1.87	140259.000	2.0	158786.400	3.0
539.5990	18.01	-4.13	196305.040	3.5	214832.170	3.5
539.5990	73.00	-2.33	9194.957	0.0	27727.237	0.0
539.6051	28.01	-2.52	117763.910	1.5	136290.830	.5
539.6249	26.01	-3.06	66522.320	2.5	85046.560	1.5
539.6261	25.00	-4.95	34343.900	4.5	52870.100	3.5
539.6287	22.01	-3.08	12774.810	5.5	31300.920	4.5
539.6330	41.00	-1.99	8307.725	0.0	26838.838	0.0
539.6345	9.00	-3.12	118936.797	1.5	137462.710	1.5
539.6415	23.00	-9.30	10892.500	3.5	29418.170	3.5
539.6465	10.01	-1.84	302902.570	1.5	321428.070	2.5
539.6491	28.01	-3.27	115209.850	3.5	133735.260	2.5
539.6509	9.02	-3.99	440069.510	1.5	458594.860	2.5
539.6572	28.01	-2.27	115209.850	3.5	133734.980	3.5
539.6578	25.01	-3.55	53781.700	3.0	72306.810	2.0
539.6581	22.01	-1.88	20951.770	2.5	39476.870	2.5
539.6582	22.00	-3.75	170.132	3.0	18695.230	4.0
539.6590	22.00	-3.28	0.000	2.0	18525.070	2.0
539.6599	23.01	-6.05	16421.510	4.0	34946.550	4.0
539.6616	25.02	-1.15	174464.070	4.5	192989.050	5.5
539.6701	28.01	-4.58	117763.910	1.5	136288.600	2.5
539.6780	10.01	-1.41	302903.650	2.5	321428.070	2.5
539.6783	10.01	-.76	302903.650	2.5	321428.660	3.5
539.6861	24.00	-2.32	36577.730	4.0	55101.870	3.0
539.6904	26.00	-3.97	24335.764	2.0	42859.756	2.0
539.6919	24.01	-3.70	36101.820	3.5	54625.760	2.5
539.6965	10.01	-4.15	303824.230	3.5	322348.010	3.5
539.6965	10.01	-3.60	303824.230	3.5	322348.010	4.5
539.7076	28.01	-4.04	104298.230	4.5	122821.630	5.5
539.7093	22.00	-.98	15156.787	4.0	33660.130	3.0
539.7131	26.00	-2.07	7376.762	4.0	25899.974	4.0
539.7177	26.00	-.71	35856.386	2.0	54379.440	3.0
539.7216	28.01	-4.34	115739.150	4.5	134262.070	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
539.7248	29.01	-1.42	117747.450	3.0	136270.260	4.0
539.7304	23.00	-2.86	21603.170	4.5	40125.740	3.5
539.7371	28.01	-2.86	103653.030	3.5	122175.420	2.5
539.7380	42.00	-.92	22745.421	0.0	41272.929	0.0
539.7446	27.01	-3.53	67824.600	2.0	86346.730	3.0
539.7522	18.01	-.05	189414.960	3.5	207936.830	4.5
539.7560	73.00	-1.53	17099.394	0.0	35626.284	0.0
539.7624	26.00	-3.27	29313.008	6.0	47834.529	5.0
539.7699	9.00	-1.82	117164.006	2.5	135685.270	1.5
539.7726	25.02	-.62	124823.900	4.5	143345.070	3.5
539.7834	23.00	-.76	20606.430	.5	39127.230	1.5
539.7939	25.01	-4.82	49291.310	3.0	67811.750	3.0
539.7970	74.00	-1.59	19115.832	0.0	37641.315	0.0
539.8003	28.01	-2.46	118379.110	2.5	136899.330	1.5
539.8187	10.01	-1.16	302903.650	2.5	321423.240	3.5
539.8262	26.00	-1.34	35856.386	2.0	54375.719	2.0
539.8431	10.00	-3.27	152970.733	0.0	171489.485	1.0
539.8475	17.01	-1.61	161348.400	1.0	179867.000	1.0
539.8502	23.00	-3.84	26171.960	4.5	44690.470	3.5
539.8615	14.00	-4.84	45276.188	1.0	63794.310	2.0
539.8636	10.01	-2.52	302890.570	2.5	321408.620	2.5
539.8668	28.01	-1.47	118442.810	1.5	136960.750	2.5
539.8688	10.01	-2.18	302890.570	2.5	321408.440	3.5
539.8744	24.00	-4.78	31055.350	5.0	49573.030	4.0
539.8767	22.03	.26	212395.800	.5	230913.400	1.5
539.8845	14.00	-3.04	45276.188	1.0	63793.520	1.0
539.8910	23.00	-4.22	2311.370	3.5	20828.480	2.5
539.8910	90.00	-1.42	8711.012	0.0	27233.269	0.0
539.9043	18.00	-3.18	106087.305	1.0	124603.957	2.0
539.9120	60.01	-1.94	7420.492	0.0	25942.029	0.0
539.9300	21.00	-3.88	0.000	1.5	18515.770	1.5
539.9414	10.01	-2.69	302890.570	2.5	321405.950	3.5
539.9499	25.00	-.31	31076.420	1.5	49591.510	1.5
539.9507	26.01	-4.30	66012.830	4.5	84527.890	4.5
539.9659	9.00	-3.14	118936.797	1.5	137451.340	2.5
539.9753	18.01	-3.60	187589.230	2.5	206103.450	1.5
539.9758	27.00	-.91	33945.900	2.5	52460.100	2.5
539.9940	66.01	-2.39	4274.849	0.0	22793.573	0.0
540.0022	22.00	-3.31	25388.334	4.0	43901.630	4.0
540.0061	9.00	-3.17	118936.797	1.5	137449.960	1.5
540.0202	28.01	-4.30	97799.660	1.5	116312.340	1.5
540.0313	26.01	-2.59	66672.390	3.5	85184.690	4.5
540.0397	24.01	-3.17	36272.660	4.5	54784.670	3.5
540.0470	42.00	-.98	20809.640	0.0	39326.547	0.0
540.0484	26.00	-.58	35257.309	4.0	53769.020	4.0
540.0488	25.02	-1.58	174436.590	2.5	192948.290	1.5
540.0562	10.00	-2.18	134459.287	1.0	152970.733	0.0
540.0590	23.00	-3.67	20789.130	2.5	39300.480	2.5
540.0600	28.00	-3.37	40361.254	3.0	58872.570	4.0
540.0613	24.00	-.67	27223.050	2.0	45734.320	2.0
540.0633	18.01	-1.95	188766.150	2.5	207277.350	1.5
540.0668	26.00	-2.87	29320.050	1.0	47831.132	2.0
540.0703	22.00	-3.65	28952.100	4.0	47463.060	4.0
540.0735	16.01	-.14	133399.820	1.5	151910.670	1.5
540.0773	24.00	-3.78	31009.000	3.0	49519.720	3.0
540.0826	28.01	-4.46	115870.280	2.5	134380.820	3.5
540.0905	25.00	-4.52	45013.550	2.5	63523.820	2.5
540.0950	92.01	-2.16	5323.396	0.0	23838.657	0.0
540.1013	28.01	-1.14	101740.270	3.5	120250.170	3.5
540.1100	17.01	-2.35	140259.000	2.0	158768.600	2.0
540.1202	18.01	-3.47	185624.730	3.5	204133.980	2.5
540.1264	26.00	-2.65	34843.980	6.0	53353.020	6.0
540.1351	24.00	-3.97	24056.110	5.0	42564.850	4.0
540.1372	22.00	-2.81	6598.749	2.0	25107.417	2.0
540.1390	44.00	-1.40	13631.121	0.0	32144.874	0.0
540.1445	28.01	-.63	100389.520	2.5	118897.940	2.5
540.1498	28.00	-4.52	40484.282	2.0	58992.520	2.0
540.1502	26.00	-3.11	33095.922	4.0	51604.146	3.0
540.1541	12.01	-1.88	93799.700	3.5	112307.790	3.5
540.1541	12.01	-.34	93799.700	3.5	112307.790	4.5
540.1541	12.01	-.45	93799.700	2.5	112307.790	3.5
540.1547	16.01	-4.99	140318.800	3.5	158826.870	2.5
540.1681	24.00	-3.48	37233.500	5.0	55741.110	6.0
540.1713	30.02	-1.52	218540.300	2.0	237047.800	2.0
540.1768	18.01	-2.62	186470.280	1.5	204977.590	2.5
540.1768	17.00	-1.86	82918.893	2.5	101426.204	2.5
540.1824	23.00	-2.91	21646.390	3.5	40153.510	2.5
540.1912	23.00	.04	19023.470	4.5	37530.290	5.5
540.1979	9.02	-4.83	376879.070	3.5	395385.660	2.5
540.1990	27.00	-.29	34196.210	1.5	52702.760	1.5
540.2034	26.02	-.05	200656.020	6.0	219162.420	6.0
540.2043	25.02	.19	176464.780	3.5	194971.150	2.5
540.2080	9.00	-2.65	118936.797	1.5	137443.040	2.5
540.2095	7.00	-3.87	97805.810	1.5	116312.000	.5
540.2095	7.00	-3.77	97805.810	1.5	116312.000	1.5
540.2122	25.00	-4.79	43524.080	3.5	62030.180	4.5
540.2171	18.01	-2.84	183914.560	.5	202420.490	.5
540.2180	28.01	-2.12	115108.090	2.5	133613.990	1.5
540.2218	27.00	-3.32	27497.060	2.5	46002.830	2.5
540.2484	28.01	-.84	116833.150	4.5	135338.010	5.5
540.2510	73.00	-2.74	0.000	0.0	18509.915	0.0
540.2570	71.00	-2.34	0.000	0.0	18509.709	0.0
540.2580	25.00	-2.79	23549.200	2.5	42053.730	2.5
540.2606	18.01	-.83	190511.190	2.5	209015.630	3.5
540.2615	22.00	-4.20	27740.190	2.0	46244.600	2.0
540.2697	22.00	-6.35	6598.749	2.0	25102.680	2.0
540.2703	25.02	-4.93	176390.670	2.5	194894.780	1.5
540.2720	21.00	-3.45	0.000	1.5	18504.050	.5
540.2770	63.00	.36	13147.176	0.0	31656.200	0.0
540.2780	39.01	-.89	14760.326	0.0	33269.316	0.0
540.2893	28.01	-3.74	118774.760	.5	137278.220	1.5
540.3001	23.00	-4.64	15664.750	1.5	34167.840	2.5
540.3012	24.01	-4.05	69498.270	4.5	88001.320	5.5
540.3383	28.01	-4.63	115565.980	2.5	134067.760	1.5
540.3407	23.03	-.47	236322.400	2.0	254824.100	1.0
540.3430	76.00	.28	36134.569	0.0	54641.332	0.0
540.3540	73.00	-2.09	15002.299	0.0	33508.686	0.0
540.3640	29.01	-1.97	120092.200	2.0	138593.100	1.0
540.3700	62.00	-.77	1451.835	0.0	19957.674	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
540.3704	14.00	-2.62	45293.629	2.0	63794.310	2.0
540.3798	28.00	-3.34	44314.980	4.0	62815.340	5.0
540.3824	26.00	-1.10	32873.623	4.0	51373.894	5.0
540.3935	14.00	-3.10	45293.629	2.0	63793.520	1.0
540.4044	22.00	-.70	18825.890	1.0	37325.407	2.0
540.4050	21.01	-1.61	39114.440	1.0	57613.940	2.0
540.4099	26.00	-.30	34782.406	5.0	53281.735	5.0
540.4113	23.00	-3.40	19145.130	5.5	37644.410	4.5
540.4133	26.00	.02	35767.546	4.0	54266.760	5.0
540.4140	7.00	-4.25	97805.810	1.5	116305.000	.5
540.4140	7.00	-3.34	97805.810	1.5	116305.000	1.5
540.4222	18.01	-1.53	190196.160	.5	208695.070	1.5
540.4470	72.00	-1.21	19680.435	0.0	38183.637	0.0
540.4604	28.01	-3.69	113623.100	.5	132120.700	.5
540.4665	14.00	-.53	45276.188	1.0	63773.560	2.0
540.4730	45.00	.20	29278.680	0.0	47780.992	0.0
540.4960	73.00	-1.29	17099.394	0.0	35600.919	0.0
540.4961	28.01	-4.21	116468.400	1.5	134964.780	1.5
540.4984	26.01	-7.99	20516.980	2.5	39013.280	1.5
540.5028	24.00	-1.21	27223.050	2.0	45719.200	1.0
540.5078	24.01	-4.79	70427.220	3.5	88923.200	2.5
540.5095	24.00	-2.90	38537.680	5.0	57033.600	4.0
540.5109	9.01	-4.46	264451.100	2.0	282946.970	2.0
540.5109	9.01	-4.08	264451.100	3.0	282946.970	2.0
540.5130	40.00	-2.27	5000.766	0.0	23501.709	0.0
540.5150	10.01	-.25	302935.330	5.5	321431.060	6.5
540.5150	10.01	-.32	302935.310	4.5	321431.040	5.5
540.5156	10.01	-2.38	302935.330	5.5	321431.040	5.5
540.5230	62.00	-.77	241.973	0.0	18742.573	0.0
540.5311	27.00	-6.18	7442.410	3.5	25937.590	4.5
540.5330	63.00	-.22	16534.792	0.0	35035.050	0.0
540.5332	26.00	-1.73	35379.189	5.0	53874.300	5.0
540.5399	24.01	-4.99	70679.220	4.5	89174.100	3.5
540.5501	28.01	-.88	100309.290	5.5	118803.820	6.5
540.5624	23.00	-4.80	2112.320	.5	20606.430	.5
540.5645	25.02	-1.02	174247.630	.5	192741.670	.5
540.5659	28.01	-3.37	115120.000	2.5	133613.990	1.5
540.5741	23.00	-2.49	15571.900	2.5	34065.610	2.5
540.5778	26.00	-1.92	7985.783	2.0	26479.366	1.0
540.5790	42.00	-.38	27181.584	0.0	45680.268	0.0
540.5800	73.00	-1.81	17260.709	0.0	35759.359	0.0
540.5811	26.01	-2.77	66377.370	3.5	84870.840	2.5
540.5954	28.01	-3.11	120002.860	3.5	138495.640	4.5
540.6000	92.01	-1.97	8307.725	0.0	26805.690	0.0
540.6004	25.00	-2.42	23296.670	3.5	41789.480	4.5
540.6022	10.01	-3.31	302935.310	4.5	321428.060	3.5
540.6148	22.00	-.48	28788.372	4.0	47280.690	5.0
540.6253	28.01	-3.36	103653.030	3.5	122144.990	2.5
540.6267	22.00	-3.42	28702.768	3.0	47194.680	4.0
540.6335	26.00	-1.85	32873.623	4.0	51365.300	3.0
540.6390	42.00	-1.00	22100.161	0.0	40596.792	0.0
540.6419	24.00	-2.43	31028.330	2.0	49519.720	3.0
540.6566	9.00	-3.73	117622.923	2.5	136113.810	1.5
540.6598	9.01	-4.43	264456.190	2.0	282946.970	2.0
540.6598	9.01	-3.52	264456.190	3.0	282946.970	2.0
540.6726	27.00	-3.86	15184.040	2.5	33674.380	2.5
540.6731	22.00	-1.84	20209.444	2.0	38699.767	2.0
540.6756	26.00	-1.41	35257.309	4.0	53747.547	3.0
540.6928	25.01	-3.77	62564.700	1.0	81054.350	2.0
540.7162	7.00	-3.91	97770.150	.5	116259.000	.5
540.7162	7.00	-3.82	97770.150	.5	116259.000	1.5
540.7191	9.02	-3.65	441315.800	.5	459804.550	1.5
540.7197	24.00	-3.05	31049.330	6.0	49538.060	5.0
540.7206	24.00	-4.21	28637.000	3.0	47125.700	3.0
540.7235	26.00	-4.50	29732.721	1.0	48221.323	1.0
540.7349	18.01	-.86	189654.780	2.5	208142.990	3.5
540.7386	26.00	-3.13	28604.610	2.0	47092.693	3.0
540.7419	25.00	-2.00	17282.000	3.5	35769.970	3.5
540.7431	10.01	-2.99	302935.310	4.5	321423.240	3.5
540.7434	10.01	-1.55	302935.310	4.5	321423.230	4.5
540.7469	27.01	-7.68	27484.300	3.0	45972.100	3.0
540.7504	28.01	-3.22	103653.030	3.5	122140.710	4.5
540.7516	27.00	-.64	33674.380	2.5	52162.020	3.5
540.7536	28.01	-.97	100389.520	2.5	118877.090	1.5
540.7537	10.01	-2.90	302935.310	4.5	321422.880	5.5
540.7543	10.01	-1.29	302935.330	5.5	321422.680	5.5
540.7545	10.01	-1.94	302935.310	4.5	321422.850	4.5
540.7551	10.01	-2.59	302935.330	5.5	321422.850	4.5
540.7560	23.00	-3.80	20812.990	1.5	39300.480	2.5
540.7601	24.01	-2.59	30864.610	2.5	49351.960	2.5
540.7609	29.01	-2.51	110365.980	2.0	128853.300	2.0
540.7620	40.00	-1.63	5807.341	0.0	24299.765	0.0
540.7683	28.01	-4.82	115565.980	2.5	134053.050	2.5
540.7850	23.03	-1.93	265879.200	1.0	284365.700	1.0
540.7850	23.03	-3.02	265879.200	2.0	284365.700	1.0
540.7961	27.00	-4.69	35450.560	3.5	53936.680	2.5
540.8124	27.00	-2.61	18389.570	1.5	36875.130	1.5
540.8197	29.01	-2.16	110084.290	1.0	128569.600	2.0
540.8247	26.02	-1.23	200437.940	2.0	218923.080	3.0
540.8271	28.01	-2.82	102742.740	1.5	121227.800	2.5
540.8408	28.01	-2.66	100389.520	2.5	118874.110	3.5
540.8446	22.00	-4.17	6742.757	4.0	25227.217	3.0
540.8756	23.00	-3.66	26437.680	1.5	44921.080	2.5
540.8832	25.02	-.45	177269.340	1.5	195752.480	2.5
540.8847	26.01	-3.11	48039.230	2.5	66522.320	2.5
540.8891	25.01	-3.41	49427.320	4.0	67910.260	4.0
540.8914	22.00	-3.55	0.000	2.0	18482.860	1.0
540.8958	24.00	-4.10	31055.350	5.0	49538.060	5.0
540.9026	26.01	-4.71	60956.820	3.5	79439.300	3.5
540.9114	26.00	-1.61	35257.309	4.0	53739.488	5.0
540.9122	25.01	-3.20	62572.200	2.0	81054.350	2.0
540.9220	58.01	-.34	8791.670	0.0	27278.624	0.0
540.9400	18.01	-3.53	183985.940	1.5	202467.140	1.5
540.9543	17.00	-1.65	83364.927	.5	101845.640	1.5
540.9610	22.00	-.90	15220.390	5.0	33700.674	4.0
540.9713	15.01	-.37	86744.700	1.0	105224.830	0.0
540.9766	14.00	-1.52	45293.629	2.0	63773.580	2.0
540.9772	24.00	-.93	8307.570	4.0	26787.500	3.0
540.9851	14.00	-.69	45293.629	2.0	63773.290	3.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
540.9874	26.00	-4.15	37046.000	4.0	55525.580	5.0
540.9921	25.01	-3.58	62572.200	2.0	81051.620	3.0
540.9927	23.00	-4.51	21646.390	3.5	40125.790	3.5
540.9974	28.00	-3.30	44336.100	4.0	62815.340	5.0
541.0033	23.00	-3.75	15688.800	2.5	34167.840	2.5
541.0033	25.00	-3.92	23719.520	1.5	42198.560	.5
541.0109	26.00	-3.70	40231.312	2.0	58710.090	3.0
541.0124	9.00	-1.34	117622.923	2.5	136101.650	3.5
541.0240	92.00	-1.81	4194.191	0.0	22677.659	0.0
541.0396	13.01	-.83	124792.000	2.0	143269.800	3.0
541.0465	18.00	-1.78	106237.597	2.0	124715.160	3.0
541.0489	26.00	-4.53	29356.780	2.0	47834.260	3.0
541.0492	23.00	-4.17	20789.130	2.5	39266.600	1.5
541.0492	24.01	-3.67	31168.780	3.5	49646.250	3.5
541.0550	73.00	-2.61	9598.245	0.0	28080.654	0.0
541.0760	90.00	-1.77	6291.287	0.0	24772.979	0.0
541.0855	23.01	-3.59	32299.240	1.0	50775.470	2.0
541.0879	26.02	-.59	200384.280	3.0	218860.430	2.0
541.0894	26.00	-.08	36079.353	3.0	54555.450	4.0
541.1066	28.01	-3.74	115592.250	1.5	134067.760	1.5
541.1084	10.01	-.63	303599.930	3.5	322075.380	4.5
541.1096	10.01	-4.09	303599.930	3.5	322075.340	3.5
541.1200	64.00	-.76	10808.108	0.0	29288.297	0.0
541.1204	24.00	-4.75	44186.920	2.0	62661.960	3.0
541.1214	28.00	-.52	32982.280	1.0	51457.285	0.0
541.1240	41.00	-1.67	10969.423	0.0	29449.476	0.0
541.1263	10.01	-.62	303600.500	2.5	322075.340	3.5
541.1390	62.00	-.78	3064.986	0.0	21544.526	0.0
541.1405	26.00	-3.51	29356.780	2.0	47831.132	2.0
541.1439	26.00	-4.67	33095.922	4.0	51570.160	3.0
541.1470	27.00	-4.09	27497.060	2.5	45971.190	3.5
541.1518	2.01	.32	411477.918	0.0	429957.021	0.0
541.1560	59.01	-2.06	4032.876	0.0	22511.836	0.0
541.1644	18.01	-1.95	183675.570	3.5	202149.110	2.5
541.1696	24.01	-3.58	70852.240	3.5	89325.600	4.5
541.1817	10.01	-3.26	302961.070	1.5	321434.020	1.5
541.1840	23.00	-1.78	21646.390	3.5	40119.260	2.5
541.1860	63.00	-.14	17260.709	0.0	35738.644	0.0
541.1930	60.00	-1.26	2339.068	0.0	20816.764	0.0
541.1959	14.00	-4.16	45321.848	3.0	63794.310	2.0
541.1971	23.00	-4.52	19026.340	2.5	37498.760	2.5
541.2080	23.00	-4.02	8715.720	3.5	27187.770	2.5
541.2140	76.00	-1.28	20890.298	0.0	39367.278	0.0
541.2253	24.01	-4.44	70584.640	2.5	89056.100	2.5
541.2317	23.01	-3.33	34228.790	3.0	52700.030	2.0
541.2326	25.02	-.55	177477.230	2.5	195948.440	3.5
541.2411	24.00	-4.44	35934.020	6.0	54404.940	7.0
541.2437	18.01	-1.21	190942.650	.5	209413.480	1.5
541.2446	28.01	-4.64	116312.340	1.5	134783.140	2.5
541.2478	28.01	-3.42	99844.130	3.5	118314.820	2.5
541.2516	24.00	-3.24	27703.840	4.0	46174.400	3.0
541.2557	26.00	-3.55	36975.640	3.0	55446.060	4.0
541.2724	7.00	-2.56	97770.150	.5	116240.000	1.5
541.2782	26.00	-2.36	35767.546	4.0	54237.200	4.0
541.2856	12.02	-1.54	545820.400	2.0	564289.800	1.0
541.2880	9.00	-1.93	117622.923	2.5	136092.240	2.5
541.3094	10.01	-3.79	303599.930	3.5	322068.520	4.5
541.3099	14.00	-.71	45293.629	2.0	63762.200	3.0
541.3200	64.00	-.72	7017.204	0.0	25490.565	0.0
541.3255	24.00	-3.79	31009.000	3.0	49477.040	2.0
541.3305	28.01	-4.89	115827.120	3.5	134294.990	2.5
541.3374	18.00	-3.29	106087.305	1.0	124554.939	1.0
541.3378	23.00	-4.92	2220.130	2.5	20687.750	1.5
541.3378	20.02	-1.22	346896.260	2.0	365363.880	1.0
541.3390	64.00	-1.06	6694.574	0.0	25167.287	0.0
541.3431	24.00	-4.21	27500.370	3.0	45967.810	2.0
541.3448	24.00	-4.41	31355.210	2.0	49822.590	2.0
541.3480	73.00	-2.90	5968.656	0.0	24441.062	0.0
541.3551	28.01	-3.09	94705.930	3.5	113172.960	4.5
541.3574	10.01	-2.98	303599.930	3.5	322066.880	2.5
541.3583	10.01	-1.39	303599.930	3.5	322066.850	3.5
541.3584	9.00	-2.87	117622.923	2.5	136089.840	1.5
541.3604	25.01	-3.30	62587.500	3.0	81054.350	2.0
541.3613	56.01	-2.66	48258.590	0.0	66730.542	0.0
541.3689	25.00	-.62	31124.950	.5	49591.510	1.5
541.3703	27.00	-.54	32733.070	3.5	51199.580	3.5
541.3730	27.00	-1.36	29735.180	3.5	48201.600	3.5
541.3742	10.01	-1.69	303600.500	2.5	322066.880	2.5
541.3750	10.01	-1.03	303600.500	2.5	322066.850	3.5
541.3864	14.00	-3.29	61198.036	0.0	79664.000	1.0
541.3961	28.01	-1.62	119656.250	3.5	138121.880	4.5
541.3988	17.00	-4.30	83130.900	1.5	101596.440	.5
541.4076	26.01	-3.92	25981.650	3.5	44446.890	3.5
541.4234	17.01	-1.96	140259.000	2.0	158723.700	1.0
541.4404	25.01	-2.59	62587.500	3.0	81051.620	3.0
541.4668	28.01	-2.13	101740.270	3.5	120203.490	2.5
541.4730	25.00	-3.13	45060.810	3.5	63523.820	2.5
541.4909	26.00	-4.89	29371.860	3.0	47834.260	3.0
541.4938	24.01	-2.08	55023.300	2.5	73485.600	3.5
541.4982	26.01	-3.05	67000.630	2.5	85462.780	3.5
541.4982	28.01	-4.41	97799.660	1.5	116261.810	.5
541.5052	26.02	-4.61	179876.710	4.0	198338.620	4.0
541.5094	17.00	-1.95	83130.900	1.5	101592.670	.5
541.5175	26.00	.15	35379.189	5.0	53840.680	6.0
541.5184	14.00	-4.44	45321.848	3.0	63783.310	4.0
541.5187	24.00	-3.82	38911.330	3.0	57372.780	4.0
541.5191	9.01	-4.45	264451.100	1.0	282912.540	1.0
541.5191	9.01	-4.14	264451.100	2.0	282912.540	1.0
541.5246	23.00	-4.68	23608.800	1.5	42070.050	2.5
541.5264	23.00	.11	19145.130	5.5	37606.320	6.5
541.5293	26.01	-3.44	54063.530	.5	72524.620	1.5
541.5325	24.00	-3.66	27597.220	3.0	46058.200	4.0
541.5434	23.00	-2.68	21603.170	4.5	40063.780	5.5
541.5460	90.01	-1.14	14195.724	0.0	32661.376	0.0
541.5510	26.02	-2.54	179876.710	4.0	198337.060	3.0
541.5610	26.02	-2.71	114325.350	5.0	132785.360	4.0
541.5630	22.00	-3.20	17540.205	3.0	36000.144	4.0
541.5680	23.00	-3.83	20789.130	2.5	39248.900	1.5
541.5680	57.00	-1.18	7420.492	0.0	25885.394	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
541.5690	64.00	-.67	7420.492	0.0	25885.360	0.0
541.5701	22.00	-2.12	27025.652	4.0	45485.350	5.0
541.5704	24.00	-3.86	35572.940	2.0	54032.630	2.0
541.5724	10.01	-2.50	302961.070	1.5	321420.690	2.5
541.5806	10.01	-3.13	302961.070	1.5	321420.410	1.5
541.5826	26.00	-5.00	29371.860	3.0	47831.132	2.0
541.5830	28.01	-4.28	115827.120	3.5	134286.380	4.5
541.5870	18.01	-4.98	186470.280	1.5	204929.400	.5
541.6073	25.02	-4.68	176390.670	2.5	194849.100	1.5
541.6120	21.00	-.74	16021.780	1.5	34480.050	2.5
541.6123	24.00	-3.99	31364.330	3.0	49822.590	2.0
541.6158	23.00	-2.57	15571.900	2.5	34030.040	1.5
541.6300	41.00	-1.78	11211.395	0.0	29674.183	0.0
541.6331	29.01	-3.83	120684.550	3.0	139142.100	2.0
541.6340	76.00	.78	30085.255	0.0	48547.907	0.0
541.6346	12.02	-1.74	564289.800	1.0	582747.300	2.0
541.6346	12.02	-1.74	564289.800	1.0	582747.300	2.0
541.6380	60.01	-1.51	6855.889	0.0	25318.405	0.0
541.6396	21.00	-.40	16022.720	2.5	34480.050	2.5
541.6419	24.00	-4.27	31355.210	2.0	49812.460	3.0
541.6522	28.01	-3.17	115785.060	1.5	134241.960	.5
541.6554	22.00	-1.61	25797.600	3.0	44254.390	3.0
541.6634	28.01	-2.65	118442.810	1.5	136899.330	1.5
541.6683	9.01	-3.89	264456.190	2.0	282912.540	1.0
541.6690	76.00	-2.82	4113.534	0.0	22574.993	0.0
541.6719	18.01	-2.13	183797.360	2.5	202253.590	1.5
541.6937	22.00	-4.95	25388.334	4.0	43843.820	3.0
541.6987	9.00	-2.26	117622.923	2.5	136076.240	2.5
541.7000	8.04	-.32	689700.000	0.0	708160.402	0.0
541.7017	26.00	-1.69	35611.608	3.0	54066.821	2.0
541.7030	39.00	-1.14	15970.189	0.0	34430.489	0.0
541.7091	26.00	-3.27	35611.608	3.0	54066.570	4.0
541.7147	28.01	-2.55	117872.780	2.5	136327.550	1.5
541.7249	22.00	-3.43	11531.760	2.0	29986.165	3.0
541.7249	18.00	-3.38	106237.597	2.0	124692.020	2.0
541.7274	22.00	-1.06	25926.820	4.0	44381.160	4.0
541.7380	42.00	-.91	22100.161	0.0	40559.269	0.0
541.7488	23.00	-4.76	20812.990	1.5	39266.600	1.5
541.7490	90.00	-2.05	3629.588	0.0	22088.321	0.0
541.7510	76.00	.33	32504.981	0.0	50963.646	0.0
541.7557	22.00	-2.32	27614.667	4.0	46068.040	4.0
541.7592	22.00	-4.78	24694.895	4.0	43148.150	3.0
541.7597	17.00	-2.90	84648.100	2.5	103101.340	2.5
541.7599	23.00	-7.38	2153.200	1.5	20606.430	.5
541.7611	7.00	-4.22	97805.810	1.5	116259.000	.5
541.7611	7.00	-4.02	97805.810	1.5	116259.000	1.5
541.7611	7.00	-2.16	97805.810	1.5	116259.000	2.5
541.7679	24.00	-3.14	37233.500	5.0	55686.460	5.0
541.7823	28.01	-4.29	111783.790	3.5	130236.260	2.5
541.7840	58.01	-1.62	8872.327	0.0	27329.667	0.0
541.8008	23.00	-3.52	26604.770	3.5	45056.610	3.5
541.8039	14.00	-2.92	45321.848	3.0	63773.580	2.0
541.8075	23.00	-1.26	19023.470	4.5	37475.080	3.5
541.8125	26.01	-4.10	66411.700	6.5	84863.140	5.5
541.8125	14.00	-1.45	45321.848	3.0	63773.290	3.0
541.8196	28.01	-1.76	100475.820	3.5	118927.020	4.5
541.8287	28.01	-2.48	120044.950	4.5	138495.840	4.5
541.8469	23.00	-2.24	14910.040	3.5	33360.310	3.5
541.8536	28.01	-3.35	99844.130	3.5	118294.170	3.5
541.8574	24.00	-4.49	38911.330	3.0	57361.240	3.0
541.8601	26.01	-4.62	60989.480	4.5	79439.300	3.5
541.8756	22.01	-2.07	12758.150	2.5	31207.440	2.5
541.8860	44.00	-1.97	8952.985	0.0	27407.051	0.0
541.8918	23.00	-3.88	19026.340	2.5	37475.080	3.5
541.8927	24.00	-2.73	31028.330	2.0	49477.040	1.0
541.8927	24.00	-2.64	31028.330	2.0	49477.040	2.0
541.9097	24.00	-3.61	31364.330	3.0	49812.460	3.0
541.9130	73.00	-2.20	5968.656	0.0	24421.803	0.0
541.9148	9.00	-2.04	117622.923	2.5	136070.880	3.5
541.9160	26.00	-2.86	33765.291	2.0	52213.207	3.0
541.9214	22.00	-2.86	18911.399	2.0	37359.130	2.0
541.9268	10.01	-2.70	302961.070	1.5	321408.620	2.5
541.9291	23.00	-3.85	26397.360	.5	44844.830	1.5
541.9318	28.01	-1.89	100475.820	3.5	118923.200	3.5
541.9365	23.00	-1.81	15571.900	2.5	34019.120	1.5
541.9397	24.01	-3.97	29952.080	.5	48399.190	1.5
541.9400	74.00	-1.35	22342.133	0.0	40794.360	0.0
541.9529	28.01	-3.50	115081.360	4.5	133528.020	3.5
541.9601	22.00	-4.96	6661.003	3.0	25107.417	2.0
541.9668	22.00	-3.24	29661.232	1.0	48107.420	2.0
541.9880	64.01	-1.58	10485.478	0.0	28936.071	0.0
541.9896	26.02	-3.94	114339.950	4.0	132785.360	4.0
541.9966	9.01	-3.97	264451.100	1.0	282896.270	0.0
541.9979	25.01	-3.97	49465.130	3.0	67910.260	4.0
541.9999	26.02	-2.28	179893.560	5.0	196338.620	4.0
542.0034	24.00	-3.33	31009.000	3.0	49453.940	4.0
542.0067	25.02	-1.13	173920.690	1.5	192365.520	1.5
542.0080	22.00	-2.78	20209.444	2.0	38654.230	1.0
542.0093	10.01	-2.35	302989.820	1.5	321434.560	2.5
542.0140	22.00	-4.10	7255.369	2.0	25699.950	2.0
542.0234	24.00	-3.61	44246.700	4.0	62690.960	5.0
542.0355	25.00	-1.70	17282.000	3.5	35725.850	2.5
542.0416	28.01	-1.69	115000.250	3.5	133443.890	2.5
542.0422	23.00	-3.27	15724.220	3.5	34167.840	2.5
542.0437	25.02	-.48	174436.590	2.5	192860.160	3.5
542.0599	26.02	-3.22	179893.560	5.0	198336.580	5.0
542.0704	28.01	-3.94	115085.360	3.5	133528.020	3.5
542.0740	24.01	-4.60	69506.160	3.5	87948.700	4.5
542.0813	24.00	-3.19	37244.170	4.0	55686.460	5.0
542.0907	24.01	-2.71	30307.600	1.5	48749.570	.5
542.0935	22.00	-5.74	6661.003	3.0	25102.880	2.0
542.1022	25.01	-3.36	53805.800	4.0	72247.380	3.0
542.1069	56.01	-2.31	46154.890	0.0	64601.436	0.0
542.1070	63.00	-.16	16534.792	0.0	34981.335	0.0
542.1171	14.00	-2.25	45321.848	3.0	63762.920	4.0
542.1190	64.00	-1.68	1693.808	0.0	20139.943	0.0
542.1222	28.01	-3.52	99132.780	5.5	117573.680	4.5
542.1251	24.00	-4.32	36552.130	3.0	54992.930	2.0
542.1342	18.00	-1.72	105462.804	3.0	123903.295	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
542.1383	14.00	-1.48	45321.848	3.0	63762.200	3.0
542.1423	22.00	-3.18	29768.655	2.0	48208.870	3.0
542.1428	26.02	-4.48	179893.560	5.0	198333.760	6.0
542.1489	23.00	-5.04	14548.830	2.5	32988.820	3.5
542.1532	9.00	-2.25	117164.006	2.5	135603.850	2.5
542.1560	60.01	-1.58	5968.656	0.0	24413.532	0.0
542.1570	62.00	-1.01	2258.411	0.0	20703.253	0.0
542.1639	23.00	-1.13	20687.750	1.5	39127.230	1.5
542.1650	18.00	-3.26	106087.305	1.0	124526.750	0.0
542.1710	23.00	-4.01	15688.800	2.5	34128.040	3.5
542.1751	26.00	-4.09	26224.961	3.0	44664.061	2.0
542.1754	28.01	-3.83	100389.520	2.5	118828.610	2.5
542.1835	26.00	-2.59	36686.159	4.0	55124.974	3.0
542.1840	90.01	-2.61	6936.547	0.0	25380.470	0.0
542.1880	25.00	-2.88	41031.480	4.5	59470.140	3.5
542.1900	71.00	-2.67	1935.780	0.0	20379.499	0.0
542.1922	28.01	-1.55	100475.820	3.5	118914.340	4.5
542.1945	24.00	-3.24	31028.330	2.0	49466.770	2.0
542.1954	27.00	-1.01	34196.210	1.5	52634.620	.5
542.1983	25.01	-2.69	49427.320	4.0	67865.630	4.0
542.2001	10.01	-.74	302989.820	1.5	321428.070	2.5
542.2147	26.00	-3.39	34843.980	6.0	53281.735	5.0
542.2304	21.00	-1.26	18711.030	.5	37148.250	1.5
542.2342	22.00	-.61	28702.768	3.0	47139.660	4.0
542.2348	27.00	-1.31	32733.070	3.5	51170.140	4.5
542.2363	21.01	-2.07	39114.440	1.0	57551.460	1.0
542.2416	26.02	-.33	200656.020	6.0	219092.860	5.0
542.2440	41.00	-1.35	10808.108	0.0	29249.990	0.0
542.2466	16.01	-4.19	140229.780	2.5	158666.450	1.5
542.2480	22.01	-3.81	12676.990	4.5	31113.610	3.5
542.2545	23.00	-4.04	20830.200	.5	39266.600	1.5
542.2574	28.02	-4.00	98238.200	4.0	116674.500	4.0
542.2689	23.00	-3.40	20812.990	1.5	39248.900	1.5
542.2716	26.01	-3.83	66612.740	1.5	85048.560	1.5
542.2722	13.01	-3.00	121480.900	2.0	139916.700	1.0
542.2810	13.01	-3.48	121481.200	1.0	139916.700	1.0
542.2890	74.00	-1.57	22342.133	0.0	40782.485	0.0
542.2972	29.01	-2.66	120684.550	3.0	139119.500	3.0
542.2972	28.01	-4.76	115827.120	3.5	134262.070	3.5
542.3090	18.01	-2.57	183985.940	1.5	202420.490	.5
542.3104	24.00	-2.88	31377.960	4.0	49812.460	3.0
542.3139	24.00	-1.97	36558.550	2.0	54992.930	2.0
542.3195	7.00	-2.75	97805.810	1.5	116240.000	1.5
542.3195	7.00	-2.44	97805.810	1.5	116240.000	2.5
542.3251	17.01	-.18	110295.800	4.0	128729.800	3.0
542.3416	26.02	-3.78	114351.920	3.0	132785.360	4.0
542.3604	17.01	-.88	110297.000	3.0	128729.800	3.0
542.3651	28.01	-3.69	100010.170	.5	118442.810	1.5
542.3713	24.00	-4.55	35884.400	5.0	54316.830	6.0
542.3721	11.02	-4.41	444825.000	2.5	463257.400	2.5
542.3731	26.00	-3.04	29798.960	4.0	48231.330	5.0
542.3834	26.02	-1.60	179904.560	6.0	198336.580	5.0
542.3930	74.00	-1.90	19680.435	0.0	38117.251	0.0
542.4020	72.00	-.71	22342.133	0.0	40778.643	0.0
542.4069	26.00	.26	34843.980	6.0	53275.200	7.0
542.4070	45.00	.60	29278.680	0.0	47715.020	0.0
542.4087	23.00	-.48	19026.340	2.5	37457.500	1.5
542.4101	15.01	-1.57	106001.990	1.0	124433.100	1.0
542.4126	26.00	-2.26	32873.623	4.0	51304.650	4.0
542.4181	28.01	-4.78	101366.140	2.5	119796.980	2.5
542.4210	28.01	-2.31	103025.580	2.5	121456.320	1.5
542.4284	23.00	-1.48	15264.830	5.5	33695.320	5.5
542.4340	17.01	-1.69	110299.500	2.0	128729.800	3.0
542.4370	39.00	-.64	15405.586	0.0	33840.907	0.0
542.4405	25.00	-1.12	44993.920	3.5	63424.000	3.5
542.4499	23.02	-2.25	141714.500	2.5	160144.260	1.5
542.4531	28.00	-1.02	33610.916	2.0	52040.568	2.0
542.4550	56.00	0.00	12179.286	0.0	30613.995	0.0
542.4572	28.01	-2.36	52205.950	3.5	70635.460	2.5
542.4641	28.00	-2.68	15734.018	1.0	34163.294	2.0
542.4664	26.02	-1.64	179904.560	6.0	198333.760	6.0
542.4664	26.02	-1.97	179904.560	7.0	198333.760	6.0
542.4708	25.02	-1.68	176683.760	2.5	195112.810	3.5
542.4720	45.00	-2.03	11856.655	0.0	30290.786	0.0
542.4743	28.01	-4.86	115827.120	3.5	134256.050	2.5
542.4770	28.01	-1.56	116833.150	4.5	135261.990	4.5
542.4802	24.00	-3.40	39158.630	4.0	57587.360	4.0
542.4805	23.01	-3.29	34228.790	3.0	52657.510	4.0
542.4961	24.00	-3.31	31048.850	1.0	49477.040	1.0
542.4961	24.00	-2.26	31048.850	1.0	49477.040	2.0
542.5037	18.01	-1.37	191169.520	1.5	209597.450	1.5
542.5126	28.01	-2.88	113407.310	2.5	131834.940	2.5
542.5149	6.00	-2.83	70743.950	1.0	89171.500	0.0
542.5255	26.01	-3.54	25805.320	4.5	44232.510	4.5
542.5382	24.01	-4.77	31219.490	4.5	49646.250	3.5
542.539.	28.01	-4.99	98467.250	3.5	116893.980	2.5
542.5450	45.00	.10	29278.680	0.0	47710.331	0.0
542.5509	24.00	-4.33	35501.260	3.0	53927.590	4.0
542.5538	28.01	-3.37	113408.710	1.5	131834.940	2.5
542.5588	21.00	-2.18	16141.040	2.5	34567.100	3.5
542.5591	6.00	-2.76	70743.950	1.0	89170.000	1.0
542.5623	27.00	-.33	32841.990	4.5	51267.930	4.5
542.5680	90.01	-1.80	9517.587	0.0	27948.456	0.0
542.5685	28.01	-4.38	115827.120	3.5	134252.850	3.5
542.5886	15.01	.19	87125.400	2.0	105550.450	2.0
542.6089	23.01	-2.52	30306.400	3.0	48730.760	4.0
542.6106	24.00	-3.54	44246.700	4.0	62671.000	4.0
542.6162	23.00	-4.20	20812.990	1.5	39237.100	.5
542.6162	28.01	-4.58	115956.710	2.5	134380.820	3.5
542.6180	25.00	-3.10	23719.520	1.5	42143.570	1.5
542.6236	22.00	-2.83	170.132	3.0	18593.990	3.0
542.6519	22.00	-4.16	30039.211	5.0	48462.110	5.0
542.6639	26.02	-.58	200437.940	2.0	218860.430	2.0
542.6645	25.02	-.80	174243.330	3.5	192665.800	4.5
542.6716	27.00	-3.34	36092.440	2.5	54514.670	3.5
542.6734	27.00	-3.33	15774.040	1.5	34196.210	1.5
542.6748	28.01	-2.49	100475.820	3.5	118897.940	2.5
542.6840	24.01	-3.69	33521.230	3.5	51943.040	4.5
542.6890	42.00	-1.84	16615.449	0.0	35042.209	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
542.7140	6.00	-2.75	70743.950	1.0	89164.740	1.0
542.7155	26.02	-2.47	204907.130	1.0	223327.870	2.0
542.7190	27.00	-.24	33674.380	2.5	52095.000	3.5
542.7193	23.00	-2.84	19078.150	3.5	37498.760	2.5
542.7219	22.00	-7.24	11639.804	3.0	30060.328	4.0
542.7226	25.00	-3.51	34463.370	1.5	52883.870	2.5
542.7226	25.00	-4.01	34463.370	1.5	52883.870	1.5
542.7246	26.00	-4.44	26406.490	1.0	44826.920	0.0
542.7279	26.00	-4.32	40404.492	1.0	58824.810	2.0
542.7408	27.00	-1.14	34352.420	1.5	52772.300	2.5
542.7426	28.01	-3.06	100389.520	2.5	118809.340	1.5
542.7453	25.00	-4.34	34463.370	1.5	52883.100	.5
542.7541	23.00	-3.20	26738.310	4.5	45157.740	4.5
542.7550	42.00	-1.29	23551.996	0.0	41976.515	0.0
542.7590	44.00	.55	28391.447	0.0	46815.831	0.0
542.7700	27.00	-2.26	32781.710	2.5	51200.600	1.5
542.7706	28.01	-3.60	99154.810	4.5	117573.680	4.5
542.7765	9.02	-3.23	441385.880	1.5	459804.550	1.5
542.7783	25.01	-3.60	49427.320	4.0	67845.930	5.0
542.7865	25.00	-4.24	45130.160	4.5	63548.490	4.5
542.7874	27.01	-6.93	27902.500	4.0	46320.800	4.0
542.7888	6.00	-2.52	70743.950	1.0	89162.200	2.0
542.7915	23.01	-7.34	19112.930	4.0	37531.090	4.0
542.7986	24.00	-2.56	31048.850	1.0	49466.770	2.0
542.7989	24.00	-3.75	28637.000	3.0	47054.910	4.0
542.8001	27.00	-2.18	32781.710	2.5	51199.580	3.5
542.8036	25.02	.32	176695.060	4.5	195112.810	3.5
542.8304	29.01	-4.99	116326.160	3.0	134743.000	4.0
542.8390	22.00	-2.94	29912.262	3.0	48328.810	4.0
542.8511	25.00	-3.27	45130.160	4.5	63546.300	3.5
542.8525	25.02	-1.16	174464.070	4.5	192880.160	3.5
542.8605	28.01	-2.70	117872.780	2.5	136286.600	2.5
542.8637	16.01	-.21	109560.500	.5	127976.210	1.5
542.8691	26.00	-2.95	33765.291	2.0	52180.820	1.0
542.8729	26.01	-4.66	68000.820	4.5	86416.220	3.5
542.8770	24.00	-3.51	44246.700	4.0	62661.960	3.0
542.8785	56.01	-1.40	48258.590	0.0	66678.918	0.0
542.8788	23.00	-4.04	26505.880	2.5	44921.080	2.5
542.8845	28.00	-2.26	30912.838	1.0	49327.845	2.0
542.9083	25.00	-3.49	31001.150	2.5	49415.350	2.5
542.9106	24.00	-4.46	35618.510	1.0	54032.630	2.0
542.9139	22.00	-.40	18911.399	2.0	37325.407	2.0
542.9274	23.01	-4.88	16533.000	5.0	34946.550	4.0
542.9294	17.00	-3.74	84688.637	.5	103102.120	1.5
542.9395	21.00	-.88	16009.710	.5	34422.850	1.5
542.9395	28.01	-3.86	99559.330	2.5	117972.470	3.5
542.9421	26.00	-2.27	33412.706	3.0	51825.758	3.0
542.9445	24.01	-3.62	55023.300	2.5	73436.270	2.5
542.9478	23.00	-1.01	20828.480	2.5	39241.340	2.5
542.9503	26.00	-1.44	33801.555	2.0	52214.330	1.0
542.9566	26.00	-3.46	28604.610	2.0	47017.170	3.0
542.9688	18.00	-4.19	104102.144	1.0	122514.290	1.0
542.9700	26.00	-1.94	7728.058	3.0	26140.164	3.0
542.9746	18.00	-3.30	106237.597	2.0	124649.549	3.0
542.9812	26.00	-.98	36079.353	3.0	54491.080	3.0
542.9837	24.00	-4.56	44259.360	3.0	62671.000	4.0
542.9860	57.00	-1.03	7178.519	0.0	25595.200	0.0
542.9885	24.00	-3.81	28637.000	3.0	47048.480	3.0
543.0023	23.00	-3.13	14949.300	4.5	33360.310	3.5
543.0156	23.00	-4.45	26122.040	3.5	44532.600	2.5
543.0182	24.00	-4.85	28637.000	3.0	47047.470	2.0
543.0298	27.00	-3.51	33150.680	1.5	51560.760	2.5
543.0466	25.01	-4.49	55371.300	3.0	73780.810	3.0
543.0625	24.00	-3.35	28679.430	1.0	47088.400	1.0
543.0687	25.02	-1.40	174332.910	1.5	192741.670	.5
543.0878	20.02	-.91	340748.720	2.0	359156.830	1.0
543.0920	6.00	-2.41	71364.900	1.0	89772.870	2.0
543.1006	23.01	-5.06	19112.930	4.0	37520.610	3.0
543.1018	22.00	-4.57	27750.124	5.0	46157.760	5.0
543.1020	42.00	-1.47	20809.640	0.0	39222.388	0.0
543.1023	27.00	-1.40	27497.060	2.5	45904.680	1.5
543.1110	90.00	-2.03	6291.287	0.0	24703.729	0.0
543.1168	27.01	-2.40	67939.600	2.0	86346.730	3.0
543.1209	28.01	-2.19	100490.950	1.5	118897.940	2.5
543.1233	25.02	-.65	177185.180	.5	195592.090	1.5
543.1236	23.00	-3.79	20830.200	.5	39237.100	.5
543.1260	41.00	-2.98	1532.493	0.0	19944.427	0.0
543.1295	25.02	-3.75	124754.800	3.5	143161.500	4.5
543.1436	24.00	-2.56	28682.180	2.0	47088.400	1.0
543.1528	37.00	-1.50	12816.545	0.0	31227.570	0.0
543.1530	60.01	-.90	8952.985	0.0	27364.004	0.0
543.1566	26.01	-3.05	67273.860	1.5	85679.640	2.5
543.1625	24.00	-3.63	24200.230	6.0	42605.810	6.0
543.1819	22.00	-4.13	25438.898	2.0	43843.820	3.0
543.1827	37.00	-2.45	12816.545	0.0	31226.557	0.0
543.1870	23.01	-5.59	16340.970	3.0	34745.720	3.0
543.1900	75.00	.25	39441.527	0.0	57851.292	0.0
543.2000	8.04	-.32	689890.000	0.0	708299.426	0.0
543.2050	29.00	-1.00	44522.951	0.0	62932.207	0.0
543.2056	23.00	-3.59	15571.900	2.5	33976.020	1.5
543.2086	23.01	-3.93	18269.490	1.0	36673.510	2.0
543.2112	23.00	-9.91	10892.500	3.5	29296.430	2.5
543.2145	23.00	-2.88	15724.220	3.5	34128.040	3.5
543.2336	22.00	-1.98	19421.576	3.0	37824.748	4.0
543.2345	24.00	-2.17	27597.220	3.0	46000.360	3.0
543.2360	60.01	-1.56	8952.985	0.0	27361.191	0.0
543.2369	21.00	-4.52	168.340	2.5	18571.400	2.5
543.2469	22.00	-1.72	20795.599	5.0	39198.320	6.0
543.2546	25.00	-3.72	0.000	2.5	18402.460	2.5
543.2614	25.01	-3.87	49882.150	4.0	68284.380	3.0
543.2740	70.01	-.62	47426.622	0.0	65833.540	0.0
543.2744	16.01	.20	109831.280	1.5	128233.070	2.5
543.2746	22.00	-2.75	30060.328	4.0	48462.110	5.0
543.2938	26.00	-.92	35856.386	2.0	54257.520	2.0
543.2939	28.01	-3.72	118877.090	1.5	137278.220	1.5
543.2939	18.01	-2.18	191012.350	1.5	209413.480	1.5
543.2956	21.00	-.73	16021.780	1.5	34422.850	1.5
543.2971	26.01	-4.06	26352.800	4.5	44753.820	3.5
543.3018	23.00	-4.01	15664.750	1.5	34065.610	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
543.3125	25.01	-4.08	49465.130	3.0	67865.630	4.0
543.3234	21.00	-.65	16022.720	2.5	34422.850	1.5
543.3255	26.00	-4.17	37046.000	4.0	55446.060	4.0
543.3432	22.00	-4.27	28882.440	3.0	47281.900	3.0
543.3453	25.00	.77	43314.230	5.5	61713.620	5.5
543.3471	22.00	-3.27	28638.832	2.0	47038.160	3.0
543.3651	10.00	-2.17	148257.790	1.0	166656.508	1.0
543.3654	6.00	-3.63	70743.950	1.0	89142.660	2.0
543.3689	24.00	-3.20	31055.350	5.0	49453.940	4.0
543.3690	90.01	-2.41	11050.080	0.0	29453.780	0.0
543.3721	27.00	-1.73	32654.500	2.5	51052.980	3.5
543.3725	21.01	-1.35	39344.900	2.0	57743.370	3.0
543.3745	24.00	-4.14	39158.630	4.0	57557.030	3.0
543.3777	28.01	-1.61	100475.820	3.5	118874.110	3.5
543.3804	9.02	-3.44	426558.910	1.5	444957.110	1.5
543.3813	25.01	-2.60	84307.200	4.0	102705.370	3.0
543.3820	62.00	-1.57	806.575	0.0	19209.835	0.0
543.3851	24.00	-1.63	36558.550	2.0	54956.590	1.0
543.3860	23.00	-1.79	21603.170	4.5	40001.180	3.5
543.3893	25.03	-4.68	152986.000	2.0	171383.900	1.0
543.3976	22.00	-3.14	29661.232	1.0	48058.850	1.0
543.4023	12.01	-2.30	93799.700	2.5	112197.160	1.5
543.4052	12.01	-2.15	93799.700	3.5	112197.060	2.5
543.4052	12.01	-3.45	93799.700	2.5	112197.060	2.5
543.4100	19.02	-2.21	225051.000	2.5	243448.200	1.5
543.4179	23.00	-.50	19078.150	3.5	37475.080	3.5
543.4182	23.00	-3.54	14910.040	3.5	33306.960	4.5
543.4268	26.02	-1.94	182810.660	5.0	201207.290	4.0
543.4412	25.01	-2.29	84307.200	4.0	102703.340	4.0
543.4527	26.00	-2.19	8154.713	1.0	26550.466	0.0
543.4566	27.00	-.56	33674.380	2.5	52070.000	2.5
543.4593	28.01	-4.66	112719.750	3.5	131115.280	4.5
543.4891	25.01	-4.82	49889.860	3.0	68284.380	3.0
543.4968	28.01	-3.92	103653.030	3.5	122047.290	3.5
543.5060	74.00	-3.20	1613.150	0.0	20012.211	0.0
543.5089	7.00	-4.36	97770.150	.5	116164.000	.5
543.5089	7.00	-2.40	97770.150	.5	116164.000	1.5
543.5124	28.01	-3.00	93390.060	2.5	111783.790	3.5
543.5152	26.00	-3.40	35767.546	4.0	54161.182	3.0
543.5177	8.00	-1.80	86625.769	1.0	105019.319	2.0
543.5186	6.00	-4.81	71385.380	2.0	89778.900	3.0
543.5270	73.00	-1.90	10888.765	0.0	29287.115	0.0
543.5470	23.00	-3.36	21646.390	3.5	40038.950	4.5
543.5523	9.02	-2.58	440202.480	2.5	458594.860	2.5
543.5541	23.02	-1.81	141987.320	3.5	160379.640	2.5
543.5610	74.00	-2.01	17018.737	0.0	35415.936	0.0
543.5636	23.03	-2.45	265067.400	2.0	283459.400	3.0
543.5680	42.00	-1.02	20003.065	0.0	38400.027	0.0
543.5692	28.01	-4.71	97799.660	1.5	116191.470	2.5
543.5775	8.00	-1.58	86627.790	2.0	105019.319	2.0
543.5786	26.01	-5.59	26055.400	2.5	44446.890	3.5
543.5799	22.00	-.75	28638.832	2.0	47030.280	3.0
543.5855	28.00	-2.63	16017.317	0.0	34408.574	1.0
543.6194	24.00	-4.08	35572.940	2.0	53963.050	1.0
543.6277	26.00	-1.77	35379.189	5.0	53769.020	4.0
543.6300	64.00	-.92	7904.437	0.0	26299.301	0.0
543.6413	28.01	-2.12	101754.800	2.5	120144.170	2.5
543.6517	24.00	-3.82	24200.230	6.0	42589.250	5.0
543.6593	26.00	-3.30	18378.187	2.0	36766.950	3.0
543.6722	22.00	-2.41	7255.369	2.0	25643.695	3.0
543.6724	22.00	-2.39	20062.980	1.0	38451.298	2.0
543.6842	23.01	-3.70	19132.690	2.0	37520.610	3.0
543.6862	8.00	-1.43	86631.466	3.0	105019.319	2.0
543.6872	6.00	-2.13	71385.380	2.0	89773.200	3.0
543.6889	27.00	-2.56	32654.500	2.5	51042.260	2.5
543.6907	19.02	-1.01	245382.300	.5	263770.000	.5
543.6925	24.00	-4.37	20523.690	4.0	38911.330	3.0
543.6969	6.00	-2.92	71385.380	2.0	89772.870	2.0
543.6981	26.02	-2.40	204943.260	2.0	223330.710	3.0
543.6996	27.00	-.82	33173.360	3.5	51560.760	2.5
543.7002	28.01	-3.64	118379.110	2.5	136766.490	2.5
543.7030	75.00	-1.46	22261.476	0.0	40653.870	0.0
543.7078	29.01	-1.35	117883.140	4.0	136270.260	4.0
543.7089	26.00	-3.58	19788.248	4.0	38175.332	3.0
543.7129	25.00	-1.80	44696.290	2.5	63083.240	1.5
543.7172	26.00	-3.60	34782.406	5.0	53169.210	6.0
543.7206	26.02	-3.72	205672.010	4.0	224058.700	4.0
543.7270	41.00	-1.82	5242.739	0.0	23634.322	0.0
543.7368	28.01	-1.79	100490.950	1.5	118877.090	1.5
543.7380	15.01	-.86	112607.700	2.0	130993.800	3.0
543.7525	29.01	-.78	117747.450	3.0	136133.060	4.0
543.7540	57.00	-1.31	7178.519	0.0	25569.188	0.0
543.7658	23.00	-1.08	19145.130	5.5	37530.290	5.5
543.7750	7.00	-4.09	97770.150	.5	116155.000	.5
543.7750	7.00	-2.72	97770.150	.5	116155.000	1.5
543.7750	42.00	-1.38	16696.107	0.0	35086.066	0.0
543.7760	40.00	-2.75	1209.863	0.0	19599.788	0.0
543.7779	24.00	-3.37	35398.020	4.0	53782.770	4.0
543.7815	22.00	-1.45	28896.062	5.0	47280.690	5.0
543.7815	27.00	-3.15	36092.440	2.5	54477.070	3.5
543.7821	26.02	-2.90	204943.260	2.0	223327.870	2.0
543.7874	25.01	-3.92	49427.320	4.0	67811.750	3.0
543.8034	26.00	-2.53	37046.000	4.0	55429.890	5.0
543.8060	25.00	-3.99	45060.810	3.5	63444.610	4.5
543.8167	25.00	-3.31	23549.200	2.5	41932.640	3.5
543.8240	39.00	-.26	15728.216	0.0	34116.518	0.0
543.8241	21.00	-2.53	16096.860	1.5	34480.050	2.5
543.8276	24.00	-2.02	46368.350	3.0	64751.420	4.0
543.8297	24.00	-3.07	44307.960	5.0	62690.960	5.0
543.8309	22.00	-2.60	11531.760	2.0	29914.720	3.0
543.8353	24.00	-4.33	35934.020	6.0	54316.830	6.0
543.8486	25.00	-2.13	44523.450	3.5	62905.810	2.5
543.8740	72.00	-3.32	0.000	0.0	18386.612	0.0
543.8835	28.01	-2.58	115827.120	3.5	134208.300	2.5
543.8859	24.01	-3.29	52298.120	3.5	70679.220	4.5
543.8889	28.02	-3.15	121802.800	3.0	140183.800	4.0
543.8921	9.00	-2.12	119081.820	.5	137462.710	1.5
543.9025	21.00	-.89	16009.710	.5	34390.250	.5
543.9036	22.00	-2.80	11531.760	2.0	29912.262	3.0
543.9075	22.00	-4.54	7255.369	2.0	25635.740	1.0
543.9102	28.01	-4.26	118897.940	2.5	137276.220	1.5
543.9214	23.03	-.56	236766.900	3.0	255146.800	2.0
543.9276	25.00	-3.44	23818.870	.5	42196.560	.5
543.9291	23.01	-2.59	18293.870	2.0	36673.510	2.0
543.9297	24.00	-1.64	46422.460	4.0	64802.080	5.0
543.9297	26.02	-2.44	205672.010	4.0	224051.630	3.0
543.9341	28.01	-.93	118294.170	3.5	136673.640	4.5
543.9520	45.00	-2.14	12663.231	0.0	31047.206	0.0
543.9569	30.02	-2.41	217073.800	2.0	235452.500	2.0
543.9667	18.01	-2.06	172213.800	1.5	190592.170	1.5
543.9776	13.01	-2.65	124792.000	2.0	143170.000	1.0
543.9871	23.00	-4.16	15103.770	4.5	33481.450	3.5
543.9901	29.01	-3.19	128558.900	3.0	146936.480	2.0
543.9979	18.00	-2.60	104102.144	1.0	122479.459	1.0
544.0080	74.00	-1.77	19680.435	0.0	38062.518	0.0
544.0129	23.00	-2.88	15688.800	2.5	34065.610	2.5
544.0158	9.00	-2.15	117308.558	1.5	135685.270	1.5
544.0265	7.01	-3.70	202765.260	2.0	221141.610	3.0
544.0410	40.00	-2.52	4839.451	0.0	23220.419	0.0
544.0502	18.01	-3.62	196621.880	3.5	214997.430	4.5
544.0513	22.00	-1.54	11531.760	2.0	29907.273	2.0
544.0538	18.01	-1.67	190106.230	1.5	208461.660	.5
544.0561	23.00	-3.49	15264.830	5.5	33640.180	4.5
544.0688	25.00	-1.21	50341.300	4.5	68716.220	4.5
544.0756	21.00	-.96	18711.030	.5	37085.720	.5
544.1290	25.01	-3.03	84307.200	4.0	102680.090	5.0
544.1301	28.01	-3.58	102742.740	1.5	121115.590	1.5
544.1339	26.00	-1.82	34782.406	5.0	53155.130	4.0
544.1355	28.01	-4.83	114836.630	3.5	133209.300	2.5
544.1360	45.00	-.06	29681.967	0.0	48059.726	0.0
544.1580	64.00	-1.06	8388.382	0.0	26765.397	0.0
544.1583	25.01	-3.26	52373.180	3.0	70745.080	3.0
544.1675	29.01	-3.32	116371.410	4.0	134743.000	4.0
544.1820	24.01	-3.29	33418.110	2.5	51789.210	3.5
544.1820	76.00	-1.35	19761.092	0.0	38137.297	0.0
544.1917	28.01	-.90	108368.050	2.5	126738.820	1.5
544.2131	25.00	-2.84	41230.300	3.5	59600.350	2.5
544.2235	18.00	-2.09	105462.804	3.0	123832.500	3.0
544.2270	60.01	-1.60	5404.054	0.0	23778.740	0.0
544.2347	28.01	-4.92	117662.110	1.5	136031.430	2.5
544.2374	24.00	-1.41	27597.220	3.0	45966.450	2.0
544.2394	28.01	-2.69	102742.740	1.5	121111.900	.5
544.2599	21.00	-.82	16021.780	1.5	34390.250	.5
544.2696	9.00	-4.61	119081.820	.5	137449.960	1.5
544.2709	28.01	-2.69	97799.660	1.5	116167.760	1.5
544.3117	26.02	-4.59	205672.010	4.0	224038.730	5.0
544.3123	25.01	-4.45	65567.070	2.0	83933.770	3.0
544.3224	18.00	-2.11	106237.597	2.0	124603.957	2.0
544.3242	24.00	-3.78	28682.180	2.0	47048.480	3.0
544.3242	23.00	-1.09	21032.520	3.5	39398.820	3.5
544.3269	26.01	-3.13	54063.530	.5	72429.740	.5
544.3271	19.02	-4.80	225082.000	1.5	243448.200	1.5
544.3310	76.00	-1.51	13953.751	0.0	32324.926	0.0
544.3343	24.00	-2.64	44307.960	5.0	62673.920	6.0
544.3355	24.00	-2.09	24282.340	4.0	42648.260	3.0
544.3395	26.00	-2.06	33095.922	4.0	51461.707	4.0
544.3479	17.01	-.53	110297.000	3.0	128662.500	2.0
544.3541	24.00	-3.85	28682.180	2.0	47047.470	2.0
544.3541	23.00	-3.50	15664.750	1.5	34030.040	1.5
544.3560	63.00	-.46	15324.929	0.0	33695.260	0.0
544.3681	18.01	-2.67	191012.350	1.5	209377.170	2.5
544.3808	28.01	-1.23	115081.360	4.5	133445.750	4.5
544.3840	22.00	-7.15	6556.828	1.0	24921.110	1.0
544.3910	18.00	-3.26	105462.804	3.0	123826.850	2.0
544.3915	28.01	-3.09	100078.780	1.5	118442.810	1.5
544.3953	28.01	-2.69	115565.980	2.5	133929.880	3.5
544.3989	18.01	-3.84	196633.020	2.5	214996.800	3.5
544.4070	72.01	-1.47	20003.065	0.0	38371.675	0.0
544.4099	25.00	-3.50	25281.040	2.5	43644.450	1.5
544.4208	24.00	-3.14	44307.960	5.0	62671.000	4.0
544.4220	17.01	-.73	110299.500	2.0	128662.500	2.0
544.4320	45.00	-.20	29278.680	0.0	47646.447	0.0
544.4339	28.01	-3.36	115592.250	1.5	133954.850	.5
544.4357	24.00	-2.61	46349.500	2.0	64712.040	3.0
544.4386	18.01	-3.80	196305.040	3.5	214667.480	2.5
544.4451	24.01	-4.68	68305.730	1.5	86667.950	1.5
544.4463	10.01	-3.38	303071.840	2.5	321434.020	1.5
544.4480	92.01	-2.12	5726.684	0.0	24093.911	0.0
544.4523	24.00	-1.61	44299.980	2.0	62661.960	3.0
544.4588	27.00	-.02	32841.990	4.5	51203.750	5.5
544.4606	24.00	-3.40	31009.000	3.0	49370.700	3.0
544.4706	25.01	-3.10	52383.720	4.0	70745.080	3.0
544.4822	27.00	-4.81	28345.860	4.5	46706.830	3.5
544.4962	17.01	-1.26	110302.000	1.0	128662.500	2.0
544.4979	17.00	-2.68	83364.927	.5	101725.370	1.5
544.4994	28.01	-3.16	115085.360	3.5	133445.750	4.5
544.5021	26.00	-.32	35379.189	5.0	53739.488	5.0
544.5044	28.01	-2.91	103025.580	2.5	121385.600	1.5
544.5194	14.00	-4.21	61304.283	2.0	79664.000	1.0
544.5294	25.01	-3.92	52718.800	0.0	71078.180	1.0
544.5442	27.00	-.96	33674.380	2.5	52033.260	1.5
544.5646	7.00	-4.68	97805.810	1.5	116164.000	.5
544.5646	7.00	-3.35	97805.810	1.5	116164.000	1.5
544.5646	7.00	-2.86	97805.810	1.5	116164.000	2.5
544.5696	26.00	-3.84	36766.950	3.0	55124.974	3.0
544.5715	26.01	-4.38	44915.070	3.5	63273.030	2.5
544.5727	24.01	-2.81	52321.300	4.5	70679.220	4.5
544.5804	23.00	-2.47	14949.300	4.5	33306.960	4.5
544.5825	27.00	-4.83	32841.990	4.5	51199.580	3.5
544.5905	23.00	-1.99	15770.720	4.5	34128.040	3.5
544.5970	26.01	-4.89	26932.740	.5	45289.640	1.5
544.5990	18.01	-1.69	189654.780	2.5	208011.810	1.5
544.6017	25.00	-.22	50359.280	3.5	66716.220	4.5
544.6029	28.01	-4.91	98467.250	3.5	116824.150	2.5
544.6041	22.00	-2.35	27887.740	3.0	46244.600	2.0
544.6160	22.00	-4.07	20795.599	5.0	39154.057	5.0
544.6207	21.00	-.07	16210.800	3.5	34567.100	3.5
544.6457	22.01	-3.96	12758.150	2.5	31113.610	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
544.6498	24.01	-4.91	31351.150	2.5	49706.470	2.5
544.6560	26.00	-1.74	35611.608	3.0	53966.720	2.0
544.6611	22.00	-3.17	170.132	3.0	18525.070	2.0
544.6655	23.00	-3.00	21646.390	3.5	40001.180	3.5
544.6677	22.00	-.94	18818.230	0.0	37172.947	1.0
544.6721	24.01	-2.20	55081.700	1.5	73436.270	2.5
544.6780	23.00	-4.44	15664.750	1.5	34019.120	1.5
544.6783	24.00	-2.19	27703.840	4.0	46058.200	4.0
544.6875	26.00	-3.48	12968.552	2.0	31322.603	3.0
544.6920	26.00	-1.98	7985.783	2.0	26339.682	2.0
544.6930	76.00	.23	32504.981	0.0	50863.947	0.0
544.6934	7.00	-3.45	97770.150	.5	116124.000	.5
544.6934	7.00	-4.36	97770.150	.5	116124.000	1.5
544.7000	28.01	-3.42	118379.110	2.5	136732.740	1.5
544.7038	23.00	-2.96	21646.390	3.5	39999.890	2.5
544.7102	10.00	-3.03	152970.733	0.0	171324.017	1.0
544.7130	7.00	-2.47	97805.810	1.5	116159.000	2.5
544.7230	28.00	-3.51	30979.789	4.0	49332.643	4.0
544.7249	28.01	-1.88	100475.820	3.5	118828.610	2.5
544.7281	18.01	-4.41	196621.880	3.5	214974.560	3.5
544.7365	21.00	-1.45	14926.240	2.5	33278.640	3.5
544.7427	7.00	-2.48	96750.810	1.5	115103.000	2.5
544.7492	18.01	-2.43	196315.510	2.5	214667.480	2.5
544.7558	18.01	-2.56	183797.360	2.5	202149.110	2.5
544.7560	60.01	-1.64	8307.725	0.0	26664.567	0.0
544.7566	25.00	-.10	50341.300	4.5	68693.020	5.5
544.7635	22.00	-1.29	28788.372	4.0	47139.860	4.0
544.7760	76.00	-2.59	10969.423	0.0	29325.591	0.0
544.7920	75.00	-2.36	14921.641	0.0	33277.270	0.0
544.7976	27.00	-1.26	34352.420	1.5	52702.760	1.5
544.8243	29.01	-3.39	116326.160	3.0	134675.600	2.0
544.8251	26.00	-1.42	33412.706	3.0	51762.120	2.0
544.8288	7.00	-3.11	96750.810	1.5	115100.100	2.5
544.8310	41.00	-1.88	10808.108	0.0	29162.423	0.0
544.8318	7.00	-4.40	97805.810	1.5	116155.000	.5
544.8318	7.00	-4.26	97805.810	1.5	116155.000	1.5
544.8419	10.01	-2.89	303071.840	2.5	321420.690	2.5
544.8502	10.01	-3.43	303071.840	2.5	321420.410	1.5
544.8510	10.00	-2.40	148257.790	1.0	166606.333	0.0
544.8517	26.01	-3.81	66522.320	2.5	84870.640	2.5
544.8561	24.00	-3.05	24299.890	2.0	42648.260	3.0
544.8570	40.00	-2.05	5484.711	0.0	23838.151	0.0
544.8656	25.01	-3.30	49517.580	5.0	67865.630	4.0
544.8785	22.00	-.90	28596.293	1.0	46943.910	2.0
544.8820	23.03	-1.18	265879.200	2.0	284226.700	3.0
544.8840	21.00	-3.10	168.340	2.5	18515.770	1.5
544.8924	6.00	-3.28	70743.950	1.0	89091.100	1.0
544.8951	22.00	-1.22	18825.890	1.0	37172.947	1.0
544.9081	24.00	-3.91	44299.980	2.0	62646.600	2.0
544.9081	25.01	-2.89	49465.130	3.0	67811.750	3.0
544.9152	22.00	-1.90	11639.804	3.0	29986.185	3.0
544.9300	70.01	-.48	34844.049	0.0	53195.030	0.0
544.9307	26.01	-3.55	61093.440	2.5	79439.300	3.5
544.9326	18.00	-2.91	105462.804	3.0	123808.600	2.0
544.9366	24.00	-3.86	24093.160	2.0	42438.820	2.0
544.9370	76.00	-1.93	14276.381	0.0	32627.126	0.0
544.9374	20.02	-1.49	323003.560	1.0	341349.190	1.0
544.9390	29.01	-2.44	115639.020	2.0	133984.600	3.0
544.9470	90.01	-1.38	14195.724	0.0	32546.132	0.0
544.9500	77.00	.75	32666.296	0.0	51016.603	0.0
544.9699	24.00	-3.98	35618.510	1.0	53963.050	1.0
544.9764	24.00	-2.98	24303.940	3.0	42648.260	3.0
544.9856	25.00	-1.43	44288.760	4.5	62632.770	3.5
544.9951	24.00	-3.07	46368.350	3.0	64712.040	3.0
545.0017	9.00	-1.68	117622.923	2.5	135966.390	1.5
545.0025	26.01	-4.22	44929.590	2.5	63273.030	2.5
545.0064	25.02	-.73	174048.890	2.5	192392.200	3.5
545.0268	22.00	-3.30	29986.185	3.0	48328.810	4.0
545.0305	15.01	-2.55	112607.700	2.0	130950.200	2.0
545.0331	14.00	-3.24	45276.188	1.0	63618.600	0.0
545.0343	24.00	-2.62	31028.330	2.0	49370.700	3.0
545.0358	24.00	-4.53	28679.430	1.0	47021.750	1.0
545.0385	23.00	-3.32	14548.830	2.5	32891.060	3.5
545.0394	25.02	-2.74	124754.800	3.5	143097.000	3.5
545.0459	26.01	-7.96	20516.980	2.5	38858.960	2.5
545.0510	42.00	-.99	21454.900	0.0	39801.807	0.0
545.0608	18.01	-4.59	196633.020	2.5	214974.500	2.5
545.0635	23.00	-2.18	15724.220	3.5	34065.610	2.5
545.0679	23.00	-3.16	15688.800	2.5	34030.040	1.5
545.0706	15.01	-.12	105550.450	2.0	123891.600	2.0
545.0840	27.01	-6.64	28111.900	2.0	46452.600	2.0
545.0840	38.00	-.17	18067.285	0.0	36413.081	0.0
545.1066	18.01	-4.72	172829.580	1.5	191169.520	1.5
545.1176	24.00	-3.78	28682.180	2.0	47021.750	1.0
545.1259	12.01	-1.86	97455.120	.5	115794.410	1.5
545.1342	21.00	-1.95	16141.040	2.5	34480.050	2.5
545.1342	28.01	-3.31	96535.870	3.5	114874.880	2.5
545.1360	23.00	-3.68	26505.880	2.5	44844.830	1.5
545.1366	25.00	-3.85	31076.420	1.5	49415.350	2.5
545.1410	25.02	.43	176970.010	5.5	195308.790	4.5
545.1415	22.00	-2.71	29768.655	2.0	48107.420	2.0
545.1500	23.00	-2.02	19023.470	4.5	37361.950	4.5
545.1510	63.00	.34	13711.778	0.0	32055.320	0.0
545.1559	28.01	-4.13	115956.710	2.5	134294.990	2.5
545.1636	28.01	-3.52	115870.280	2.5	134208.300	2.5
545.1653	18.00	-1.89	104102.144	1.0	122440.109	2.0
545.1743	28.01	-4.24	100490.950	1.5	118828.610	2.5
545.1761	25.02	-2.70	124823.900	4.5	143161.500	4.5
545.1769	22.00	-2.93	27907.026	2.0	46244.600	2.0
545.1934	28.01	-3.82	115665.980	2.5	133903.000	1.5
545.1958	22.00	-1.88	19322.988	2.0	37659.927	3.0
545.1984	7.00	-3.84	97770.150	.5	116107.000	.5
545.1984	7.00	-3.94	97770.150	.5	116107.000	1.5
545.2005	10.01	-2.48	303071.840	2.5	321408.620	2.5
545.2059	10.01	-2.25	303071.840	2.5	321408.440	3.5
545.2071	7.01	-.59	170572.610	2.0	188909.170	1.0
545.2086	26.00	-3.02	29156.780	2.0	47693.289	3.0
545.2251	28.00	-2.60	31441.665	2.0	49777.619	3.0
545.2252	6.00	-2.95	70743.950	1.0	89079.900	2.0
545.2296	28.01	-2.49	115108.090	2.5	133443.890	2.5
545.2302	77.00	-.91	30742.650	.5	49078.430	1.5
545.2418	22.00	-4.97	28702.768	3.0	47038.160	3.0
545.2553	22.00	-3.65	20209.444	2.0	38544.380	3.0
545.2641	25.00	-4.44	45060.810	3.5	63395.450	3.5
545.2662	23.02	-3.87	141987.320	3.5	160321.890	2.5
545.2707	28.01	-5.00	114874.880	2.5	133209.300	2.5
545.2710	44.00	-.05	28391.447	0.0	46730.952	0.0
545.2772	27.00	-4.56	36092.440	2.5	54426.640	1.5
545.2799	10.01	-2.51	303071.840	2.5	321405.950	3.5
545.2820	28.01	-1.98	100592.980	3.5	118927.020	4.5
545.2860	28.00	-2.98	30619.440	2.0	48953.344	1.0
545.2885	26.02	-4.19	114325.350	5.0	132659.170	4.0
545.2920	72.00	-2.46	4516.821	0.0	22855.619	0.0
545.2940	63.00	.08	12985.861	0.0	31324.592	0.0
545.3000	62.00	-.21	3064.986	0.0	21403.515	0.0
545.3030	42.00	-1.20	23390.681	0.0	41729.109	0.0
545.3043	26.01	-4.62	66377.370	3.5	84710.660	3.5
545.3043	28.01	-2.80	114836.630	3.5	133169.920	3.5
545.3102	25.02	-1.63	174243.330	3.5	192576.420	2.5
545.3201	28.01	-5.00	98561.220	2.5	116893.980	2.5
545.3227	28.00	-1.47	32973.414	4.0	51306.085	3.0
545.3340	27.00	-.02	32841.990	4.5	51174.280	5.5
545.3400	76.00	-.75	23874.626	0.0	42211.810	0.0
545.3430	23.00	-5.41	14514.750	1.5	32846.740	2.5
545.3430	23.00	-4.70	14514.750	1.5	32846.740	2.5
545.3460	64.00	-.34	11211.395	0.0	29548.377	0.0
545.3570	71.00	-3.01	4113.534	0.0	22450.147	0.0
545.3599	18.01	-1.53	189414.960	3.5	207746.380	2.5
545.3643	22.00	-1.98	11639.804	3.0	29971.078	4.0
545.3652	18.01	-.43	190592.170	1.5	208923.410	2.5
545.3700	24.01	-4.43	45730.740	2.5	64061.820	1.5
545.3789	16.01	.48	110268.330	2.5	128599.110	3.5
545.3813	24.00	-3.84	28637.000	3.0	46967.700	2.0
545.3926	23.00	-4.03	15688.800	2.5	34019.120	1.5
545.3950	24.01	-2.78	55081.700	1.5	73411.940	1.5
545.3956	28.01	-2.38	100592.980	3.5	118923.200	3.5
545.3969	26.00	-3.13	33507.102	3.0	51837.279	3.0
545.4042	22.01	-3.65	12628.770	1.5	30958.700	2.5
545.4060	29.01	-3.18	120789.630	4.0	139119.500	3.0
545.4081	22.00	-4.75	28952.100	4.0	47281.900	3.0
545.4141	30.02	-1.23	220006.600	1.0	238336.200	2.0
545.4215	7.01	-.61	170607.890	1.0	188937.240	0.0
545.4242	17.00	-3.36	83130.900	1.5	101460.160	1.5
545.4295	18.01	-.72	188766.150	2.5	207095.230	2.5
545.4310	18.01	-1.28	190592.170	1.5	208921.200	1.5
545.4331	24.00	-2.59	46422.460	4.0	64751.420	4.0
545.4414	28.01	-2.20	117872.780	2.5	136201.460	3.5
545.4500	77.00	.46	33956.816	0.0	52290.302	0.0
545.4513	25.01	-3.15	49517.580	5.0	67845.930	5.0
545.4545	26.02	-2.72	205002.470	3.0	223330.710	3.0
545.4572	27.00	-.04	32841.990	4.5	51170.140	4.5
545.4709	25.00	-3.42	45130.160	4.5	63457.850	5.5
545.4745	22.00	-1.47	25926.820	4.0	44254.390	3.0
545.4762	22.00	-1.30	28702.768	3.0	47030.280	3.0
545.4820	44.00	.97	31053.145	0.0	49365.556	0.0
545.4849	28.01	-2.45	76402.030	2.5	94729.250	2.5
545.5060	27.00	-1.09	34133.590	3.5	52460.100	2.5
545.5104	26.00	-4.88	26224.961	3.0	44551.325	3.0
545.5150	57.00	-.69	1048.548	0.0	19379.850	0.0
545.5215	21.00	-2.31	16096.860	1.5	34422.850	1.5
545.5310	64.00	-.69	10808.108	0.0	29138.872	0.0
545.5313	18.01	-1.38	190942.650	.5	209268.310	1.5
545.5364	12.01	-1.60	97468.920	1.5	115794.410	2.5
545.5364	12.01	-2.56	97468.920	1.5	115794.410	1.5
545.5391	26.02	-3.89	205002.470	3.0	223327.870	2.0
545.5441	26.00	-.19	34843.980	6.0	53169.210	6.0
545.5516	24.01	-3.77	55081.700	1.5	73406.680	.5
545.5590	7.01	-4.14	202170.630	1.0	220495.360	2.0
545.5599	25.00	-4.22	23818.870	.5	42143.570	1.5
545.5613	26.00	-2.15	8154.713	1.0	26479.366	1.0
545.5721	26.02	-2.33	205002.470	3.0	223326.760	4.0
545.5745	23.01	-4.63	16421.510	4.0	34745.720	3.0
545.5820	60.01	-1.39	7904.437	0.0	26233.487	0.0
545.5834	24.01	-2.72	33619.130	4.5	51943.040	4.5
545.5840	28.01	-3.98	115120.000	2.5	133443.890	2.5
545.5903	28.01	-2.82	118442.810	1.5	136766.490	2.5
545.5960	22.00	-.93	11531.760	2.0	29855.248	1.0
545.6076	9.02	-2.67	440069.510	1.5	458392.610	1.5
545.6130	44.00	-1.59	9114.300	0.0	27442.309	0.0
545.6180	25.02	-.78	177269.340	1.5	195592.090	1.5
545.6190	41.00	-.73	20164.380	0.0	38492.187	0.0
545.6284	17.01	-.94	110299.500	2.0	128621.900	1.0
545.6296	22.00	-5.82	6598.749	2.0	24921.110	1.0
545.6296	24.00	-4.34	35640.690	0.0	53963.050	1.0
545.6454	29.01	-4.28	115662.770	4.0	133984.600	3.0
545.6460	42.00	-1.01	22100.161	0.0	40427.062	0.0
545.6523	26.00	-3.17	29056.312	3.0	47377.909	4.0
545.6573	26.00	-3.74	29371.860	3.0	47693.289	3.0
545.6594	28.01	-1.45	100592.980	3.5	118914.340	4.5
545.6892	22.00	-2.53	20795.599	5.0	39115.958	4.0
545.6918	28.01	-1.53	100619.260	4.5	118939.530	5.5
545.6939	23.03	-1.69	236148.600	1.0	254468.800	2.0
545.7026	27.00	-3.06	32733.070	3.5	51052.980	3.5
545.7028	17.01	-.78	110302.000	1.0	128621.900	1.0
545.7112	23.01	-3.07	18353.890	3.0	36673.510	2.0
545.7231	26.02	-3.06	114339.950	4.0	132659.170	4.0
545.7300	76.00	-3.01	5081.424	0.0	23405.504	0.0
545.7362	23.01	-4.14	32420.040	0.0	50738.820	1.0
545.7389	7.01	-3.39	178273.380	0.0	196592.070	1.0
545.7399	18.00	-2.03	105617.315	2.0	123935.970	1.0
545.7419	27.00	-1.20	33945.900	2.5	52264.490	1.5
545.7460	25.00	-2.88	17451.520	2.5	35769.970	3.5
545.7475	17.01	-1.12	110303.500	0.0	128621.900	1.0
545.7478	28.01	-3.79	100490.950	1.5	118809.340	1.5
545.7505	23.00	-3.86	26738.310	4.5	45056.610	3.5
545.7538	7.00	-3.76	97805.810	1.5	116124.000	.5
545.7538	7.00	-3.66	97805.810	1.5	116124.000	1.5
545.7620	22.00	-2.62	27750.124	5.0	46068.040	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
545.7620	63.00	.01	19115.832	0.0	37438.837	0.0
545.7738	23.00	-8.70	11100.650	4.5	29418.170	3.5
545.7790	18.00	-2.76	106237.597	2.0	124554.939	1.0
545.7806	20.02	-.92	325467.670	2.0	343784.960	1.0
545.7979	29.01	-3.12	128569.600	2.0	146886.310	1.0
545.8003	25.02	-2.99	174048.890	2.5	192365.520	1.5
545.8040	41.00	-1.81	8952.985	0.0	27274.580	0.0
545.8095	23.00	-1.05	19026.340	2.5	37342.660	2.5
545.8098	23.00	-3.68	26604.770	3.5	44921.080	2.5
545.8128	28.01	-3.06	121692.550	4.5	140008.760	3.5
545.8152	28.01	-3.51	117972.470	3.5	136288.600	2.5
545.8256	23.00	-1.69	21646.390	3.5	39962.170	2.5
545.8310	15.00	-1.16	57876.700	.5	76192.300	1.5
545.8396	28.01	-4.01	114874.880	2.5	133190.190	1.5
545.8399	29.01	-2.12	118484.000	3.0	136799.300	2.0
545.8542	26.02	-1.74	188013.400	4.0	206328.220	3.0
545.8649	25.00	-3.78	25281.040	2.5	43595.500	2.5
545.8652	25.00	-4.87	45130.160	4.5	63444.610	4.5
545.8690	57.01	-1.02	18793.202	0.0	37112.616	0.0
545.8900	28.01	-1.62	121692.550	4.5	140006.170	4.5
545.8951	28.01	-3.60	99559.330	2.5	117872.780	2.5
545.9210	58.01	-.55	12905.203	0.0	31222.872	0.0
545.9234	23.01	-2.67	30267.460	2.0	48579.960	3.0
545.9249	7.00	-3.86	96787.650	1.5	115100.100	2.5
545.9270	92.00	-2.14	564.603	0.0	18882.070	0.0
545.9378	17.00	-4.02	82918.893	2.5	101230.909	3.5
545.9600	23.00	-3.10	15664.750	1.5	33976.020	1.5
545.9647	18.00	-2.34	105462.804	3.0	123773.920	3.0
545.9682	22.00	-3.74	8492.421	1.0	26803.417	2.0
545.9755	28.01	-3.12	115592.250	1.5	133903.000	1.5
545.9917	6.00	-4.04	70743.950	1.0	89054.160	2.0
545.9994	25.01	-3.74	48333.060	5.0	66643.010	4.0
546.0221	27.00	-1.75	32733.070	3.5	51042.260	2.5
546.0304	23.01	-4.02	54717.850	1.0	73026.760	2.0
546.0469	22.00	-2.63	386.874	4.0	18695.230	4.0
546.0530	42.00	-.07	31133.803	0.0	49447.044	0.0
546.0555	25.00	-2.30	41031.480	4.5	59339.550	3.5
546.0640	75.00	-1.57	19357.805	0.0	37670.677	0.0
546.0647	28.01	-.90	100619.260	4.5	118927.020	4.5
546.0647	25.00	-3.00	25287.740	3.5	43595.500	2.5
546.0724	20.02	-2.11	328588.760	3.0	346896.260	2.0
546.0740	80.00	1.58	43797.033	0.0	62109.569	0.0
546.0796	9.01	-4.58	246662.010	1.0	264969.270	2.0
546.0799	26.02	-1.77	114351.920	3.0	132659.170	4.0
546.0876	26.00	-3.88	24772.019	1.0	43079.013	1.0
546.0901	24.00	-3.86	24282.340	4.0	42589.250	5.0
546.0913	25.02	-3.90	94771.470	2.5	113078.340	1.5
546.1136	23.00	-3.15	15000.840	5.5	33306.960	4.5
546.1172	15.01	-.03	112607.700	2.0	130913.700	3.0
546.1290	73.00	-2.42	5565.369	0.0	23876.061	0.0
546.1447	22.00	-1.46	28638.832	2.0	46943.910	2.0
546.1482	28.01	-3.15	100592.980	3.5	118897.940	2.5
546.1531	26.00	-2.12	35856.386	2.0	54161.182	3.0
546.1638	17.00	-2.20	82918.893	2.5	101223.330	2.5
546.1682	25.02	-.25	174575.870	3.5	192880.160	3.5
546.1785	26.00	-4.10	29732.721	1.0	48036.667	2.0
546.1787	28.01	-1.68	100619.260	4.5	118923.200	3.5
546.2020	25.00	-4.94	33825.490	2.5	52128.650	2.5
546.2040	18.01	-2.73	186890.950	2.5	205194.040	1.5
546.2145	14.01	-1.00	103861.000	.5	122163.740	1.5
546.2163	22.00	-3.25	17995.750	0.0	36298.430	1.0
546.2375	23.00	-2.55	15664.750	1.5	33966.720	.5
546.2393	25.01	-3.27	89800.340	4.0	108102.250	3.0
546.2485	28.00	-1.04	31031.042	3.0	49332.643	4.0
546.2486	22.00	-3.26	29907.273	2.0	48208.870	3.0
546.2551	25.01	-4.22	49465.130	3.0	67766.510	2.0
546.2581	7.01	-.56	170607.890	1.0	188909.170	1.0
546.2608	7.00	-4.14	97805.810	1.5	116107.000	.5
546.2608	7.00	-3.24	97805.810	1.5	116107.000	1.5
546.2610	90.01	-1.53	14195.724	0.0	32501.992	0.0
546.2736	28.01	-2.51	96535.870	3.5	114836.630	3.5
546.2861	24.00	-2.94	31352.420	1.0	49652.760	2.0
546.2864	28.01	-2.94	100078.780	1.5	118379.110	2.5
546.2937	26.00	-.70	36079.353	3.0	54379.440	3.0
546.3109	28.01	-2.73	103025.580	2.5	121325.090	2.5
546.3138	29.00	-1.86	46136.101	0.0	64440.599	0.0
546.3254	26.00	-.42	35767.546	4.0	54066.570	4.0
546.3264	18.00	-3.21	107054.319	0.0	125353.310	1.0
546.3336	23.00	-2.24	20828.480	2.5	39127.230	1.5
546.3375	22.00	-3.10	28896.062	5.0	47194.680	4.0
546.3380	72.01	-1.94	13389.148	0.0	31692.835	0.0
546.3566	28.01	-4.49	115956.710	2.5	134254.690	1.5
546.3587	23.00	-6.73	14548.830	2.5	32846.740	2.5
546.3587	23.00	-4.79	14548.830	2.5	32846.740	2.5
546.3602	24.00	-2.96	44393.100	6.0	62690.960	5.0
546.3661	24.00	-1.21	44373.340	3.0	62671.000	4.0
546.3694	24.00	-3.72	31355.210	2.0	49652.760	2.0
546.3703	27.00	-6.71	7442.410	3.5	25739.930	2.5
546.3799	26.00	-3.56	28604.610	2.0	46901.808	1.0
546.3917	28.00	-1.83	31031.042	3.0	49327.845	2.0
546.3933	29.01	-3.58	120684.550	3.0	138981.300	2.0
546.3976	22.00	-2.73	29912.262	3.0	48208.870	3.0
546.4002	24.00	-1.33	27703.840	4.0	46000.360	3.0
546.4048	26.00	-3.93	36079.353	3.0	54375.719	2.0
546.4088	28.01	-4.11	115565.980	2.5	133862.210	1.5
546.4115	28.01	-4.19	115956.710	2.5	134252.850	3.5
546.4200	58.01	-.74	11372.710	0.0	29673.651	0.0
546.4269	26.00	-1.55	33412.706	3.0	51708.330	2.0
546.4364	17.00	-2.21	83130.900	1.5	101426.204	2.5
546.4368	9.00	-3.46	117308.558	1.5	135603.650	2.5
546.4380	57.01	-2.43	6129.972	0.0	24430.310	0.0
546.4432	28.01	-2.78	100619.260	4.5	118914.340	4.5
546.4444	28.01	-3.62	114874.880	2.5	133169.920	3.5
546.4453	24.00	-3.41	31355.210	2.0	49650.220	3.0
546.4912	17.00	-4.40	83894.037	3.5	102187.510	2.5
546.4937	21.00	-3.17	16096.860	1.5	34390.250	.5
546.4957	9.00	-3.02	117391.950	.5	135685.270	1.5
546.5028	26.00	-3.14	29313.008	6.0	47606.092	5.0
546.5206	21.00	-.58	18855.760	1.5	37148.250	1.5
546.5244	23.00	-2.29	19023.470	4.5	37315.830	5.5
546.5334	23.01	-3.36	55206.870	5.0	73498.930	6.0
546.5415	28.00	-4.16	30979.789	4.0	49271.578	3.0
546.5490	47.00	.85	30327.228	0.0	48623.649	0.0
546.5601	22.00	-4.64	29768.655	2.0	48059.820	3.0
546.5775	22.00	-3.36	8602.340	2.0	26892.926	3.0
546.5800	27.00	-3.41	36875.130	1.5	55165.630	2.5
546.5845	28.01	-3.90	76727.360	5.5	95017.710	4.5
546.5891	22.00	-3.56	29768.655	2.0	48058.650	1.0
546.5971	28.01	-1.66	118442.810	1.5	136732.740	1.5
546.6069	22.00	-4.06	30039.211	5.0	48328.810	4.0
546.6075	24.00	-4.16	46422.460	4.0	64712.040	3.0
546.6105	20.02	-.86	328606.780	2.0	346896.260	2.0
546.6123	18.01	-3.47	196621.880	3.5	214911.300	2.5
546.6159	17.02	-4.56	183042.700	2.5	201332.000	1.5
546.6284	28.01	-3.98	119833.000	5.5	138121.880	4.5
546.6362	24.00	-1.56	44373.340	3.0	62661.960	3.0
546.6376	26.00	-2.00	35257.309	4.0	53545.882	3.0
546.6440	18.01	-.64	186815.960	3.5	205104.320	4.5
546.6460	39.00	-.23	11453.368	0.0	29746.743	0.0
546.6461	14.01	-.22	101023.310	1.5	119311.600	2.5
546.6491	29.01	-1.04	117747.450	3.0	136035.640	3.0
546.6607	11.02	-3.15	444825.000	2.5	463112.800	3.5
546.6667	29.01	-3.33	116388.000	2.0	134675.600	2.0
546.6720	62.00	-.61	1451.835	0.0	19744.339	0.0
546.6730	25.02	-1.24	176683.760	2.5	194971.150	2.5
546.6781	23.00	-2.41	15688.800	2.5	33976.020	1.5
546.6796	9.01	-4.07	246682.100	2.0	264969.270	2.0
546.6816	25.00	-2.72	45060.810	3.5	63347.910	4.5
546.6849	14.01	-1.36	101024.610	2.5	119311.600	2.5
546.6894	14.01	-.06	101024.610	2.5	119311.450	3.5
546.6896	26.00	-4.33	26224.961	3.0	44511.795	2.0
546.6920	57.00	-1.42	7985.094	0.0	26276.929	0.0
546.6924	26.01	-2.12	54902.420	1.5	73189.160	1.5
546.6990	24.01	-2.87	52298.120	3.5	70584.640	2.5
546.6997	26.00	-2.21	28819.966	5.0	47106.463	4.0
546.7003	26.00	-3.46	29469.010	2.0	47755.485	3.0
546.7145	28.01	-3.23	115870.280	2.5	134156.280	1.5
546.7146	17.02	-1.71	185838.000	1.5	204124.000	1.5
546.7152	18.00	-2.42	105617.315	2.0	123903.295	2.0
546.7178	24.00	-3.43	31364.330	3.0	49650.220	3.0
546.7289	24.00	-4.94	28682.180	2.0	46967.700	2.0
546.7295	18.01	-1.82	190196.160	.5	208481.660	.5
546.7432	26.01	-2.89	54902.420	1.5	73187.460	.5
546.7432	25.00	-.61	43428.580	4.5	61713.620	5.5
546.7516	7.01	-.08	170572.610	2.0	188857.370	2.0
546.7778	26.00	-3.64	28604.610	2.0	46888.494	2.0
546.7782	26.01	-3.21	66012.830	4.5	84296.700	5.5
546.7800	28.01	-1.77	100490.950	1.5	118774.760	.5
546.7803	23.00	-.85	19078.150	3.5	37361.950	4.5
546.7886	22.00	-5.85	11776.806	4.0	30060.328	4.0
546.7986	24.00	-1.83	37233.500	5.0	55516.690	6.0
546.8093	27.00	-4.80	15184.040	2.5	33466.870	3.5
546.8100	28.00	-1.63	31031.042	3.0	49313.851	3.0
546.8100	41.00	-.77	19841.750	0.0	38129.638	0.0
546.8110	45.00	.19	29278.680	0.0	47566.534	0.0
546.8132	30.02	.25	219360.000	4.0	237642.700	3.0
546.8132	28.01	-2.70	115765.060	1.5	134067.760	1.5
546.8183	24.00	-1.77	31028.330	2.0	49310.860	3.0
546.8186	28.01	-3.33	118442.810	1.5	136725.330	.5
546.8222	26.01	-4.03	61156.900	3.5	79439.300	3.5
546.8282	27.00	-2.85	34352.420	1.5	52634.620	.5
546.8369	22.00	-3.53	7255.369	2.0	25537.276	1.0
546.8440	22.01	-3.65	20951.770	2.5	39233.440	1.5
546.8470	39.00	-.60	15244.271	0.0	33530.922	0.0
546.8488	24.00	-4.09	35501.260	3.0	53782.770	4.0
546.8602	28.01	-1.38	100592.980	3.5	118874.110	3.5
546.8694	24.00	-2.83	44393.100	6.0	62673.920	6.0
546.8940	25.02	-.44	176265.780	1.5	194545.780	.5
546.8975	18.01	-3.52	200880.520	3.5	219160.400	2.5
546.9101	18.01	-.67	189414.960	3.5	207694.420	3.5
546.9200	22.00	-3.31	18061.540	1.0	36340.670	2.0
546.9277	26.00	-1.89	34782.406	5.0	53061.280	5.0
546.9302	27.00	-2.87	15184.040	2.5	33462.630	2.5
546.9400	77.00	-1.73	19438.462	0.0	37722.003	0.0
546.9450	9.00	-2.21	117872.916	1.5	136151.210	.5
546.9451	14.01	-.75	103885.510	1.5	122163.800	2.5
546.9469	14.01	-1.70	103885.510	1.5	122163.740	1.5
546.9601	29.01	-.93	117883.140	4.0	136160.930	5.0
546.9712	24.00	-3.40	31987.060	4.0	50264.460	3.0
546.9720	64.00	-1.03	7017.204	0.0	25299.675	0.0
546.9814	25.02	-.88	177185.180	.5	195462.260	.5
547.0000	76.00	-1.73	14760.326	0.0	33041.862	0.0
547.0047	28.01	-4.80	116824.150	2.5	135100.450	3.5
547.0109	26.00	-1.93	35856.386	2.0	54132.480	1.0
547.0307	18.01	-3.60	184191.710	.5	202467.140	1.5
547.0361	25.02	-.38	177477.230	2.5	195752.480	2.5
547.0367	25.00	-3.05	45013.550	2.5	63286.780	3.5
547.0397	25.01	-2.73	84428.210	5.0	102703.340	4.0
547.0454	27.00	-.76	30443.630	1.5	48716.570	2.5
547.0461	22.00	-4.98	11639.804	3.0	29914.720	3.0
547.0637	25.00	-1.94	17451.520	2.5	35725.850	2.5
547.0744	26.01	-3.94	66589.170	4.5	84863.140	5.5
547.0810	26.01	-4.92	26932.740	.5	45206.490	.5
547.0816	28.01	-.54	100619.260	4.5	118892.990	5.5
547.0850	45.00	.60	31859.720	0.0	50138.415	0.0
547.0897	25.01	-3.80	52383.720	4.0	70657.180	5.0
547.0957	24.00	-2.63	44373.340	3.0	62646.000	4.0
547.1005	25.02	-4.69	124823.900	4.5	143097.000	3.5
547.1008	9.02	-3.19	426733.040	2.5	445006.130	2.5
547.1077	26.01	-4.80	54870.620	2.5	73143.480	3.5
547.1197	22.00	-1.18	11639.804	3.0	29912.262	3.0
547.1256	24.00	-2.81	31377.960	4.0	49650.220	3.0
547.1372	22.00	-4.70	27418.015	2.0	45689.690	3.0
547.1550	47.00	-.15	30327.228	0.0	48603.585	0.0
547.1553	27.00	-4.17	32781.710	2.5	51054.980	3.5
547.1945	28.01	-4.06	115592.250	1.5	133862.210	1.5
547.1963	30.02	-.80	215340.500	2.0	233610.400	2.0
547.1978	7.00	-3.22	96787.650	1.5	115057.500	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
547.2062	27.00	-3.53	27497.060	2.5	45766.630	3.5
547.2158	21.00	-.73	16210.800	3.5	34480.050	2.5
547.2212	22.00	-4.76	18145.400	2.0	36414.470	3.0
547.2220	21.01	-2.10	39344.900	2.0	57613.940	2.0
547.2300	58.01	-.51	10001.532	0.0	28275.384	0.0
547.2320	63.00	-.32	13389.148	0.0	31662.933	0.0
547.2357	28.00	-4.51	40361.254	3.0	58629.840	2.0
547.2380	25.00	-3.13	44814.730	1.5	63083.240	1.5
547.2388	22.00	-3.50	30060.328	4.0	48328.810	4.0
547.2444	28.00	-4.64	40361.254	3.0	58629.550	3.0
547.2466	23.00	-2.28	19189.280	1.5	37457.500	1.5
547.2523	24.00	-3.85	28637.000	3.0	46905.030	4.0
547.2535	28.01	-3.13	115785.060	1.5	134053.050	2.5
547.2538	24.01	-2.56	33521.230	3.5	51789.210	3.5
547.2565	25.00	-.19	45156.110	2.5	63424.000	3.5
547.2637	18.01	-2.42	183985.940	1.5	202253.590	1.5
547.2691	22.00	-.67	11639.804	3.0	29907.273	2.0
547.2709	26.00	-2.30	33946.920	2.0	52214.330	1.0
547.2718	28.01	-3.30	118631.950	.5	136899.330	1.5
547.2787	29.01	-3.42	118532.150	2.0	136799.300	2.0
547.2889	29.01	-1.92	117747.450	3.0	136014.260	2.0
547.2904	9.02	-2.65	440069.510	1.5	458336.270	.5
547.3000	8.04	.15	689890.000	0.0	708161.515	0.0
547.3057	29.01	-2.09	120875.850	2.0	139142.100	2.0
547.3074	7.00	-3.35	96750.810	1.5	115017.000	.5
547.3080	60.01	-1.56	8952.985	0.0	27224.233	0.0
547.3163	26.00	-2.50	33801.555	2.0	52067.450	2.0
547.3188	22.01	-2.94	44902.420	2.5	63168.230	2.5
547.3269	29.01	-3.22	118071.340	1.0	136336.880	1.0
547.3287	28.01	-3.52	113592.250	1.5	133857.730	.5
547.3370	42.00	-1.67	20003.065	0.0	38273.345	0.0
547.3390	39.01	-1.40	13953.751	0.0	32223.964	0.0
547.3436	18.00	-3.02	105617.315	2.0	123882.300	1.0
547.3474	28.00	-4.07	13521.352	2.0	31786.210	3.0
547.3503	22.00	-1.00	18825.890	1.0	37090.650	0.0
547.3578	23.00	-2.11	19078.150	3.5	37342.660	2.5
547.3602	16.01	-.21	109560.500	.5	127824.930	.5
547.3764	27.00	-1.42	34196.210	1.5	52460.100	2.5
547.3888	26.00	-1.15	33507.102	3.0	51770.577	3.0
547.3998	18.01	-3.13	186815.960	3.5	205079.070	2.5
547.4052	28.01	-4.45	98561.220	2.5	116824.150	2.5
547.4067	26.00	-2.32	40257.300	5.0	58520.180	4.0
547.4209	22.00	-1.59	11776.806	4.0	30039.211	5.0
547.4462	23.00	-2.55	19023.470	4.5	37285.030	4.5
547.4466	22.00	-.85	18911.399	2.0	37172.947	1.0
547.4580	76.00	-.73	25487.776	0.0	43754.017	0.0
547.4657	24.00	-3.90	24303.940	3.0	42564.850	4.0
547.4660	25.02	-.18	177687.540	3.5	195948.440	3.5
547.4730	60.01	-1.60	7904.437	0.0	26170.178	0.0
547.4747	24.01	-4.89	69498.270	4.5	87758.880	3.5
547.4920	40.00	-1.25	16696.107	0.0	34961.214	0.0
547.5110	74.00	-.65	28068.817	0.0	46333.290	0.0
547.5130	76.00	-1.28	20970.955	0.0	39235.362	0.0
547.5180	44.00	.21	31133.803	0.0	49398.043	0.0
547.5194	23.00	-1.91	19145.130	5.5	37404.250	6.5
547.5258	28.00	-4.91	22102.349	4.0	40361.254	3.0
547.5263	23.00	-5.91	0.000	1.5	18258.890	2.5
547.5287	7.01	-1.04	187091.370	2.0	205350.180	2.0
547.5305	25.00	-2.81	41031.480	4.5	59290.230	3.5
547.5407	18.01	-1.73	190507.360	1.5	208765.770	.5
547.5425	28.00	-1.95	30912.838	1.0	49171.187	1.0
547.5500	26.01	-4.27	66612.740	1.5	84870.640	2.5
547.5540	73.00	-.58	24116.599	0.0	42379.638	0.0
547.5549	22.00	-3.97	25643.695	3.0	43901.630	4.0
547.5551	25.00	-2.83	34845.260	.5	53103.190	1.5
547.5720	64.00	-1.37	6694.574	0.0	24957.013	0.0
547.5764	23.00	-3.28	15270.420	1.5	33527.640	2.5
547.5770	78.00	.18	33956.816	0.0	52219.088	0.0
547.5968	23.00	-4.06	15103.770	4.5	33360.310	3.5
547.5989	24.00	-4.46	24282.340	4.0	42538.810	3.0
547.6022	24.00	-3.15	31364.330	3.0	49620.690	4.0
547.6070	29.01	-4.34	130386.400	2.0	148642.600	2.0
547.6112	25.00	-2.92	34845.260	.5	53101.320	.5
547.6120	45.00	-1.89	14679.669	0.0	32940.774	0.0
547.6141	18.01	-.94	191012.350	1.5	209268.310	1.5
547.6289	26.00	-.79	33412.706	3.0	51668.175	4.0
547.6325	28.01	-2.41	93528.440	3.5	111783.790	3.5
547.6475	28.01	-3.98	100619.260	4.5	118874.110	3.5
547.6508	27.00	-1.61	29269.730	4.5	47524.470	4.5
547.6555	26.00	-.74	33095.922	4.0	51350.505	4.0
547.6690	71.01	-.79	14115.066	0.0	32374.270	0.0
547.6831	17.00	-1.97	82918.893	2.5	101172.553	1.5
547.6856	27.00	-2.32	35450.560	3.5	53704.140	2.5
547.6900	28.00	-.50	14728.847	0.0	32982.280	1.0
547.6901	22.01	-1.79	44914.800	1.5	63168.230	2.5
547.6972	7.00	-2.14	96750.810	1.5	115004.000	2.5
547.6991	23.00	-2.49	14514.750	1.5	32767.880	1.5
547.6991	23.01	-6.52	20980.920	2.0	39234.050	3.0
547.7078	27.00	-.63	29948.760	2.5	48201.600	3.5
547.7147	29.01	-2.97	117231.690	1.0	135484.300	0.0
547.7270	25.02	-.81	173920.690	1.5	192172.890	2.5
547.7270	76.00	-1.88	17583.339	0.0	35840.610	0.0
547.7278	22.00	-3.36	29855.248	1.0	48107.420	2.0
547.7366	25.01	-2.38	84428.210	5.0	102680.090	5.0
547.7400	40.00	-2.71	4839.451	0.0	23096.288	0.0
547.7405	23.01	-4.56	16340.970	3.0	34592.720	2.0
547.7438	24.01	-2.50	33418.110	2.5	51669.750	2.5
547.7453	28.01	-4.42	115956.710	2.5	134208.300	2.5
547.7515	9.00	-3.13	117872.916	1.5	136124.300	.5
547.7585	10.01	-4.23	303824.230	3.5	322075.380	4.5
547.7672	26.01	-5.77	25981.650	3.5	44232.510	4.5
547.7696	22.00	-.45	19573.968	4.0	37824.748	4.0
547.7702	14.01	-3.68	101023.310	1.5	119274.070	1.5
547.7705	15.00	-.79	58174.450	1.5	76425.200	2.5
547.7732	10.01	-3.80	303824.680	2.5	322075.340	3.5
547.7780	25.00	-2.21	41230.300	3.5	59480.800	2.5
547.7800	74.00	-2.40	9436.930	0.0	27692.434	0.0
547.7954	29.01	-1.40	117883.140	4.0	136133.060	4.0
547.7987	26.02	-4.07	117950.320	4.0	136200.130	3.0
547.7994	22.00	-3.55	28788.372	4.0	47038.160	3.0
547.8086	7.01	-1.22	170607.890	1.0	188857.370	2.0
547.8092	14.01	-2.73	101024.610	2.5	119274.070	1.5
547.8290	62.01	-1.66	10082.190	0.0	28336.061	0.0
547.8330	40.00	-.55	17663.997	0.0	35917.735	0.0
547.8359	24.01	-2.08	33694.470	5.5	51943.040	4.5
547.8451	26.00	-1.80	33801.555	2.0	52049.820	2.0
547.8500	78.00	.38	38312.322	0.0	56565.493	0.0
547.8512	28.01	-2.26	101754.800	2.5	120002.860	3.5
547.8520	70.01	-.76	39844.818	0.0	58097.920	0.0
547.8551	26.02	-2.28	188013.400	4.0	206261.330	4.0
547.8599	28.01	-4.35	114942.420	1.5	133190.190	1.5
547.8677	28.01	-2.63	92325.850	3.5	110573.360	2.5
547.8740	28.01	-1.03	119315.440	2.5	137562.740	3.5
547.9005	24.00	-2.85	33040.100	2.0	51286.520	2.0
547.9064	28.00	-4.48	30912.838	1.0	49159.060	2.0
547.9203	24.00	-1.89	37205.880	3.0	55451.640	3.0
547.9233	24.00	-4.17	31352.420	1.0	49598.080	2.0
547.9353	23.00	-5.88	14910.040	3.5	33155.300	4.5
547.9400	44.00	.81	31133.803	0.0	49383.976	0.0
547.9491	29.01	-3.82	130386.400	2.0	148631.200	3.0
547.9620	25.00	-3.79	45130.160	4.5	63374.530	4.5
547.9644	10.01	-.48	303824.230	3.5	322068.520	4.5
547.9728	27.00	-1.02	35450.560	3.5	53694.570	3.5
547.9743	18.01	-1.60	191169.520	1.5	209413.480	1.5
547.9792	22.00	-2.87	28896.062	5.0	47139.860	4.0
547.9837	29.01	-1.27	120875.850	2.0	139119.500	3.0
547.9879	25.02	-.61	174332.910	1.5	192576.420	2.5
548.0011	20.02	-.69	343110.240	0.0	361353.310	1.0
548.0020	25.00	-4.81	25281.040	2.5	43524.080	3.5
548.0050	7.01	-.84	170666.230	0.0	188909.170	1.0
548.0071	24.00	-3.87	31355.210	2.0	49598.080	2.0
548.0113	24.00	-4.37	31377.960	4.0	49620.690	4.0
548.0116	24.00	-3.90	35398.020	4.0	53640.740	3.0
548.0122	29.01	-3.41	117747.450	3.0	135990.150	3.0
548.0122	17.01	-2.54	159574.200	2.0	177816.900	2.0
548.0230	64.00	-.87	10808.108	0.0	29055.517	0.0
548.0296	56.01	-1.31	48483.290	0.0	66730.480	0.0
548.0300	44.00	.42	30085.255	0.0	48332.431	0.0
548.0360	22.00	-2.59	28788.372	4.0	47030.280	3.0
548.0376	22.00	-3.17	20209.444	2.0	38451.298	2.0
548.0383	22.00	-3.89	27480.047	3.0	45721.878	4.0
548.0404	24.00	-1.61	31393.400	5.0	49635.160	6.0
548.0449	24.00	-3.54	28637.000	3.0	46878.610	3.0
548.0537	24.00	-1.24	27816.880	5.0	46058.200	4.0
548.0590	22.00	-2.64	28702.768	3.0	46943.910	2.0
548.0664	9.00	-2.35	117872.916	1.5	136113.810	1.5
548.0730	57.01	-1.33	17099.394	0.0	35345.139	0.0
548.0740	39.01	-1.41	13792.436	0.0	32038.147	0.0
548.0772	28.00	-2.29	31031.042	3.0	49271.578	3.0
548.0830	40.00	-2.09	5162.081	0.0	23407.493	0.0
548.0840	38.00	.51	18228.600	0.0	36473.978	0.0
548.0859	26.00	-1.54	34017.084	1.0	52257.330	0.0
548.0978	28.01	-4.64	117662.110	1.5	135901.960	2.5
548.0981	25.00	-4.97	41230.300	3.5	59470.140	3.5
548.1000	41.00	-.71	17905.969	0.0	36150.815	0.0
548.1038	24.00	-1.83	31377.960	4.0	49617.610	5.0
548.1095	23.01	-8.54	19112.930	4.0	37352.390	5.0
548.1126	26.02	-3.11	114325.350	5.0	132564.710	5.0
548.1160	73.00	-1.01	23229.366	0.0	41473.679	0.0
548.1213	23.01	-2.53	30613.970	4.0	48853.040	5.0
548.1220	92.01	-1.74	6371.944	0.0	24616.058	0.0
548.1240	26.01	-3.81	54904.500	3.5	73143.480	3.5
548.1252	24.00	-4.29	27728.870	2.0	45967.810	2.0
548.1258	24.00	-4.63	24299.890	2.0	42538.810	3.0
548.1339	25.00	-2.68	25285.430	4.5	43524.080	3.5
548.1396	25.00	-2.20	17451.520	2.5	35689.980	1.5
548.1419	26.00	-1.79	33801.555	2.0	52039.939	1.0
548.1420	45.00	.12	31859.720	0.0	50103.168	0.0
548.1428	22.00	-3.34	7255.369	2.0	25493.722	2.0
548.1429	22.00	-.60	19421.576	3.0	37659.927	3.0
548.1480	26.02	-3.42	205092.530	4.0	223330.710	3.0
548.1552	25.02	-3.63	115711.600	4.5	133949.540	4.5
548.1597	22.00	-4.32	29971.078	4.0	48208.870	3.0
548.1682	25.00	.58	44993.920	3.5	63231.430	4.5
548.1769	23.00	-4.44	32963.900	6.5	51201.120	6.5
548.1778	7.00	-3.65	96750.810	1.5	114988.000	.5
548.1778	7.00	-2.82	96750.810	1.5	114988.000	1.5
548.1778	7.00	-2.63	96750.810	1.5	114988.000	2.5
548.1850	76.00	-1.36	19761.092	0.0	38003.109	0.0
548.1866	22.00	-1.32	11531.760	2.0	29768.655	2.0
548.1868	22.00	-3.17	18061.540	1.0	36298.430	1.0
548.1937	21.00	.34	15041.980	3.5	33278.640	3.5
548.1940	70.00	-.58	24358.571	0.0	42600.288	0.0
548.1970	24.00	-4.30	31352.420	1.0	49586.970	1.0
548.1981	9.00	-3.10	117872.916	1.5	136109.430	.5
548.1991	18.01	-1.89	189040.870	1.5	207277.350	1.5
548.2010	64.00	-.87	10808.108	0.0	29049.592	0.0
548.2033	25.00	-3.39	25287.740	3.5	43524.080	3.5
548.2039	23.01	-3.68	19132.690	2.0	37369.010	2.0
548.2106	11.02	-2.25	399179.400	2.5	417415.500	1.5
548.2112	7.00	-2.42	96864.020	2.5	115100.100	2.5
548.2247	28.01	-1.62	100592.980	3.5	118828.610	2.5
548.2256	9.02	-1.71	440359.260	3.5	458594.860	2.5
548.2270	57.01	-3.04	0.000	0.0	18240.619	0.0
548.2276	26.00	-2.88	29320.050	1.0	47555.584	1.0
548.2412	23.00	-4.42	137.380	2.5	18372.460	3.5
548.2475	24.00	-4.21	24303.940	3.0	42538.810	3.0
548.2626	24.01	-4.90	31117.590	2.5	49351.960	2.5
548.2662	29.01	-4.26	115359.800	4.0	133594.050	3.0
548.2668	26.02	-3.36	205092.530	4.0	223326.760	4.0
548.2725	28.01	-3.13	115209.850	3.5	133443.890	2.5
548.2809	24.00	-3.93	31355.210	2.0	49588.970	1.0
548.2812	24.00	-3.16	31364.330	3.0	49598.080	2.0
548.3079	26.00	-1.85	33507.102	3.0	51739.964	2.0
548.3097	11.02	-3.22	399182.700	1.5	417415.500	1.5
548.3120	60.01	-2.00	7904.437	0.0	26142.229	0.0
548.3215	28.01	-1.10	119889.470	5.5	138121.880	4.5
548.3257	28.01	-4.13	116732.510	2.5	134964.780	1.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
548.3308	17.01	-3.22	161634.900	2.0	179867.000	1.0
548.3317	26.01	-4.07	66612.740	1.5	84844.810	2.5
548.3344	27.00	-2.19	13795.520	2.5	32027.500	3.5
548.3350	18.00	-2.13	107054.319	0.0	125286.280	1.0
548.3368	24.00	-5.00	35572.940	2.0	53804.840	3.0
548.3430	73.00	-.89	23229.366	0.0	41466.127	0.0
548.3484	17.00	-4.97	83364.927	.5	101596.440	.5
548.3490	41.00	-2.16	8630.355	0.0	26866.916	0.0
548.3497	15.01	-.69	105224.830	0.0	123456.300	1.0
548.3549	28.01	-4.14	100332.090	4.5	118563.390	3.5
548.3567	26.02	-1.29	186712.020	1.0	204943.260	2.0
548.3569	22.00	-4.83	27480.047	3.0	45711.280	4.0
548.3952	21.00	-1.30	18855.760	1.5	37085.720	.5
548.3955	27.00	-.49	29294.520	3.5	47524.470	4.5
548.3964	25.00	-1.26	44523.450	3.5	62753.370	2.5
548.4014	22.00	-3.38	29829.097	0.0	48058.850	1.0
548.4063	23.00	-4.87	23935.150	2.5	42164.740	3.5
548.4135	7.00	-4.58	96787.650	1.5	115017.000	.5
548.4135	7.00	-3.10	96787.650	1.5	115017.000	1.5
548.4211	22.00	-4.97	17423.853	2.0	35652.950	3.0
548.4230	45.00	.26	31859.720	0.0	50093.820	0.0
548.4244	28.01	-2.78	117972.470	3.5	136201.460	3.5
548.4298	24.00	-4.67	24286.540	1.0	42515.350	2.0
548.4307	18.01	-2.63	184191.710	.5	202420.490	.5
548.4320	44.00	-1.80	7985.094	0.0	26218.895	0.0
548.4551	25.00	-2.73	45060.810	3.5	63288.780	3.5
548.4596	25.01	-4.44	87941.080	4.0	106168.900	5.0
548.4611	21.00	.21	14926.240	2.5	33154.010	2.5
548.4619	17.00	-1.80	83364.927	.5	101592.670	.5
548.4638	25.02	-4.17	94850.660	1.5	113078.340	1.5
548.4640	44.00	-1.85	12743.888	0.0	30976.625	0.0
548.4755	24.00	-4.04	31393.400	5.0	49620.690	4.0
548.4800	3.01	-.03	476046.000	0.0	494278.205	0.0
548.4868	28.00	-3.56	40361.254	3.0	58588.168	3.0
548.4948	28.01	-3.28	112906.930	1.5	131133.580	2.5
548.4993	25.01	-3.49	49517.580	5.0	67744.080	6.0
548.5155	25.00	-3.32	41031.480	4.5	59257.440	4.5
548.5210	24.00	-2.46	33060.740	3.0	51286.520	2.0
548.5420	62.00	-1.12	0.000	0.0	18230.145	0.0
548.5517	26.02	-1.73	114339.950	4.0	132564.710	5.0
548.5682	24.00	-2.80	31393.400	5.0	49617.610	5.0
548.5685	17.01	-1.76	141350.000	3.0	159574.200	2.0
548.5700	60.01	-.75	10082.190	0.0	28311.404	0.0
548.5724	9.02	-4.35	426733.040	2.5	444957.110	1.5
548.5929	23.00	-4.30	14514.750	1.5	32738.140	1.5
548.6010	25.01	-4.09	87941.080	4.0	106164.200	4.0
548.6010	74.00	-.19	31295.118	0.0	49523.302	0.0
548.6076	22.00	-.15	27498.975	3.0	45721.878	4.0
548.6090	40.00	-2.19	5000.766	0.0	23228.684	0.0
548.6092	18.01	-2.06	190106.230	1.5	208329.080	.5
548.6120	38.00	-.31	18067.285	0.0	36295.104	0.0
548.6140	29.01	-2.91	120919.410	1.0	139142.100	2.0
548.6141	22.00	-4.22	29986.185	3.0	48208.870	3.0
548.6297	14.01	-2.87	101023.310	1.5	119245.480	.5
548.6378	23.03	-2.06	265879.200	2.0	284101.100	3.0
548.6387	28.01	-1.88	91800.050	4.5	110021.920	4.5
548.6482	18.00	-2.63	107131.755	1.0	125353.310	1.0
548.6513	24.00	-3.68	36577.730	4.0	54799.180	5.0
548.6559	26.00	-4.89	37157.546	2.0	55378.842	2.0
548.6643	26.00	-3.06	34636.820	2.0	52857.840	1.0
548.6874	26.01	-3.68	62125.660	1.5	80345.910	.5
548.6935	25.01	-3.64	89950.400	3.0	108170.450	2.0
548.6994	7.00	-4.25	97770.150	.5	115990.000	.5
548.6994	7.00	-3.02	97770.150	.5	115990.000	1.5
548.6995	23.01	-2.65	18269.490	1.0	36489.340	1.0
548.6998	24.00	-4.13	23933.900	4.0	42153.740	5.0
548.7020	92.01	-2.13	5726.684	0.0	23951.513	0.0
548.7030	60.01	-1.85	8307.725	0.0	26532.521	0.0
548.7145	26.00	-.92	35611.608	3.0	53830.960	3.0
548.7153	9.00	-1.83	117872.916	1.5	136092.240	2.5
548.7236	23.00	-1.28	14548.830	2.5	32767.880	1.5
548.7359	26.02	-1.51	188109.580	3.0	206328.220	3.0
548.7380	26.00	-4.05	37157.546	2.0	55376.117	1.0
548.7489	26.00	-2.67	29371.860	3.0	47590.070	4.0
548.7507	26.00	-2.43	33801.555	2.0	52019.706	1.0
548.7602	22.00	-1.80	27614.667	4.0	45832.500	5.0
548.7627	25.00	-4.32	45130.160	4.5	63347.910	4.5
548.7763	26.00	-.83	34843.980	6.0	53061.280	5.0
548.7780	74.00	-3.57	4758.794	0.0	22981.099	0.0
548.7876	9.00	-2.50	117872.916	1.5	136089.840	1.5
548.7889	27.00	-3.36	17233.680	3.5	35450.560	3.5
548.7901	26.02	-1.83	205092.530	4.0	223309.370	5.0
548.7907	23.00	-.06	19145.130	5.5	37361.950	4.5
548.7913	19.01	-1.43	194776.100	0.0	212992.900	1.0
548.8049	7.00	-2.64	96787.650	1.5	115004.000	2.5
548.8118	27.00	-.99	33945.900	2.5	52162.020	3.5
548.8120	26.00	-2.10	37162.729	3.0	55378.842	2.0
548.8210	22.00	-.74	19322.988	2.0	37538.804	2.0
548.8362	24.00	-.55	35862.820	4.0	54078.130	5.0
548.8362	26.02	-4.80	188109.580	3.0	206324.890	2.0
548.8400	18.00	-3.03	105617.315	2.0	123832.500	3.0
548.8480	27.00	-1.36	28470.510	1.5	46685.430	1.5
548.8630	90.01	-3.38	0.000	0.0	18219.483	0.0
548.8650	63.00	-.26	12824.546	0.0	31043.962	0.0
548.8670	42.00	-.79	27181.584	0.0	45400.934	0.0
548.8983	14.00	-.53	45276.188	1.0	63489.440	2.0
548.9268	22.00	-3.73	27498.975	3.0	45711.280	4.0
548.9300	17.01	-3.54	161654.800	1.0	179867.000	1.0
548.9586	15.00	-4.69	56090.450	1.5	74301.700	2.5
548.9655	25.02	-.98	176683.760	2.5	194894.780	1.5
548.9664	27.00	-.22	32841.990	4.5	51052.980	3.5
548.9755	26.02	-1.17	186791.780	2.0	205002.470	3.0
548.9832	26.00	-2.00	35856.386	2.0	54066.821	2.0
548.9868	22.00	.04	27750.124	5.0	45960.439	6.0
548.9890	28.01	-2.52	118379.110	2.5	136589.350	3.5
548.9930	23.00	-1.44	14514.750	1.5	32724.860	.5
549.0010	22.00	-4.64	27480.047	3.0	45689.890	3.0
549.0032	24.00	-4.21	28637.000	3.0	46846.770	3.0
549.0038	24.00	-4.18	20520.920	3.0	38730.670	2.0
549.0099	26.02	-1.20	186882.980	3.0	205092.530	4.0
549.0103	18.00	-2.03	105617.315	2.0	123826.850	2.0
549.0108	25.00	-4.12	44496.290	2.5	62905.810	2.5
549.0150	22.00	-.89	11776.806	4.0	29986.185	3.0
549.0280	42.00	-1.18	20809.640	0.0	39023.647	0.0
549.0319	23.00	-2.35	21032.520	3.5	39241.340	2.5
549.0355	24.00	-2.00	31364.330	3.0	49573.030	4.0
549.0400	28.01	-1.58	119913.330	4.5	138121.880	4.5
549.0641	22.01	-2.75	12628.770	1.5	30836.520	1.5
549.0671	18.01	-.47	191169.520	1.5	209377.170	2.5
549.0687	24.00	-3.77	35870.530	4.0	54078.130	5.0
549.0702	22.00	-4.63	17369.590	1.0	35577.140	2.0
549.0726	24.00	-2.86	37244.170	4.0	55451.640	3.0
549.0832	22.00	-3.08	386.874	4.0	18593.990	3.0
549.0904	23.00	-2.22	19078.150	3.5	37285.030	4.5
549.0937	24.00	-2.64	33040.100	2.0	51246.870	1.0
549.1000	21.01	-3.25	39344.900	2.0	57551.460	1.0
549.1060	41.00	-.90	20325.695	0.0	38537.115	0.0
549.1070	57.00	-1.25	6936.547	0.0	25147.934	0.0
549.1169	23.00	-4.56	14949.300	4.5	33155.300	4.5
549.1373	9.00	-2.21	117872.916	1.5	136078.240	2.5
549.1486	25.01	-4.58	53805.800	4.0	72010.750	4.0
549.1591	24.01	-4.58	54444.190	3.5	72648.790	3.5
549.1597	28.01	-4.38	99559.330	2.5	117765.910	1.5
549.1818	26.00	-2.12	33765.291	2.0	51969.140	3.0
549.1887	29.01	-4.14	110365.980	2.0	128569.600	2.0
549.1892	22.00	-2.99	29855.248	1.0	48058.850	1.0
549.2017	23.00	-2.73	15103.770	4.5	33306.960	4.5
549.2044	28.01	-4.20	118563.390	3.5	136766.490	2.5
549.2075	18.00	-2.37	107131.755	1.0	125334.750	0.0
549.2119	7.00	-2.65	97770.150	.5	115973.000	1.5
549.2128	23.01	-3.86	19166.190	1.0	37369.010	2.0
549.2170	42.00	-1.32	21454.900	0.0	39662.639	0.0
549.2320	74.00	.30	29601.310	0.0	47808.552	0.0
549.2436	22.03	-.05	212395.800	.5	230597.600	.5
549.2457	25.02	-.05	174464.070	4.5	192665.800	4.5
549.2548	27.00	-2.64	28470.510	1.5	46671.940	2.5
549.2654	22.00	-4.20	8602.340	2.0	26803.417	2.0
549.2813	22.01	-3.06	12758.150	2.5	30958.700	2.5
549.2874	7.00	-4.88	96787.650	1.5	114988.000	.5
549.2874	7.00	-3.34	96787.650	1.5	114988.000	1.5
549.2874	7.00	-2.88	96787.650	1.5	114988.000	2.5
549.2935	22.00	-3.33	29907.273	2.0	48107.420	2.0
549.2970	92.01	-2.17	0.000	0.0	18205.088	0.0
549.2979	12.02	-1.93	546531.600	1.0	564731.600	1.0
549.3002	22.00	-4.48	29986.185	3.0	48186.110	4.0
549.3040	24.00	-3.45	24093.160	2.0	42292.960	1.0
549.3109	28.01	-3.60	115956.710	2.5	134156.280	1.5
549.3170	39.00	-.90	14840.984	0.0	33045.409	0.0
549.3224	7.00	-3.78	96750.810	1.5	114950.000	.5
549.3224	7.00	-3.75	96750.810	1.5	114950.000	1.5
549.3233	7.01	-3.61	168892.210	1.0	187091.370	2.0
549.3248	20.02	-2.85	341601.460	2.0	359800.570	3.0
549.3311	30.02	-.44	220006.600	1.0	238205.500	1.0
549.3340	26.00	-3.00	29356.780	2.0	47555.584	1.0
549.3420	64.00	-1.23	7904.437	0.0	26108.033	0.0
549.3447	26.01	-3.24	66672.390	3.5	84870.840	2.5
549.3447	29.01	-3.42	120684.550	3.0	138883.000	4.0
549.3450	57.01	-3.14	967.890	0.0	19171.387	0.0
549.3480	26.00	-2.06	33095.922	4.0	51294.262	3.0
549.3518	18.00	-4.16	105617.315	2.0	123815.530	1.0
549.3559	23.00	-4.92	0.000	1.5	18198.080	2.5
549.3598	26.00	-2.83	33507.102	3.0	51705.052	2.0
549.3720	62.00	-.47	806.575	0.0	19009.177	0.0
549.3751	22.00	-4.89	21588.496	4.0	39785.940	4.0
549.3800	42.00	-.04	31456.433	0.0	49658.770	0.0
549.3811	26.00	-2.73	34017.084	1.0	52214.330	1.0
549.3846	23.00	-4.41	17181.980	4.5	35379.110	3.5
549.3876	14.00	-.62	45293.629	2.0	63490.660	3.0
549.4021	26.02	-1.52	186998.600	4.0	205195.150	5.0
549.4057	24.00	-3.69	28682.180	2.0	46878.610	3.0
549.4111	28.01	-3.76	112906.930	1.5	131103.180	2.5
549.4154	10.01	-2.60	303237.910	1.5	321434.020	1.5
549.4169	24.00	-3.63	24056.110	5.0	42252.170	6.0
549.4187	17.01	-2.13	161671.000	0.0	179867.000	1.0
549.4244	14.00	-1.28	45293.629	2.0	63489.440	2.0
549.4247	28.02	-3.92	97996.300	3.0	116192.100	4.0
549.4347	23.01	-3.17	18293.870	2.0	36489.340	1.0
549.4407	22.00	-3.04	18145.400	2.0	36340.670	2.0
549.4416	10.00	-2.22	150772.112	1.0	168967.353	1.0
549.4441	22.00	-3.55	29912.262	3.0	48107.420	2.0
549.4444	26.00	-1.66	32873.623	4.0	51068.770	5.0
549.4456	26.02	-.93	186712.020	1.0	204907.130	1.0
549.4468	24.00	-2.68	31377.960	4.0	49573.030	4.0
549.4482	28.00	-4.18	30979.789	4.0	49174.811	4.0
549.4675	14.00	-1.60	45293.629	2.0	63488.010	3.0
549.4679	28.01	-4.38	114836.630	3.5	133031.000	4.5
549.4709	22.00	-3.67	11776.806	4.0	29971.078	4.0
549.4780	73.00	-3.01	5968.656	0.0	24167.747	0.0
549.4790	15.01	-2.82	112607.700	2.0	130801.700	1.0
549.4872	24.00	-2.19	35884.400	5.0	54078.130	5.0
549.4876	28.00	-.88	33112.368	3.0	51306.085	3.0
549.4948	7.00	-3.67	96864.020	2.5	115057.500	1.5
549.5035	26.02	-3.28	188131.700	1.0	206324.890	2.0
549.5117	29.01	-2.30	110365.980	2.0	128558.900	3.0
549.5117	25.02	-.89	177269.340	1.5	195462.260	.5
549.5183	22.00	-4.69	29914.720	3.0	48107.420	2.0
549.5200	63.00	-.69	12824.546	0.0	31022.246	0.0
549.5232	23.01	-4.31	54715.630	2.0	72906.170	3.0
549.5590	39.00	-.96	15970.189	0.0	34166.597	0.0
549.5611	18.00	-3.68	105617.315	2.0	123808.600	2.0
549.5639	7.00	-2.72	96750.810	1.5	114942.000	2.5
549.5670	27.00	-1.10	27497.060	2.5	45688.150	2.5
549.5868	18.00	-1.31	105462.804	3.0	123653.238	4.0
549.5912	27.00	-3.18	36092.440	2.5	54282.730	2.5
549.5915	25.00	.23	44288.760	4.5	62479.040	4.5
549.5936	28.01	-.91	108548.610	1.5	126738.620	1.5
549.5960	9.02	-1.98	440202.480	2.5	458392.610	1.5
549.5987	23.00	-3.75	323.420	3.5	18513.460	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
549.6087	28.01	-4.01	98122.630	.5	116312.340	1.5
549.6130	90.00	-2.23	5484.711	0.0	23679.332	0.0
549.6147	25.00	-4.02	33825.490	2.5	52015.000	1.5
549.6147	25.00	-4.45	33825.490	2.5	52015.000	3.5
549.6196	28.01	-4.96	116191.470	2.5	134380.820	3.5
549.6208	23.00	-4.57	14548.830	2.5	32738.140	1.5
549.6240	74.00	-1.41	22342.133	0.0	40536.389	0.0
549.6298	28.01	-3.25	104081.040	4.5	122270.050	3.5
549.6430	92.00	-1.42	4194.191	0.0	22387.819	0.0
549.6474	24.01	-4.09	47354.630	2.5	65543.060	3.5
549.6487	26.00	-4.06	28819.966	5.0	47008.351	5.0
549.6501	26.01	-3.59	66522.320	2.5	84710.660	3.5
549.6547	26.00	-1.29	39625.784	4.0	57813.970	3.0
549.6567	18.01	-1.88	186890.950	2.5	205079.070	2.5
549.6664	23.03	-1.17	265271.600	3.0	283459.400	3.0
549.6690	44.00	-.81	19922.407	0.0	38115.174	0.0
549.6691	18.01	-1.55	190507.360	1.5	208695.070	1.5
549.6791	23.00	-2.08	19023.470	4.5	37210.850	5.5
549.6818	28.01	-1.04	117074.700	3.5	135261.950	4.5
549.6851	29.01	-2.50	115639.020	2.0	133826.200	2.0
549.6879	24.00	-3.60	24200.230	6.0	42387.320	7.0
549.6940	42.00	-1.19	23955.283	0.0	42147.223	0.0
549.7060	26.02	-1.91	188109.320	0.0	206295.810	1.0
549.7124	18.01	-.47	191012.350	1.5	209198.630	2.5
549.7300	72.00	-.09	29601.310	0.0	47792.058	0.0
549.7335	26.02	-2.33	188142.640	2.0	206328.220	3.0
549.7392	25.00	-1.49	34938.700	4.5	53124.090	3.5
549.7410	39.01	-.97	14034.408	0.0	32224.792	0.0
549.7453	7.00	-1.91	97805.810	1.5	115991.000	2.5
549.7520	26.00	-2.91	8154.713	1.0	26339.682	2.0
549.7634	23.00	-4.43	26505.880	2.5	44690.470	3.5
549.7707	26.01	-3.04	54870.620	2.5	73054.970	2.5
549.7756	7.00	-4.58	97805.810	1.5	115990.000	.5
549.7756	7.00	-3.37	97805.810	1.5	115990.000	1.5
549.7756	7.00	-3.51	97805.810	1.5	115990.000	2.5
549.7849	18.01	-2.17	190511.190	2.5	208695.070	1.5
549.7870	26.00	-4.81	22946.810	1.0	41130.620	1.0
549.7876	24.01	-4.12	30307.600	1.5	48491.390	2.5
549.7934	17.02	-1.24	185838.000	1.5	204021.600	.5
549.7955	22.00	-3.55	7255.369	2.0	25438.898	2.0
549.8061	24.01	-4.98	31168.780	3.5	49351.960	2.5
549.8181	10.01	-2.02	303237.910	1.5	321420.690	2.5
549.8184	18.01	-4.15	172829.580	1.5	191012.350	1.5
549.8188	26.01	-6.07	20830.520	2.5	39013.280	1.5
549.8198	9.00	-2.15	118405.267	.5	136587.990	1.5
549.8210	62.00	-1.00	241.973	0.0	18429.710	0.0
549.8266	10.01	-3.10	303237.910	1.5	321420.410	1.5
549.8342	26.02	-2.46	188142.640	2.0	206324.890	2.0
549.8490	42.00	-.94	23551.996	0.0	41738.807	0.0
549.8614	15.00	-3.74	56090.450	1.5	74271.800	1.5
549.8750	64.00	-1.19	7420.492	0.0	25606.443	0.0
549.8932	22.00	-4.96	27887.740	3.0	46068.040	4.0
549.8983	18.01	-1.94	186815.960	3.5	204996.090	3.5
549.9022	17.01	-3.38	159574.200	2.0	177754.200	1.0
549.9025	18.00	-4.79	104102.144	1.0	122282.134	2.0
549.9134	24.00	-4.18	31393.400	5.0	49573.030	4.0
549.9260	90.00	-2.11	2500.383	0.0	20684.648	0.0
549.9319	23.00	-4.09	23935.150	2.5	42114.170	3.5
549.9403	28.00	-2.92	30979.789	4.0	49158.529	5.0
549.9440	73.00	-1.72	13227.833	0.0	31411.503	0.0
549.9530	41.00	-3.08	1532.493	0.0	19715.865	0.0
549.9577	26.00	-3.66	36079.353	3.0	54257.520	2.0
549.9691	15.01	-.20	87125.400	2.0	105303.190	1.0
549.9724	25.02	-.98	173835.070	.5	192012.750	1.5
549.9780	28.00	-2.80	43654.974	3.0	61832.470	4.0
549.9970	64.00	-.51	11775.998	0.0	29957.915	0.0
549.9978	24.00	-2.78	39158.630	4.0	57335.470	4.0
550.0178	24.01	-3.50	50667.330	3.5	68843.510	3.5
550.0332	18.01	-4.11	172335.520	2.5	190511.190	2.5
550.0372	25.02	-2.72	115774.000	3.5	133949.540	4.5
550.0430	64.01	-1.39	10969.423	0.0	29149.820	0.0
550.0505	12.02	-1.58	564664.600	2.0	582839.700	3.0
550.0505	12.02	-1.58	564664.600	2.0	582839.700	3.0
550.0510	74.00	-1.29	19680.435	0.0	37860.567	0.0
550.0680	23.01	-4.28	32299.240	1.0	50473.760	1.0
550.0680	73.00	-3.07	5968.656	0.0	24148.227	0.0
550.0690	92.00	-.86	11453.368	0.0	29632.905	0.0
550.0820	23.00	-4.09	0.000	1.5	18174.060	1.5
550.0830	63.00	-.80	15808.874	0.0	33987.949	0.0
550.0847	28.01	-3.50	111120.540	1.5	129294.510	2.5
550.1020	44.00	.12	30165.913	0.0	48344.360	0.0
550.1028	9.00	-3.57	115917.909	2.5	134091.280	1.5
550.1132	6.00	-3.75	71352.510	0.0	89525.540	1.0
550.1171	29.01	-4.26	130386.400	2.0	148559.300	2.0
550.1189	25.01	-2.00	52373.180	3.0	70546.020	4.0
550.1340	57.00	-.85	0.000	0.0	18177.390	0.0
550.1469	26.00	-3.10	7728.058	3.0	25899.974	4.0
550.1470	60.00	-1.26	0.000	0.0	18176.960	0.0
550.1486	27.00	-4.79	15774.040	1.5	33945.900	2.5
550.1492	18.01	-3.70	172335.520	2.5	190507.360	1.5
550.1540	42.00	-1.08	20245.038	0.0	38421.767	0.0
550.1622	20.02	-.73	341349.190	1.0	359520.600	2.0
550.1833	10.01	-2.61	303237.910	1.5	321408.620	2.5
550.1837	23.00	-2.54	19145.130	5.5	37315.830	5.5
550.1870	42.00	-1.33	20809.640	0.0	38985.278	0.0
550.1930	90.01	-2.92	6210.629	0.0	24386.069	0.0
550.2025	24.01	-2.31	33619.130	4.5	51789.210	3.5
550.2112	28.01	-2.91	115785.060	1.5	133954.850	.5
550.2120	40.00	-1.18	7985.094	0.0	26159.907	0.0
550.2200	18.02	-2.16	207233.090	2.0	225402.590	3.0
550.2250	57.00	-.89	9840.217	0.0	28014.600	0.0
550.2267	28.01	-3.10	115565.980	2.5	133735.260	2.5
550.2323	28.00	-3.51	40361.254	3.0	58530.350	3.0
550.2352	28.01	-3.40	115565.980	2.5	133734.980	3.5
550.2397	28.01	-3.98	112906.930	1.5	131075.780	1.5
550.2408	14.00	-1.41	45321.848	3.0	63490.660	3.0
550.2485	28.01	-.38	103025.580	2.5	121194.140	2.5
550.2670	57.00	-1.84	3468.273	0.0	21641.269	0.0
550.2772	26.00	-4.93	29798.960	4.0	47966.571	3.0
550.2778	14.00	-2.70	45321.848	3.0	63489.440	2.0
550.2900	7.00	-3.00	97805.810	1.5	115973.000	1.5
550.2938	14.00	-2.51	45321.848	3.0	63488.910	4.0
550.2954	26.02	-.99	188013.400	4.0	206180.410	3.0
550.2987	13.01	-2.00	124792.000	2.0	142958.900	1.0
550.3005	9.00	-2.35	115917.909	2.5	134084.750	2.5
550.3036	28.01	-.79	103025.580	2.5	121192.320	3.5
550.3160	24.01	-2.81	33418.110	2.5	51584.440	1.5
550.3166	27.00	-1.06	36092.440	2.5	54258.750	2.5
550.3211	14.00	-2.37	45321.848	3.0	63488.010	3.0
550.3272	18.01	-.70	190507.360	1.5	208673.320	2.5
550.3450	39.00	-.09	15728.216	0.0	33898.636	0.0
550.3450	74.00	-1.88	14840.984	0.0	33011.404	0.0
550.3460	25.02	-.37	176683.760	2.5	194849.100	1.5
550.3481	18.01	-3.12	186890.950	2.5	205056.220	1.5
550.3597	23.00	-4.71	137.380	2.5	18302.270	3.5
550.3687	24.00	-4.28	28682.180	2.0	46846.770	3.0
550.3712	24.00	-2.28	31355.210	2.0	49519.720	3.0
550.3810	57.00	-1.06	4032.876	0.0	22202.108	0.0
550.3833	26.02	-2.37	188131.700	1.0	206295.810	1.0
550.3865	22.00	-3.92	24694.895	4.0	42858.900	3.0
550.3897	22.00	-.41	20795.599	5.0	38959.499	4.0
550.4088	28.00	-2.02	30922.763	5.0	49086.030	4.0
550.4118	18.01	-3.49	183985.940	1.5	202149.110	2.5
550.4124	23.01	-4.77	34228.790	3.0	52391.940	3.0
550.4150	92.01	-1.98	6371.944	0.0	24540.054	0.0
550.4170	38.00	.19	18067.285	0.0	36235.329	0.0
550.4218	26.01	-4.14	66522.320	2.5	84685.160	3.5
550.4218	25.00	-2.49	25265.740	5.5	43428.580	4.5
550.4300	90.00	-1.72	7178.519	0.0	25346.133	0.0
550.4366	7.00	-2.44	96787.650	1.5	114950.000	.5
550.4366	7.00	-3.27	96787.650	1.5	114950.000	1.5
550.4370	26.00	-3.35	28819.966	5.0	46982.302	6.0
550.4381	25.01	-3.46	52383.720	4.0	70546.020	4.0
550.4433	18.01	-1.92	190511.190	2.5	208673.320	2.5
550.4503	9.01	-3.93	235150.580	2.0	253312.480	1.0
550.4515	6.00	-4.90	64089.850	1.0	82251.710	0.0
550.4580	41.00	-2.62	2097.096	0.0	20263.786	0.0
550.4585	18.01	-3.12	186815.960	3.5	204977.590	2.5
550.4650	45.00	.02	31859.720	0.0	50026.179	0.0
550.4809	23.01	-6.21	19191.500	6.0	37352.390	5.0
550.4836	29.01	-3.16	115665.400	1.0	133826.200	2.0
550.4845	23.00	-.98	13801.530	1.5	31962.300	.5
550.4860	25.00	-4.54	44978.980	1.5	63139.700	2.5
550.5028	9.00	-2.84	118427.823	1.5	136587.990	1.5
550.5048	24.00	-3.84	31377.960	4.0	49538.060	5.0
550.5127	24.01	-4.72	69506.160	3.5	87666.000	2.5
550.5236	24.00	-2.97	44514.440	7.0	62673.920	6.0
550.5312	26.01	-2.97	61726.090	3.5	79885.320	2.5
550.5436	24.00	-4.66	36577.730	4.0	54736.550	4.0
550.5497	25.00	-2.56	45130.160	4.5	63288.780	5.5
550.5497	25.00	-4.72	45130.160	4.5	63288.780	3.5
550.5500	70.00	-.73	24358.571	0.0	42522.226	0.0
550.5633	22.00	-4.04	17369.590	1.0	35527.760	1.0
550.5660	73.00	-2.53	9920.875	0.0	28084.002	0.0
550.5731	26.00	-1.60	36079.353	3.0	54237.200	4.0
550.5767	25.01	-3.02	86897.700	3.0	105055.430	2.0
550.5836	6.00	-2.77	71364.900	1.0	89522.400	2.0
550.5858	23.00	-1.41	19023.470	4.5	37180.900	4.5
550.5860	6.00	-3.74	69689.480	1.0	87846.900	0.0
550.5863	26.00	-1.93	35611.608	3.0	53769.020	4.0
550.5876	25.00	-2.49	17568.480	1.5	35725.850	2.5
550.5973	28.01	-2.46	97799.660	1.5	115956.710	2.5
550.6000	57.00	-1.81	0.000	0.0	18162.005	0.0
550.6012	28.01	-3.95	112906.930	1.5	131063.850	.5
550.6032	28.00	-4.01	40361.254	3.0	58518.110	4.0
550.6067	27.00	-4.33	16195.680	.5	34354.420	1.5
550.6101	9.00	-1.69	118427.823	1.5	136584.450	2.5
550.6108	18.00	-1.46	105617.315	2.0	123773.920	3.0
550.6140	24.00	-.94	44534.460	4.0	62690.960	5.0
550.6229	7.00	-4.40	94770.850	.5	112927.055	1.5
550.6476	24.00	-3.00	31364.330	3.0	49519.720	3.0
550.6490	42.01	-.05	10646.793	0.0	28807.182	0.0
550.6619	28.01	-2.02	101754.800	2.5	119909.720	1.5
550.6714	22.00	-2.71	27750.124	5.0	45904.730	6.0
550.6739	18.00	-3.00	107131.755	1.0	125286.280	1.0
550.6758	23.00	-3.58	15000.840	5.5	33155.300	4.5
550.6767	6.00	-4.16	69689.480	1.0	87843.910	1.0
550.6782	26.00	-2.86	7985.783	2.0	26140.164	3.0
550.7086	23.00	-2.86	19189.280	1.5	37342.660	2.5
550.7114	22.00	-3.89	17423.853	2.0	35577.140	2.0
550.7150	26.02	-2.55	188142.640	2.0	206295.810	1.0
550.7168	15.01	-.94	105303.190	1.0	123456.300	1.0
550.7192	22.00	-4.88	18145.400	2.0	36298.430	1.0
550.7207	28.01	.02	103025.580	2.5	121178.560	3.5
550.7338	26.01	-4.88	54902.420	1.5	73054.970	2.5
550.7339	22.00	-4.50	29907.273	2.0	48059.820	3.0
550.7341	10.00	-2.91	150772.112	1.0	168924.651	2.0
550.7353	29.01	-2.42	117883.140	4.0	136035.640	3.0
550.7399	7.00	-3.00	94793.460	1.5	112945.809	2.5
550.7420	24.00	-4.37	24286.540	1.0	42436.820	2.0
550.7550	25.01	-3.55	89950.400	3.0	108102.250	3.0
550.7581	26.02	-2.08	188109.580	3.0	206261.330	4.0
550.7633	22.00	-3.67	29907.273	2.0	48058.850	1.0
550.7663	26.02	-.91	186791.780	2.0	204943.260	2.0
550.7684	28.01	-4.61	118809.340	1.5	136960.750	2.5
550.7687	23.00	-1.12	13810.900	.5	31962.300	.5
550.7744	23.00	-.18	19023.470	4.5	37174.680	3.5
550.7757	18.01	-4.74	191974.530	1.5	210125.700	2.5
550.7870	40.00	-.82	16938.079	0.0	35093.916	0.0
550.7954	26.01	-3.39	66377.370	3.5	84527.890	4.5
550.7969	26.01	-3.71	54904.500	3.5	73054.970	2.5
550.8242	26.01	-3.66	54063.530	.5	72213.100	.5
550.8288	8.02	-.62	306584.800	2.0	324734.220	2.0
550.8385	27.00	-.73	33945.900	2.5	52095.000	3.5
550.8400	60.01	-1.83	6855.889	0.0	25009.981	0.0
550.8455	25.02	-.73	174243.330	3.5	192392.200	3.5
550.8506	27.02	-3.20	155702.400	1.5	173851.100	.5
550.8506	27.02	-3.20	155702.400	1.5	173851.100	.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
550.8561	24.01	-2.55	33521.230	3.5	51669.750	2.5
550.8609	27.00	-4.07	29216.370	2.5	47364.730	1.5
550.8616	23.00	-.77	19026.340	2.5	37174.680	3.5
550.8630	74.00	-1.66	20325.695	0.0	38479.029	0.0
550.8853	22.00	-4.73	29912.262	3.0	48059.820	3.0
550.8959	27.00	-3.59	36329.860	2.5	54477.070	3.5
550.9120	41.00	-1.64	13308.491	0.0	31460.210	0.0
550.9150	59.01	-2.02	3871.561	0.0	22023.181	0.0
550.9205	23.03	-.34	236322.400	2.0	254468.800	2.0
550.9262	28.01	-4.09	115827.120	3.5	133973.330	2.5
550.9268	28.01	-1.75	121862.570	3.5	140008.760	3.5
550.9330	76.00	.06	30407.885	0.0	48558.912	0.0
550.9414	26.01	-4.50	54870.620	2.5	73016.330	3.5
550.9459	28.01	-3.12	109846.000	3.5	127991.560	3.5
550.9460	28.00	-3.82	40484.282	2.0	58629.840	2.0
550.9468	6.00	-2.80	71364.900	1.0	89510.430	2.0
550.9475	23.00	-6.54	14514.750	1.5	32660.260	2.5
550.9597	12.00	-3.09	41197.403	1.0	59342.510	0.0
550.9597	12.00	-2.61	41197.403	1.0	59342.510	1.0
550.9597	12.00	-2.39	41197.403	1.0	59342.510	2.0
550.9650	16.01	-.10	109831.280	1.5	127976.210	1.5
550.9659	15.00	-4.65	57876.700	.5	76021.600	1.5
550.9733	24.00	-3.39	31393.400	5.0	49538.060	5.0
550.9769	25.01	-3.42	52373.180	3.0	70517.720	3.0
550.9854	26.02	-.70	182379.860	5.0	200524.120	5.0
550.9900	24.00	-1.37	35934.020	6.0	54078.130	5.0
550.9900	39.01	-1.69	7904.437	0.0	26053.587	0.0
550.9967	28.01	-4.95	104646.520	3.5	122790.410	4.5
550.9990	90.00	-1.14	9759.560	0.0	27908.413	0.0
551.0003	28.00	-1.18	31031.042	3.0	49174.811	4.0
551.0055	28.01	-3.11	121862.570	3.5	140006.170	4.5
551.0055	25.01	-1.86	52383.720	4.0	70527.320	5.0
551.0082	18.01	-.98	190106.230	1.5	208249.740	1.5
551.0120	72.00	-3.73	0.000	0.0	18148.425	0.0
551.0158	23.00	-4.50	14548.830	2.5	32692.090	3.5
551.0191	25.00	-3.30	25285.430	4.5	43428.580	4.5
551.0218	6.00	-4.39	69689.480	1.0	87832.540	2.0
551.0219	26.01	-6.98	20516.980	2.5	38660.040	3.5
551.0234	24.00	-2.89	27500.370	3.0	45643.380	3.0
551.0234	28.01	-3.13	115592.250	1.5	133735.260	2.5
551.0450	72.00	-1.48	18228.600	0.0	36375.938	0.0
551.0520	63.00	-.13	13953.751	0.0	32100.859	0.0
551.0607	22.00	-3.13	27614.667	4.0	45756.450	5.0
551.0613	24.00	-2.42	31377.960	4.0	49519.720	3.0
551.0680	24.01	-2.76	30864.610	2.5	49006.150	1.5
551.0710	44.00	-1.07	12098.628	0.0	30245.110	0.0
551.0844	28.01	-3.55	100490.950	1.5	118631.950	.5
551.0893	25.00	-4.64	25287.740	3.5	43428.580	4.5
551.0938	6.00	-3.54	69689.480	1.0	87830.170	1.0
551.0939	28.01	-4.55	116145.690	3.5	134286.380	4.5
551.1090	62.00	-1.20	2258.411	0.0	20403.642	0.0
551.1100	6.00	-4.36	71385.380	2.0	89525.540	1.0
551.1154	7.00	-3.82	96864.020	2.5	115004.000	2.5
551.1154	7.00	-2.47	96864.020	2.5	115004.000	3.5
551.1179	23.00	-1.91	19145.130	5.5	37285.030	4.5
551.1200	25.02	-.53	174436.590	2.5	192576.420	2.5
551.1306	24.00	-3.73	35501.260	3.0	53640.740	3.0
551.1394	7.00	-2.82	96750.810	1.5	114890.000	1.5
551.1397	28.01	-4.19	98122.630	.5	116261.810	.5
551.1431	24.01	-2.36	66355.130	1.5	84494.200	2.5
551.1473	24.00	-4.01	24299.890	2.0	42438.820	2.0
551.1490	42.00	-1.30	23551.996	0.0	41695.910	0.0
551.1490	92.00	-1.75	564.603	0.0	18708.517	0.0
551.1653	25.01	-2.16	52379.380	2.0	70517.720	3.0
551.1687	7.00	-2.02	94770.850	.5	112909.076	1.5
551.1741	28.01	-4.43	117763.910	1.5	135901.960	2.5
551.1756	30.02	-.29	284689.000	1.0	302827.000	2.0
551.1768	22.00	-.50	20062.980	1.0	38200.940	0.0
551.1782	22.00	-3.64	11776.806	4.0	29914.720	3.0
551.1841	25.00	-.52	44288.760	4.5	62426.480	3.5
551.2029	24.00	-2.60	27597.220	3.0	45734.320	2.0
551.2054	6.00	-2.73	71385.380	2.0	89522.400	2.0
551.2056	26.00	-4.01	26623.726	2.0	44760.739	1.0
551.2090	58.01	-.49	8065.752	0.0	26207.691	0.0
551.2100	62.00	-.94	806.575	0.0	18948.481	0.0
551.2108	28.01	-3.10	103663.500	1.5	121800.340	1.5
551.2111	27.00	-9.31	8460.810	2.5	26597.640	1.5
551.2200	24.00	-1.43	44534.460	4.0	62671.000	4.0
551.2240	26.00	-.99	35257.309	4.0	53393.715	4.0
551.2294	28.01	-1.08	103025.580	2.5	121161.810	1.5
551.2364	16.05	.24	504112.000	.5	522248.000	1.5
551.2370	44.00	.29	30085.255	0.0	48226.272	0.0
551.2382	26.00	-1.84	35611.608	3.0	53747.547	3.0
551.2529	22.00	-.18	11776.806	4.0	29912.262	3.0
551.2628	25.00	-2.38	44978.980	1.5	63114.110	1.5
551.2629	18.01	-1.70	186815.960	3.5	204951.090	3.5
551.2698	23.00	-4.52	23935.150	2.5	42070.050	2.5
551.2704	24.00	-2.41	24303.940	3.0	42438.820	2.0
551.2783	29.01	-2.38	120684.550	3.0	138819.170	3.0
551.2789	26.02	-2.96	182379.860	5.0	200516.460	4.0
551.2988	17.00	-3.51	82918.893	2.5	101052.840	2.5
551.3029	22.00	-4.53	17369.590	1.0	35503.400	0.0
551.3047	6.00	-4.01	71385.380	2.0	89519.130	3.0
551.3094	7.00	-2.45	94793.460	1.5	112927.055	1.5
551.3110	58.01	-1.38	11372.710	0.0	29511.292	0.0
551.3199	6.00	-3.30	69710.660	2.0	87843.910	1.0
551.3230	7.00	-2.44	94770.850	.5	112904.000	.5
551.3275	12.02	-1.14	546531.600	1.0	564664.600	2.0
551.3300	18.01	-1.66	190196.160	.5	208329.080	.5
551.3315	24.01	-4.48	45669.540	1.5	63802.410	.5
551.3537	28.01	-4.47	118828.610	2.5	136960.750	2.5
551.3640	39.00	-.83	15405.586	0.0	33542.425	0.0
551.3695	28.00	-4.44	36600.805	2.0	54732.425	2.0
551.3698	26.02	-3.87	205195.150	5.0	223326.760	4.0
551.3787	24.00	-.95	46704.980	5.0	64836.300	6.0
551.3877	26.00	-3.66	29798.960	4.0	47929.981	4.0
551.3939	28.01	-4.29	99442.860	4.5	117573.680	4.5
551.4060	25.00	-3.80	41230.300	3.5	59360.720	2.5
551.4203	21.00	.33	14926.240	2.5	33056.190	3.5
551.4349	22.00	-.57	11531.760	2.0	29661.232	1.0
551.4374	24.00	-4.21	33934.880	3.0	52064.270	4.0
551.4462	24.01	-3.08	52298.120	3.5	70427.220	3.5
551.4537	22.00	-.46	11639.804	3.0	29768.655	2.0
551.4647	23.00	-4.94	32897.810	5.5	51026.300	5.5
551.4700	74.00	-2.41	3306.958	0.0	21440.311	0.0
551.4791	28.00	-4.28	31031.042	3.0	49159.060	2.0
551.4948	24.00	-2.05	44534.460	4.0	62661.960	3.0
551.5070	23.00	-3.31	553.020	4.5	18680.120	5.5
551.5183	23.01	-4.80	19132.690	2.0	37259.420	1.0
551.5255	17.00	-2.44	82918.893	2.5	101045.386	1.5
551.5268	28.01	-4.37	116838.330	1.5	134964.780	1.5
551.5280	57.00	-1.02	7420.492	0.0	25551.938	0.0
551.5323	23.00	-4.24	0.000	1.5	18126.270	1.5
551.5359	25.00	-2.85	45013.550	2.5	63139.700	2.5
551.5365	21.00	-3.61	15672.550	1.5	33798.680	2.5
551.5400	66.01	-2.41	4274.849	0.0	22405.900	0.0
551.5471	22.00	-3.69	30060.328	4.0	48186.110	4.0
551.5551	6.00	-2.34	71385.380	2.0	89510.900	3.0
551.5585	20.02	-1.80	328606.780	2.0	346732.190	1.0
551.5694	6.00	-3.91	71385.380	2.0	89510.430	2.0
551.5840	28.01	-4.73	118774.760	.5	136899.330	1.5
551.5934	25.01	-3.69	52373.180	3.0	70497.440	4.0
551.5983	27.00	-.86	33945.900	2.5	52070.000	2.5
551.6010	76.00	-.59	27988.159	0.0	46117.205	0.0
551.6013	25.02	-1.93	174048.890	2.5	192174.890	2.5
551.6020	7.00	-4.11	96864.020	2.5	114988.000	1.5
551.6020	7.00	-3.97	96864.020	2.5	114988.000	2.5
551.6020	7.00	-3.10	96864.020	2.5	114988.000	3.5
551.6080	58.01	-.86	12905.203	0.0	31034.019	0.0
551.6090	62.00	-.30	2258.411	0.0	20387.194	0.0
551.6096	26.02	-.58	188109.580	3.0	206233.310	2.0
551.6294	18.01	-3.77	200880.520	3.5	219003.600	2.5
551.6487	26.00	-2.81	28604.610	2.0	46727.055	2.0
551.6515	9.00	-2.16	117872.916	1.5	135995.270	.5
551.6659	6.00	-3.72	69710.660	2.0	87832.540	2.0
551.6671	18.01	-1.65	186815.960	3.5	204937.800	4.5
551.6771	23.00	-4.13	137.380	2.5	18258.890	2.5
551.6774	25.00	-2.09	17568.480	1.5	35689.980	1.5
551.6805	28.01	-.67	103025.580	2.5	121146.980	2.5
551.6855	22.00	-3.86	29986.185	3.0	48107.420	2.0
551.6987	11.02	-3.58	416910.200	.5	435031.000	.5
551.7110	40.00	-2.14	5484.711	0.0	23610.143	0.0
551.7195	23.00	-3.53	0.000	1.5	18120.120	.5
551.7340	57.00	-.50	9840.217	0.0	27964.893	0.0
551.7380	6.00	-4.23	69710.660	2.0	87830.170	1.0
551.7386	26.02	-.75	186882.980	3.0	205002.470	3.0
551.7530	28.01	-3.88	120002.860	3.5	138121.880	4.5
551.7581	7.00	-4.43	97770.150	.5	115889.000	.5
551.7581	7.00	-2.59	97770.150	.5	115889.000	1.5
551.7648	26.01	-7.96	20340.360	5.5	38458.990	4.5
551.7648	25.01	-3.17	86936.800	2.0	105055.430	2.0
551.7730	16.01	-3.16	140708.510	2.5	158826.870	2.5
551.7813	9.01	-4.19	264451.000	4.0	282569.090	3.0
551.7843	9.01	-4.74	264451.100	3.0	282569.090	3.0
551.7858	28.01	-2.86	115785.060	1.5	133903.000	1.5
551.7860	44.00	-1.95	14921.641	0.0	33044.609	0.0
551.7874	25.02	-.89	174247.630	.5	192365.520	1.5
551.7904	24.00	-3.24	39158.630	4.0	57276.420	3.0
551.8050	40.00	-2.59	5807.341	0.0	23929.685	0.0
551.8075	22.00	-1.66	19421.576	3.0	37538.804	2.0
551.8093	7.00	-2.76	94793.460	1.5	112910.630	2.5
551.8190	7.00	-4.72	97770.150	.5	115887.000	.5
551.8190	7.00	-2.81	97770.150	.5	115887.000	1.5
551.8209	23.01	-3.39	30613.970	4.0	48730.760	4.0
551.8449	28.01	-3.20	116167.760	1.5	134283.760	.5
551.8490	58.01	-1.01	9275.615	0.0	27396.514	0.0
551.8535	13.02	-1.64	195621.720	.5	213737.440	1.5
551.8548	26.00	-2.06	40594.413	4.0	58710.090	3.0
551.8566	7.00	-2.69	94793.460	1.5	112909.076	1.5
551.8647	26.02	-.95	186791.780	2.0	204907.130	1.0
551.8663	16.01	-.52	133268.530	.5	151383.830	.5
551.8760	24.00	-4.80	31987.060	4.0	50102.040	3.0
551.8770	7.00	-2.75	94830.860	2.5	112945.809	2.5
551.8788	28.00	-1.17	35639.148	3.0	53754.036	2.0
551.8797	25.02	-.86	177477.230	2.5	195592.090	1.5
551.8861	23.00	-4.85	323.420	3.5	18438.070	4.5
551.8891	25.02	-.76	174874.500	4.5	192989.050	5.5
551.8910	73.00	-.98	17260.709	0.0	35380.229	0.0
551.8952	24.00	-2.23	31352.420	1.0	49466.770	2.0
551.8992	26.02	-2.70	205195.150	5.0	223309.370	5.0
551.9050	56.00	.20	12582.573	0.0	30701.633	0.0
551.9101	24.00	-.68	35813.730	3.0	53927.590	4.0
551.9169	17.00	-3.98	84988.480	1.5	103102.120	1.5
551.9324	9.01	-4.21	264455.960	4.0	282569.090	3.0
551.9342	18.01	-3.94	172829.580	1.5	190942.650	.5
551.9380	59.01	-1.78	11534.025	0.0	29652.002	0.0
551.9406	17.00	-2.37	84988.480	1.5	103101.340	2.5
551.9433	26.00	-3.17	36766.950	3.0	54879.720	2.0
551.9452	24.00	-4.82	31364.330	3.0	49477.040	2.0
551.9534	26.02	-1.51	182392.550	2.0	200504.990	3.0
551.9580	23.01	-2.70	55304.340	4.0	73416.630	5.0
551.9659	21.00	-1.85	15041.980	3.5	33154.010	2.5
551.9720	26.01	-3.18	54904.500	3.5	73016.330	3.5
551.9766	28.01	-2.69	115739.150	4.5	133850.830	3.5
551.9802	24.00	-2.75	31355.210	2.0	49466.770	2.0
551.9821	30.02	-1.24	216464.500	4.0	234576.000	4.0
551.9830	26.01	-5.37	26932.740	.5	45044.210	1.5
551.9830	26.02	-.94	182412.650	4.0	200524.120	5.0
551.9842	23.00	-4.10	14548.830	2.5	32660.260	2.5
552.0040	42.00	-.11	31295.118	0.0	49410.929	0.0
552.0050	75.00	-.77	27907.502	0.0	46023.280	0.0
552.0114	7.00	-2.63	94793.460	1.5	112904.000	.5
552.0176	26.00	-2.56	35856.386	2.0	53966.720	2.0
552.0312	20.02	-1.15	328582.450	1.0	346692.340	0.0
552.0455	21.00	.43	15041.980	3.5	33151.400	4.5
552.0485	25.00	.29	44523.450	3.5	62632.770	3.5
552.0506	25.00	-4.31	41230.300	3.5	59339.550	3.5
552.0629	10.00	-3.39	150858.508	2.0	168967.353	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
552.0640	42.00	-.45	27584.872	0.0	45698.714	0.0
552.0643	23.03	-2.77	237638.800	2.0	255747.600	3.0
552.0759	28.00	-1.06	34163.294	2.0	52271.716	2.0
552.0851	23.00	-4.46	17116.920	3.5	35225.040	2.5
552.1000	28.01	-2.27	114874.880	2.5	132982.510	1.5
552.1010	74.00	-2.00	17986.627	0.0	36099.255	0.0
552.1100	75.00	-.46	28391.447	0.0	46503.780	0.0
552.1128	22.00	-1.94	27614.667	4.0	45721.878	4.0
552.1129	26.00	-2.79	29313.008	6.0	47420.215	5.0
552.1131	20.00	-4.45	15210.063	1.0	33317.264	0.0
552.1144	28.01	-4.57	116145.690	3.5	134252.850	3.5
552.1150	73.00	-1.59	20487.010	0.0	38599.179	0.0
552.1189	29.01	-1.99	117883.140	4.0	135990.150	3.0
552.1267	26.00	-1.43	35767.546	4.0	53874.300	5.0
552.1406	25.01	-4.10	48435.960	6.0	66542.260	5.0
552.1424	28.00	-2.86	30979.789	4.0	49086.030	4.0
552.1522	24.01	-3.61	52321.300	4.5	70427.220	3.5
552.1561	24.00	-4.92	33906.650	1.0	52012.440	2.0
552.1570	14.02	-3.99	209559.330	3.0	227665.090	2.0
552.1613	26.01	-4.72	54063.530	.5	72169.150	1.5
552.1630	39.00	-.55	15244.271	0.0	33354.865	0.0
552.1635	26.02	-.69	182408.910	3.0	200514.460	4.0
552.1665	29.01	-1.37	120875.850	2.0	138981.300	2.0
552.1674	26.02	-.60	182418.700	4.0	200524.120	5.0
552.1750	64.00	-1.31	6452.602	0.0	24562.803	0.0
552.1759	18.01	-1.54	186890.950	2.5	204996.090	3.5
552.1780	44.00	.15	31053.145	0.0	49163.247	0.0
552.1830	38.00	.05	18067.285	0.0	36177.223	0.0
552.2043	18.01	-3.20	185093.230	4.5	203197.440	3.5
552.2098	22.00	-3.89	25797.600	3.0	43901.630	4.0
552.2136	22.00	-4.64	17423.853	2.0	35527.760	1.0
552.2142	28.00	-3.37	40484.282	2.0	58588.168	3.0
552.2443	26.00	-1.75	33946.920	2.0	52049.820	2.0
552.2479	28.01	-3.47	99559.330	2.5	117662.110	1.5
552.2489	23.00	-1.07	19078.150	3.5	37180.900	4.5
552.2583	24.00	-4.05	31364.330	3.0	49466.770	2.0
552.2611	7.00	-3.74	96787.650	1.5	114890.000	1.5
552.2626	25.00	-3.19	44978.980	1.5	63081.280	2.5
552.2775	26.02	-1.79	182412.650	4.0	200514.460	4.0
552.2836	26.02	-1.04	188131.700	1.0	206233.310	2.0
552.3087	28.01	-2.31	118631.950	.5	136732.740	1.5
552.3157	25.00	-3.80	45013.550	2.5	63114.110	1.5
552.3282	6.00	-3.17	69689.480	1.0	87789.630	1.0
552.3291	27.00	-2.03	18775.010	.5	36875.130	1.5
552.3343	26.00	-3.89	29320.050	1.0	47420.000	2.0
552.3480	24.00	-1.27	44591.460	5.0	62690.960	5.0
552.3505	7.00	-4.97	94770.850	.5	112870.270	.5
552.3530	76.00	.99	28956.050	0.0	47060.414	0.0
552.3570	41.00	-1.62	9436.930	0.0	27541.163	0.0
552.3618	28.00	-4.40	36600.805	2.0	54699.852	3.0
552.3633	23.03	-4.53	266600.300	5.0	284699.300	5.0
552.3697	18.01	-2.01	191169.520	1.5	209268.310	1.5
552.3730	28.01	-3.67	118294.170	3.5	136392.850	3.5
552.3743	27.00	-2.98	30102.960	2.5	48201.600	3.5
552.3892	23.01	-4.66	19161.270	0.0	37259.420	1.0
552.3959	27.00	-.81	33462.830	2.5	51560.760	2.5
552.4051	24.00	-4.34	24056.110	5.0	42153.740	5.0
552.4213	24.00	-1.98	46704.980	5.0	64802.080	5.0
552.4230	26.00	-1.89	33507.102	3.0	51604.146	3.0
552.4292	24.00	-4.26	33934.880	3.0	52031.720	3.0
552.4310	27.00	-3.92	36329.860	2.5	54426.640	1.5
552.4325	17.00	-3.46	83130.900	1.5	101227.630	.5
552.4350	72.01	-1.98	15002.299	0.0	33103.976	0.0
552.4361	22.00	-4.37	27614.667	4.0	45711.280	4.0
552.4387	23.00	-3.22	19078.150	3.5	37174.680	3.5
552.4423	24.00	-4.78	33906.650	1.0	52003.060	1.0
552.4445	24.01	-3.03	52298.120	3.5	70394.460	4.5
552.4466	6.00	-3.60	69710.660	2.0	87806.930	3.0
552.4489	7.00	-2.57	94830.860	2.5	112927.055	1.5
552.4490	7.00	-4.43	97805.810	1.5	115902.000	2.5
552.4524	26.02	-.57	182408.910	3.0	200504.990	3.0
552.4527	24.00	-4.49	33935.650	2.0	52031.720	3.0
552.4552	26.01	-4.92	66589.170	4.5	84685.160	3.5
552.4622	26.02	-.46	182418.700	4.0	200514.460	4.0
552.4640	13.02	-1.38	195641.740	1.5	213737.440	2.5
552.4640	13.02	-2.34	195641.740	1.5	213737.440	1.5
552.4759	28.01	-4.60	116512.060	3.5	134607.370	4.5
552.4782	17.00	-2.98	83364.927	.5	101460.160	1.5
552.4878	23.00	-4.02	26437.680	1.5	44532.600	2.5
552.4959	18.00	-4.79	105462.804	3.0	123557.459	3.0
552.4985	27.00	-.70	33173.360	3.5	51267.930	4.5
552.5028	25.01	-3.39	86961.000	1.0	105055.430	2.0
552.5127	17.00	-3.34	83894.037	3.5	101988.140	2.5
552.5132	26.01	-5.19	26352.800	4.5	44446.890	3.5
552.5181	26.02	-.40	186998.600	4.0	205092.530	4.0
552.5193	27.00	-.96	33466.870	3.5	51560.760	2.5
552.5235	9.01	-3.94	264451.000	4.0	282544.750	4.0
552.5235	9.01	-3.08	264451.000	5.0	282544.750	4.0
552.5320	9.00	-2.37	117872.916	1.5	135966.390	1.5
552.5349	28.01	-3.23	118631.950	.5	136725.330	.5
552.5352	29.01	-2.08	120789.630	4.0	138883.000	4.0
552.5394	23.01	-4.80	19166.190	1.0	37259.420	1.0
552.5459	26.00	-2.77	33946.920	2.0	52039.939	1.0
552.5554	26.00	-1.59	34121.623	0.0	52214.330	1.0
552.5596	28.01	-4.92	53365.170	4.5	71457.740	3.5
552.5639	17.00	-1.80	83130.900	1.5	101223.330	2.5
552.5660	27.00	-2.24	28470.510	1.5	46562.870	1.5
552.5666	26.02	-4.34	182412.650	4.0	200504.990	3.0
552.5746	23.01	-4.74	19112.930	4.0	37205.010	3.0
552.5752	25.02	-2.06	173920.690	1.5	192012.750	1.5
552.5828	25.01	-4.13	52653.270	4.0	70745.080	3.0
552.5831	27.01	-5.73	27106.000	6.0	45197.800	5.0
552.5862	24.00	-3.47	23933.900	4.0	42025.600	3.0
552.5892	18.01	-2.77	189654.780	2.5	207746.380	2.5
552.5895	24.01	-4.39	30307.600	1.5	48399.190	1.5
552.5944	16.01	-4.91	112937.330	.5	131028.760	1.5
552.6051	25.00	-3.22	44814.730	1.5	62905.810	2.5
552.6069	21.00	-3.08	15672.550	1.5	33763.570	1.5
552.6176	26.02	-.46	188142.640	2.0	206233.310	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
552.6188	16.01	-3.14	110508.480	3.5	128599.110	3.5
552.6234	7.01	-.32	205597.970	1.0	223688.450	2.0
552.6347	21.00	-3.46	15756.510	2.5	33846.620	3.5
552.6402	25.02	-2.19	174575.870	3.5	192665.800	4.5
552.6500	24.00	-2.57	31364.330	3.0	49453.940	4.0
552.6520	42.01	-.70	23955.283	0.0	42049.852	0.0
552.6630	63.00	-.86	12985.861	0.0	31080.070	0.0
552.6671	23.01	-2.84	30641.710	3.0	48730.760	4.0
552.6760	39.00	-1.15	16050.847	0.0	34144.631	0.0
552.6815	21.01	.06	14261.400	4.0	32349.980	3.0
552.6821	28.01	-1.29	115081.360	4.5	133169.920	3.5
552.6836	6.00	-3.04	69744.030	3.0	87832.540	2.0
552.6970	42.00	-.85	22745.421	0.0	40838.517	0.0
552.7072	26.00	-4.93	24772.019	1.0	42859.756	2.0
552.7123	28.01	-3.83	100475.820	3.5	118563.390	3.5
552.7188	27.00	-1.10	33945.900	2.5	52033.260	1.5
552.7313	23.01	-4.28	55206.870	5.0	73293.820	5.0
552.7408	28.01	-4.40	118874.110	3.5	136960.750	2.5
552.7408	18.01	-3.14	186890.950	2.5	204977.590	2.5
552.7515	26.02	-2.44	182418.700	4.0	200504.990	3.0
552.7540	39.00	-.25	11211.395	0.0	29302.625	0.0
552.7588	18.01	-4.72	196103.310	4.5	214189.360	4.5
552.7610	7.00	-2.31	96864.020	2.5	114950.000	1.5
552.7616	22.00	-1.65	19573.968	4.0	37659.927	3.0
552.7658	23.00	-4.49	0.000	1.5	18085.820	.5
552.7670	29.01	-2.50	117928.480	1.0	136014.260	2.0
552.7695	23.00	-3.68	26604.770	3.5	44690.470	3.5
552.7955	7.00	-3.30	97770.150	.5	115855.000	.5
552.7955	7.00	-4.20	97770.150	.5	115855.000	1.5
552.8043	28.01	-1.66	115085.360	3.5	133169.920	3.5
552.8309	7.01	-4.03	203162.480	0.0	221246.170	1.0
552.8333	6.00	-4.33	69689.480	1.0	87773.090	2.0
552.8355	24.00	-2.88	28637.000	3.0	46720.540	4.0
552.8360	73.00	-3.48	3871.561	0.0	21960.108	0.0
552.8404	12.00	-3.28	35051.264	1.0	53134.642	2.0
552.8410	40.00	-.20	18147.942	0.0	36236.325	0.0
552.8462	7.00	-4.76	97805.810	1.5	115889.000	.5
552.8462	7.00	-3.97	97805.810	1.5	115889.000	1.5
552.8465	29.01	-3.65	128853.300	2.0	146936.480	2.0
552.8606	25.00	-2.34	35041.370	3.5	53124.090	3.5
552.8612	12.02	-1.67	564664.600	2.0	582747.300	2.0
552.8612	12.02	-1.67	564664.600	2.0	582747.300	2.0
552.8673	6.00	-3.64	71364.900	1.0	89447.400	2.0
552.8685	24.00	-.77	44591.460	5.0	62673.920	6.0
552.8711	22.00	-.40	27750.124	5.0	45832.500	5.0
552.8878	26.00	-2.38	36079.353	3.0	54161.182	3.0
552.8967	24.00	-1.06	46720.540	4.0	64802.080	5.0
552.9070	60.00	-1.43	1048.548	0.0	19134.772	0.0
552.9073	7.00	-3.39	97805.810	1.5	115887.000	1.5
552.9073	7.00	-2.84	97805.810	1.5	115887.000	2.5
552.9180	26.00	-4.30	29371.860	3.0	47452.702	4.0
552.9327	25.02	-1.12	173835.070	.5	191915.430	.5
552.9370	7.00	-2.29	94830.860	2.5	112911.079	3.5
552.9508	7.00	-1.90	94830.860	2.5	112910.630	2.5
552.9542	24.00	-4.20	20517.400	2.0	38597.060	1.0
552.9578	24.00	-1.92	44591.460	5.0	62671.000	4.0
552.9753	6.00	-2.93	69710.660	2.0	87789.630	1.0
552.9777	25.00	-3.74	45060.810	3.5	63139.700	2.5
552.9781	26.00	-4.57	23051.744	0.0	41130.620	1.0
552.9811	23.00	-4.93	14910.040	3.5	32988.820	3.5
552.9870	57.00	-1.05	9840.217	0.0	27923.825	0.0
552.9936	22.01	-3.72	12758.150	2.5	30836.520	1.5
552.9983	7.00	-4.66	94830.860	2.5	112909.076	1.5
553.0117	23.01	-1.78	44098.460	3.0	62176.240	4.0
553.0129	24.01	-2.68	52321.300	4.5	70399.040	5.5
553.0227	18.03	-3.99	268151.380	2.5	286228.800	1.5
553.0242	7.01	.10	205654.220	2.0	223731.590	3.0
553.0309	28.01	-3.08	115785.060	1.5	133862.210	1.5
553.0377	28.01	-1.54	120044.950	4.5	138121.880	4.5
553.0383	26.02	-2.03	205195.150	5.0	223272.060	6.0
553.0395	16.01	-1.99	140750.000	1.5	158826.870	2.5
553.0413	7.00	-2.84	94793.460	1.5	112870.270	.5
553.0419	24.00	-4.55	33935.650	2.0	52012.440	2.0
553.0606	28.01	-4.77	95332.530	2.5	113408.710	1.5
553.0667	24.00	-3.11	31377.960	4.0	49453.940	4.0
553.0774	27.00	-1.81	13795.520	2.5	31871.150	3.5
553.0808	28.01	-2.66	114836.630	3.5	132912.150	2.5
553.0899	22.00	-2.90	27614.667	4.0	45689.890	3.0
553.0990	44.00	-1.05	20809.640	0.0	38889.586	0.0
553.1034	28.01	-4.30	95332.530	2.5	113407.310	2.5
553.1260	92.00	-1.29	8065.752	0.0	26144.815	0.0
553.1380	74.00	-1.76	17986.627	0.0	36065.298	0.0
553.1385	22.00	-4.12	29986.185	3.0	48059.820	3.0
553.1396	23.01	-4.73	54715.630	2.0	72789.230	3.0
553.1442	8.02	-2.31	306584.800	2.0	324658.250	3.0
553.1530	24.01	-4.42	52321.300	4.5	70394.460	4.5
553.1645	26.00	-3.39	33946.920	2.0	52019.706	1.0
553.1680	28.01	-2.41	115785.060	1.5	133857.730	.5
553.1787	23.01	-3.27	19132.690	2.0	37205.010	3.0
553.1931	7.00	-3.69	97770.150	.5	115842.000	.5
553.1931	7.00	-3.80	97770.150	.5	115842.000	1.5
553.1945	26.00	-.61	39625.784	4.0	57697.590	4.0
553.2124	26.00	-4.44	22946.810	1.0	41018.029	2.0
553.2161	17.00	-1.03	82918.893	2.5	100989.990	3.5
553.2243	26.02	-4.65	188109.580	3.0	206186.410	3.0
553.2277	28.01	-4.90	118828.610	2.5	136899.330	1.5
553.2300	40.00	-2.37	5162.081	0.0	23237.746	0.0
553.2308	28.01	-2.26	97799.660	1.5	115870.280	2.5
553.2571	26.02	-1.38	182444.700	3.0	200514.460	4.0
553.2608	22.00	-2.74	17369.590	1.0	35439.228	1.0
553.2620	27.01	-5.85	27902.500	4.0	45972.100	3.0
553.2620	19.02	-1.86	225051.000	2.5	243120.600	2.5
553.2680	75.00	-1.00	21616.215	0.0	39690.638	0.0
553.2755	26.00	-2.54	28819.966	5.0	46889.126	4.0
553.2842	26.00	-2.29	35856.386	2.0	53925.260	1.0
553.3024	27.00	-1.64	34196.210	1.5	52264.490	1.5
553.3050	42.00	-.23	10646.793	0.0	28720.008	0.0
553.3159	25.00	-1.61	35041.370	3.5	53109.210	2.5
553.3171	24.00	-3.96	35572.940	2.0	53640.740	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
553.3193	25.00	-2.22	45013.550	2.5	63081.280	2.5
553.3250	63.00	-.86	12985.861	0.0	31058.422	0.0
553.3364	7.00	-3.64	94770.850	.5	112838.020	1.5
553.3370	64.00	-1.36	6936.547	0.0	25008.716	0.0
553.3545	6.00	-3.13	71364.900	1.0	89431.480	2.0
553.3566	6.00	-3.88	69710.660	2.0	87777.170	3.0
553.3679	10.00	-2.02	150858.508	2.0	168924.651	2.0
553.3767	14.00	-3.97	61598.145	2.0	79664.000	1.0
553.3793	18.01	-4.77	196119.020	3.5	214184.790	3.5
553.3808	23.00	-1.15	19145.130	5.5	37210.850	5.5
553.3820	60.00	-.58	2339.068	0.0	20409.768	0.0
553.4047	25.02	-1.58	177687.540	3.5	195752.480	2.5
553.4099	24.00	-2.27	35862.820	4.0	53927.590	4.0
553.4259	6.00	-3.50	69689.480	1.0	87753.730	2.0
553.4330	7.00	-2.61	94881.790	3.5	112945.809	2.5
553.4469	18.00	-1.93	107289.747	2.0	125353.310	1.0
553.4515	26.00	-2.48	35767.546	4.0	53830.960	3.0
553.4574	26.00	-2.77	29356.780	2.0	47420.000	2.0
553.4586	24.00	-1.21	46688.240	3.0	64751.420	4.0
553.4599	29.01	-2.17	121078.960	3.0	139142.100	2.0
553.4636	6.00	-3.28	71385.380	2.0	89448.400	3.0
553.4673	6.00	-3.69	69744.030	3.0	87806.930	3.0
553.4761	28.01	-4.02	116145.690	3.5	134208.300	2.5
553.4810	38.00	-.04	18228.600	0.0	36296.068	0.0
553.4812	22.00	-4.75	7255.369	2.0	25317.813	1.0
553.4817	6.00	-2.74	69710.660	2.0	87773.090	2.0
553.4842	9.00	-1.95	117622.923	2.5	135685.270	1.5
553.4850	26.01	-3.39	26170.190	5.5	44232.510	4.5
553.4942	6.00	-3.87	71385.380	2.0	89447.400	2.0
553.4973	28.01	-4.96	118897.940	2.5	136959.860	2.5
553.4982	29.01	-.87	120919.410	1.0	138981.300	2.0
553.4985	18.01	-3.25	184191.710	.5	202253.590	1.5
553.5000	23.00	-4.66	26004.220	2.5	44066.050	3.5
553.5019	24.01	-2.84	66256.770	.5	84318.540	1.5
553.5019	28.01	-3.17	109269.830	1.5	127331.600	2.5
553.5040	45.00	.33	29681.967	0.0	47748.684	0.0
553.5194	23.03	-1.46	265879.200	1.0	283940.400	2.0
553.5194	23.03	-3.36	265879.200	2.0	283940.400	2.0
553.5248	25.01	-4.10	53017.160	1.0	71078.180	1.0
553.5346	23.00	-3.83	137.380	2.5	18198.080	2.5
553.5347	7.01	.39	205724.810	3.0	223785.510	4.0
553.5384	7.01	-.21	205597.970	1.0	223658.550	1.0
553.5418	26.00	-.91	33765.291	2.0	51825.758	3.0
553.5445	18.01	-1.94	200880.520	3.5	218940.900	4.5
553.5446	7.00	-1.82	94830.860	2.5	112891.238	3.5
553.5469	17.01	-.52	129065.400	2.0	147125.700	3.0
553.5472	26.02	-1.93	182444.700	3.0	200504.990	3.0
553.5475	26.02	-.61	186882.980	3.0	204943.260	2.0
553.5480	56.00	.20	0.000	0.0	18065.281	0.0
553.5518	18.01	-3.69	186890.950	2.5	204951.090	3.5
553.5582	25.00	-3.38	41230.300	3.5	59290.230	3.5
553.5662	28.01	-3.53	104081.040	4.5	122140.710	4.5
553.5670	57.01	-1.67	10001.532	0.0	28066.193	0.0
553.5674	18.01	-4.68	186074.350	2.5	204133.980	2.5
553.5852	28.01	-1.89	114942.420	1.5	133001.470	.5
553.5898	19.01	-1.25	165149.500	0.0	183208.400	1.0
553.6009	28.01	-3.69	111783.790	3.5	129842.330	2.5
553.6045	26.02	-3.06	117950.320	4.0	136008.740	3.0
553.6116	7.00	-3.61	96750.810	1.5	114809.000	.5
553.6288	25.00	-4.68	27201.540	2.5	45259.170	1.5
553.6352	18.03	-3.71	268171.380	1.5	286228.800	1.5
553.6359	22.00	-3.84	21469.494	3.0	39526.890	2.0
553.6438	7.01	-3.67	203189.030	1.0	221246.170	1.0
553.6456	25.00	.16	44696.290	2.5	62753.370	2.5
553.6462	24.00	-2.61	35870.530	4.0	53927.590	4.0
553.6472	21.00	-3.81	18515.770	1.5	36572.800	2.5
553.6570	28.01	-4.15	101740.270	3.5	119796.980	2.5
553.6587	26.00	-3.83	22838.320	2.0	40894.972	2.0
553.6714	16.01	-4.40	110176.830	1.5	128233.070	2.5
553.7018	17.00	-3.18	84132.262	2.5	102187.510	2.5
553.7070	62.01	-1.21	13389.148	0.0	31449.241	0.0
553.7098	28.00	-3.05	31031.042	3.0	49086.030	4.0
553.7120	90.01	-2.56	9114.300	0.0	27174.230	0.0
553.7290	18.01	-1.00	189040.870	1.5	207095.230	2.5
553.7460	40.00	-.54	17341.367	0.0	35400.188	0.0
553.7487	23.01	-4.23	32420.040	0.0	50473.760	1.0
553.7530	18.01	-1.74	190196.160	.5	208249.740	1.5
553.7563	9.00	-2.92	115917.909	2.5	133971.380	1.5
553.7618	28.01	-3.77	100389.520	2.5	118442.810	1.5
553.7680	28.01	-2.49	114874.880	2.5	132927.970	1.5
553.7723	29.01	-2.43	118991.500	4.0	137044.450	4.0
553.7740	74.00	-1.62	19115.832	0.0	37173.740	0.0
553.7760	25.00	-2.27	17637.150	.5	35689.980	1.5
553.7866	22.00	-3.83	21588.496	4.0	39640.980	3.0
553.7870	26.00	-4.81	26406.490	1.0	44458.960	0.0
553.7950	26.01	-4.67	62125.660	1.5	80177.870	1.5
553.8020	72.00	-.59	21616.215	0.0	39673.210	0.0
553.8033	24.00	-3.66	24200.230	6.0	42252.170	6.0
553.8247	24.00	-2.04	28637.000	3.0	46688.240	3.0
553.8260	72.00	-2.19	10485.478	0.0	28541.691	0.0
553.8318	29.01	-1.40	117883.140	4.0	135934.150	5.0
553.8435	28.01	-4.82	116732.510	2.5	134783.140	2.5
553.8471	26.00	-3.81	36940.600	2.0	54991.110	1.0
553.8506	9.00	-2.56	116040.883	1.5	134091.280	1.5
553.8511	26.00	-4.62	29313.008	6.0	47363.390	6.0
553.8516	26.00	-3.21	34017.084	1.0	52067.450	2.0
553.8652	27.00	-3.78	33150.680	1.5	51200.600	1.5
553.8652	10.00	-2.66	150917.431	0.0	168967.353	1.0
553.8686	9.00	-1.68	118405.267	.5	136455.080	1.5
553.8877	7.00	-3.60	97805.810	1.5	115855.000	.5
553.8877	7.00	-3.50	97805.810	1.5	115855.000	1.5
553.8922	23.00	-4.44	323.420	3.5	18372.460	3.5
553.8941	24.00	-4.56	27176.220	1.0	45225.200	2.0
553.9091	25.00	-3.97	25265.740	5.5	43314.230	5.5
553.9199	26.00	-2.70	29371.860	3.0	47420.000	2.0
553.9239	28.01	-4.27	115565.980	2.5	133613.990	1.5
553.9260	60.01	-2.07	5968.656	0.0	24021.609	0.0
553.9260	90.00	-1.02	9759.560	0.0	27812.513	0.0
553.9263	26.01	-4.07	67000.630	2.5	85048.560	1.5
553.9311	9.00	-1.53	115917.909	2.5	133965.680	2.5
553.9410	42.00	-1.61	16615.449	0.0	34667.913	0.0
553.9490	74.00	-1.65	20890.298	0.0	38942.501	0.0
553.9720	24.00	-3.41	46704.980	5.0	64751.420	4.0
553.9720	25.02	-2.99	177269.340	1.5	195315.780	2.5
553.9760	23.00	-3.80	26397.360	.5	44443.670	1.5
553.9786	22.00	-3.94	21739.713	5.0	39785.940	4.0
553.9788	22.00	-4.85	25797.600	3.0	43843.820	3.0
553.9822	26.00	-2.57	34636.820	2.0	52682.930	2.0
553.9825	6.00	-3.00	71385.380	2.0	89431.480	2.0
553.9871	28.01	-2.55	91800.050	4.5	109846.000	3.5
553.9900	90.01	-1.74	9517.587	0.0	27568.454	0.0
553.9910	6.00	-3.31	69689.480	1.0	87735.300	1.0
553.9978	18.01	-2.26	196621.880	3.5	214667.460	2.5
554.0050	38.00	-.06	18067.285	0.0	36117.664	0.0
554.0061	7.01	-.57	205597.970	1.0	223643.300	0.0
554.0123	28.01	-2.25	98122.630	.5	116167.760	1.5
554.0221	28.01	-2.29	98467.250	3.5	116512.060	3.5
554.0257	22.00	-3.49	25926.820	4.0	43971.513	5.0
554.0297	7.00	-4.01	94793.460	1.5	112838.020	1.5
554.0420	23.00	-1.75	26021.890	3.5	44066.050	3.5
554.0510	9.00	-1.23	116040.883	1.5	134084.750	2.5
554.0632	29.01	-4.13	118991.500	4.0	137034.970	3.0
554.0660	44.00	-1.82	12098.628	0.0	30147.019	0.0
554.0718	24.00	-1.47	35884.400	5.0	53927.590	4.0
554.0755	6.00	-2.39	69710.660	2.0	87753.730	2.0
554.0859	18.00	-3.85	105462.804	3.0	123505.536	2.0
554.1032	21.00	-2.98	15756.510	2.5	33798.680	2.5
554.1044	23.00	-3.69	15264.830	5.5	33306.960	4.5
554.1142	15.01	-.69	105303.190	1.0	123345.000	0.0
554.1190	17.00	-1.67	83130.900	1.5	101172.553	1.5
554.1260	57.00	-.59	9114.300	0.0	27160.737	0.0
554.1322	28.00	-4.50	40484.282	2.0	58525.507	1.0
554.1470	41.00	-1.86	10162.848	0.0	28208.601	0.0
554.1473	22.00	-4.56	25107.417	2.0	43148.150	3.0
554.1532	29.01	-1.18	121078.960	3.0	139119.500	3.0
554.1532	28.01	-4.78	116167.760	1.5	134208.300	2.5
554.1543	28.00	-2.92	30912.838	1.0	48953.344	1.0
554.1606	26.02	-4.12	117950.320	4.0	135990.620	4.0
554.1630	39.00	-1.01	15566.901	0.0	33612.133	0.0
554.1650	42.00	-.98	25729.749	0.0	43774.916	0.0
554.1670	28.01	-1.54	114942.420	1.5	132982.510	1.5
554.1680	24.00	-2.55	28637.000	3.0	46677.060	2.0
554.1701	24.00	-3.83	35501.260	3.0	53541.250	2.0
554.1809	18.01	-2.26	189654.780	2.5	207694.420	3.5
554.1846	23.00	-3.63	14949.300	4.5	32988.820	3.5
554.1895	18.01	-3.68	186074.350	2.5	204113.710	1.5
554.1972	26.01	-4.30	48039.230	2.5	66078.340	2.5
554.2116	24.00	-4.61	27163.200	0.0	45201.840	1.0
554.2125	25.00	-4.07	34845.260	.5	52883.870	1.5
554.2128	19.02	-.95	225082.000	1.5	243120.600	2.5
554.2325	24.01	-3.84	54678.950	4.5	72716.910	4.5
554.2362	25.00	-4.66	34845.260	.5	52883.100	.5
554.2378	14.00	-3.06	39760.285	1.0	57798.072	2.0
554.2383	26.02	-2.99	188142.640	2.0	206180.410	3.0
554.2423	23.01	-6.77	19112.930	4.0	37150.570	4.0
554.2451	28.01	-4.81	118923.200	3.5	136960.750	2.5
554.2469	23.00	-4.96	17054.870	2.5	35092.360	1.5
554.2537	28.01	-1.38	114874.880	2.5	132912.150	2.5
554.2540	63.00	-.33	17260.709	0.0	35302.978	0.0
554.2640	22.00	-4.21	17540.205	3.0	35577.140	2.0
554.2707	7.00	-3.20	94770.850	.5	112807.567	.5
554.2718	23.00	-3.45	137.380	2.5	18174.060	1.5
554.2800	46.00	.24	36779.829	0.0	54821.252	0.0
554.2856	25.01	-2.56	84643.860	6.0	102680.090	5.0
554.2869	7.00	-3.99	97805.810	1.5	115842.000	.5
554.2869	7.00	-3.10	97805.810	1.5	115842.000	1.5
554.2998	23.00	-2.39	19145.130	5.5	37180.900	4.5
554.3012	26.00	-4.25	33801.555	2.0	51837.279	3.0
554.3060	26.00	-4.12	29798.960	4.0	47834.529	5.0
554.3120	42.01	-1.01	20809.640	0.0	38850.022	0.0
554.3167	23.01	-6.36	19166.190	1.0	37201.410	0.0
554.3241	24.00	-1.67	46677.060	2.0	64712.040	3.0
554.3256	23.01	-3.92	44098.460	3.0	62133.390	3.0
554.3360	38.00	-.53	21535.558	0.0	39575.159	0.0
554.3400	18.01	-2.97	196633.020	2.5	214667.480	2.5
554.3471	7.01	-.10	205654.220	2.0	223688.450	2.0
554.3484	28.00	-1.50	34163.294	2.0	52197.482	3.0
554.3520	29.01	-1.60	119039.680	2.0	137073.750	2.0
554.3575	22.00	-4.76	6661.003	3.0	24694.895	4.0
554.3806	6.00	-2.38	69744.030	3.0	87777.170	3.0
554.3846	29.01	-4.08	128853.300	2.0	146886.310	1.0
554.3911	18.01	-1.79	190732.970	.5	208765.770	.5
554.3930	26.00	-1.32	34017.084	1.0	52049.820	2.0
554.3951	26.01	-3.09	44929.590	2.5	62962.260	1.5
554.3969	25.02	-.83	174332.910	1.5	192365.520	1.5
554.3994	28.01	-1.80	114836.630	3.5	132869.160	3.5
554.4267	27.00	-2.04	28470.510	1.5	46502.150	.5
554.4378	28.01	-1.83	114970.190	.5	133061.470	.5
554.4464	7.00	-1.81	94793.460	1.5	112824.459	2.5
554.4490	42.00	-.30	27262.242	0.0	45298.166	0.0
554.4501	24.00	-2.04	46720.540	4.0	64751.420	4.0
554.4580	45.00	.18	29681.967	0.0	47717.598	0.0
554.4610	39.00	-.56	15244.271	0.0	33279.805	0.0
554.4716	7.00	-4.16	94770.850	.5	112801.031	1.5
554.4732	26.01	-3.66	65696.110	4.5	83726.240	3.5
554.4756	26.01	-4.34	44915.070	3.5	62945.120	3.5
554.4778	29.01	-2.22	117928.480	1.0	135958.460	1.0
554.4815	27.00	-3.44	36875.130	1.5	54904.990	2.5
554.4870	23.00	-1.73	8476.200	1.5	26505.880	2.5
554.4910	57.00	-.97	9598.245	0.0	27632.603	0.0
554.4913	29.01	-3.61	120789.630	4.0	138819.170	3.0
554.4990	7.00	-1.51	94881.790	3.5	112911.079	3.5
554.5010	64.01	-1.70	10485.478	0.0	28519.711	0.0
554.5045	18.01	-2.49	191169.520	1.5	209198.630	2.5
554.5055	6.00	-2.51	69689.480	1.0	87718.560	1.0
554.5061	6.00	-3.90	69744.030	3.0	87773.090	2.0
554.5129	7.00	-2.50	94881.790	3.5	112910.630	2.5
554.5140	73.00	-2.48	12743.888	0.0	30777.698	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
554.5202	17.01	-2.74	140740.000	1.0	158768.600	2.0
554.5252	26.01	-6.66	20830.520	2.5	38858.960	2.5
554.5255	27.00	-1.25	34133.590	3.5	52162.020	3.5
554.5320	40.00	-.43	17744.654	0.0	35777.878	0.0
554.5375	18.01	-3.18	192556.840	2.5	210584.880	1.5
554.5599	28.01	-4.19	116512.060	3.5	134539.370	2.5
554.5616	9.00	-2.71	118427.823	1.5	136455.080	1.5
554.5651	25.00	-4.34	41230.300	3.5	59257.440	4.5
554.5781	23.00	-3.55	26505.880	2.5	44532.600	2.5
554.5925	23.00	-1.05	8578.520	2.5	26604.770	3.5
554.5934	27.00	-.69	33173.360	3.5	51199.580	3.5
554.6009	7.00	-2.78	96864.020	2.5	114890.000	1.5
554.6014	28.01	-3.04	118563.390	3.5	136589.350	3.5
554.6020	39.01	-1.40	14034.408	0.0	32065.356	0.0
554.6119	24.00	-4.80	27176.220	1.0	45201.840	1.0
554.6285	28.01	-2.48	103025.580	2.5	121050.660	2.5
554.6298	25.02	-1.91	115711.600	4.5	133736.640	5.5
554.6390	23.00	-2.99	8412.940	.5	26437.680	1.5
554.6421	21.00	-3.55	15881.760	3.5	33906.400	4.5
554.6421	6.00	-4.31	69710.660	2.0	87735.300	1.0
554.6486	26.00	-1.95	35257.309	4.0	53281.735	5.0
554.6534	26.02	-.49	182480.720	2.0	200504.990	3.0
554.6679	24.00	-2.28	46688.240	3.0	64712.040	3.0
554.6707	28.01	-3.76	115627.120	3.5	133850.830	3.5
554.6710	24.00	-3.69	24056.110	5.0	42079.810	4.0
554.6720	9.00	-1.32	118427.823	1.5	136451.490	2.5
554.6820	76.00	.33	33956.816	0.0	51985.164	0.0
554.6965	27.00	-.86	34133.590	3.5	52156.460	4.5
554.6970	26.00	-2.43	34017.084	1.0	52039.939	1.0
554.7020	46.00	.06	36779.829	0.0	54807.527	0.0
554.7051	23.00	-.63	8715.720	3.5	26738.310	4.5
554.7055	29.01	-3.20	120875.850	2.0	138898.430	1.0
554.7064	22.00	-3.40	28952.100	4.0	46974.650	5.0
554.7159	28.01	-4.45	118877.090	1.5	136899.330	1.5
554.7248	28.01	-4.78	116261.810	.5	134283.760	.5
554.7267	6.00	-2.34	69689.480	1.0	87711.370	0.0
554.7313	28.01	-3.59	115592.250	1.5	133613.990	1.5
554.7375	25.01	-4.23	55759.270	3.0	73780.810	3.0
554.7377	9.00	-2.11	118405.267	.5	136426.800	1.5
554.7433	7.00	-2.87	96787.650	1.5	114809.000	.5
554.7440	63.00	-.06	12824.546	0.0	30850.879	0.0
554.7501	28.01	-3.80	109846.000	3.5	127867.130	4.5
554.7704	25.00	-4.79	45060.810	3.5	63081.280	2.5
554.7726	25.01	-3.25	49889.860	3.0	67910.260	4.0
554.8139	7.00	-2.61	94793.460	1.5	112812.518	2.5
554.8180	90.00	-1.57	6291.287	0.0	24315.216	0.0
554.8181	24.01	-3.52	52298.120	3.5	70317.040	2.5
554.8200	64.00	-.59	12421.258	0.0	30445.122	0.0
554.8240	6.00	-2.93	69689.480	1.0	87708.210	2.0
554.8286	24.00	-2.99	31009.000	3.0	49027.580	2.0
554.8320	73.00	-1.65	17099.394	0.0	35122.868	0.0
554.8470	60.01	-1.96	4355.506	0.0	22378.493	0.0
554.8511	15.00	-1.89	58174.450	1.5	76192.300	1.5
554.8569	24.00	-1.27	27597.220	3.0	45614.880	4.0
554.8776	28.01	-2.45	103025.580	2.5	121042.570	1.5
554.8791	28.01	-1.76	103025.580	2.5	121042.520	1.5
554.8806	23.01	-4.60	34228.790	3.0	52245.680	2.0
554.8890	28.01	-4.84	115956.710	2.5	133973.330	2.5
554.8902	6.00	-1.76	69744.030	3.0	87760.610	4.0
554.8908	9.02	-4.59	426989.570	3.5	445006.130	2.5
554.8957	29.01	-4.58	128558.900	3.0	146575.300	2.0
554.9042	14.00	-3.92	61647.875	2.0	79664.000	1.0
554.9111	24.00	-3.72	24277.060	0.0	42292.960	1.0
554.9173	12.02	-4.48	564731.600	1.0	582747.300	2.0
554.9173	12.02	-4.48	564731.600	1.0	582747.300	2.0
554.9225	26.01	-4.19	44929.590	2.5	62945.120	3.5
554.9238	24.00	-2.93	31355.210	2.0	49370.700	3.0
554.9273	22.00	-2.34	17423.853	2.0	35439.228	1.0
554.9333	28.01	-4.27	116512.060	3.5	134527.240	3.5
554.9453	9.00	-1.92	118405.267	.5	136420.060	.5
554.9535	26.00	-2.22	35379.189	5.0	53393.715	4.0
554.9632	21.00	-1.44	15041.980	3.5	33056.190	3.5
554.9635	26.00	-.92	40257.300	5.0	58271.500	5.0
554.9664	7.00	-3.52	94793.460	1.5	112807.567	.5
554.9727	9.00	-2.93	115917.909	2.5	133931.810	2.5
554.9752	28.01	-3.61	94705.930	3.5	112719.750	3.5
554.9790	76.00	-.14	32908.268	0.0	50926.968	0.0
554.9881	25.02	-.06	174975.650	5.5	192989.050	5.5
554.9960	26.00	-3.23	29798.960	4.0	47812.104	4.0
555.0040	58.01	-1.13	10243.505	0.0	28261.393	0.0
555.0210	64.00	-1.41	6936.547	0.0	24953.883	0.0
555.0214	28.01	-2.25	114970.190	.5	132982.510	1.5
555.0353	25.00	-.59	44288.760	4.5	62300.630	4.5
555.0400	62.00	-.60	1451.835	0.0	19468.555	0.0
555.0402	21.00	-3.87	18504.050	.5	36515.760	1.5
555.0489	22.00	-3.90	28638.832	2.0	46650.260	3.0
555.0569	25.00	-4.37	27248.000	1.5	45259.170	1.5
555.0600	72.00	-2.56	0.000	0.0	18016.070	0.0
555.0960	28.01	-2.20	114836.630	3.5	132846.530	3.5
555.1006	23.00	-1.97	18805.050	.5	36814.800	1.5
555.1021	6.00	-1.69	69744.030	3.0	87753.730	2.0
555.1099	7.00	-2.61	94881.790	3.5	112891.238	3.5
555.1200	20.02	-2.18	343784.960	1.0	361794.080	1.0
555.1204	25.00	-3.57	35114.980	2.5	53124.090	3.5
555.1315	26.00	-4.84	27543.000	1.0	45551.748	1.0
555.1350	41.00	-1.98	4920.109	0.0	22933.745	0.0
555.1364	24.01	-4.19	72716.910	4.5	90725.500	3.5
555.1440	92.01	-2.14	6371.944	0.0	24385.288	0.0
555.1515	25.03	-3.78	152858.200	3.0	170866.300	2.0
555.1576	6.00	-2.03	69710.660	2.0	87718.560	1.0
555.1678	7.00	-2.05	94793.460	1.5	112801.031	1.5
555.1757	26.00	-1.38	33095.922	4.0	51103.237	5.0
555.1805	7.00	-2.69	94830.860	2.5	112838.020	1.5
555.1836	21.00	-3.68	15756.510	2.5	33763.570	1.5
555.1846	9.00	-3.05	118427.823	1.5	136434.850	2.5
555.1922	7.01	-.20	205724.810	3.0	223731.590	3.0
555.1977	25.00	1.05	44288.760	4.5	62295.360	5.5
555.2048	24.00	-3.24	31364.330	3.0	49370.700	3.0
555.2062	22.00	-4.22	27750.124	5.0	45756.450	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
555.2073	22.00	-4.68	15108.121	3.0	33114.412	2.0
555.2120	72.00	-1.87	5565.369	0.0	23576.507	0.0
555.2144	24.00	-2.69	28682.180	2.0	46686.240	3.0
555.2165	23.00	-3.65	26437.680	1.5	44443.670	1.5
555.2190	42.00	-1.68	21051.613	0.0	39062.524	0.0
555.2193	25.00	-1.31	44288.760	4.5	62294.660	3.5
555.2233	21.01	-2.37	11736.350	0.0	29742.120	1.0
555.2255	29.01	-4.38	128569.600	2.0	146575.300	2.0
555.2267	25.02	-2.56	174874.500	4.5	192880.160	3.5
555.2421	9.00	-1.41	115917.909	2.5	133923.070	3.5
555.2541	22.00	-4.50	25227.217	3.0	43231.990	4.0
555.2620	92.01	-2.35	6210.629	0.0	24220.145	0.0
555.2677	26.00	-1.20	39969.830	3.0	57974.160	2.0
555.2677	7.01	-.69	205654.220	2.0	223658.550	1.0
555.2819	26.02	-.38	186998.600	4.0	205002.470	3.0
555.2838	26.00	-4.73	22838.320	2.0	40842.130	3.0
555.2880	76.00	-2.48	11292.053	0.0	29300.726	0.0
555.3174	6.00	-2.37	69710.660	2.0	87713.380	3.0
555.3204	26.00	-2.41	34017.084	1.0	52019.706	1.0
555.3427	22.00	-4.97	8492.421	1.0	26494.322	2.0
555.3526	9.00	-2.10	115917.909	2.5	133919.490	1.5
555.3544	24.00	-2.71	37205.880	3.0	55207.400	4.0
555.3558	26.00	-1.30	35767.546	4.0	53769.020	4.0
555.3581	21.00	-3.18	18571.400	2.5	36572.800	2.5
555.3584	28.01	-4.63	118897.940	2.5	136899.330	1.5
555.3683	7.01	-3.71	188909.170	1.0	206910.240	0.0
555.3688	28.00	-3.56	15609.861	2.0	33610.916	2.0
555.3843	25.02	-1.94	174575.870	3.5	192576.420	2.5
555.3850	27.00	-4.63	16195.680	.5	34196.210	1.5
555.4032	18.01	-1.43	190592.170	1.5	208592.110	.5
555.4134	18.01	-.77	190592.170	1.5	208591.780	1.5
555.4152	23.01	-4.01	55499.380	5.0	73498.930	6.0
555.4170	22.00	-4.39	30060.328	4.0	48059.820	3.0
555.4245	24.00	-4.02	31028.330	2.0	49027.580	2.0
555.4306	24.00	-2.41	33060.740	3.0	51059.790	4.0
555.4328	9.00	-1.49	118427.823	1.5	136426.800	1.5
555.4346	24.00	-1.83	28679.430	1.0	46678.350	1.0
555.4383	24.01	-2.10	66727.160	2.5	84725.960	3.5
555.4723	29.01	-3.62	128558.900	3.0	146556.600	3.0
555.4744	24.00	-4.52	28679.430	1.0	46677.060	2.0
555.4769	6.00	-3.36	69710.660	2.0	87708.210	2.0
555.4832	8.00	-2.11	88630.599	1.0	106627.946	1.0
555.4868	26.00	-.44	36686.159	4.0	54683.390	4.0
555.4935	29.00	-1.63	44442.294	0.0	62444.305	0.0
555.4957	24.00	-.84	35807.900	2.0	53804.840	3.0
555.4992	26.00	-3.20	33765.291	2.0	51762.120	2.0
555.5004	8.00	-1.89	88631.158	2.0	106627.946	1.0
555.5007	27.00	-1.21	33173.360	3.5	51170.140	4.5
555.5053	8.00	-2.59	88631.315	0.0	106627.946	1.0
555.5083	18.00	-4.79	107289.747	2.0	125286.280	1.0
555.5101	26.00	-1.95	33412.706	3.0	51409.180	4.0
555.5189	26.00	-3.40	28604.610	2.0	46600.800	1.0
555.5195	24.00	-2.47	28682.180	2.0	46678.350	1.0
555.5467	29.01	-1.37	119039.680	2.0	137034.970	3.0
555.5593	24.00	-1.62	28682.180	2.0	46677.060	2.0
555.5637	25.02	-.57	173920.690	1.5	191915.430	.5
555.5729	9.02	-2.08	442147.190	2.5	460141.630	2.5
555.5779	28.01	-1.09	114874.880	2.5	132869.160	3.5
555.5794	25.00	-2.20	35114.980	2.5	53109.210	2.5
555.5967	24.00	-2.79	27649.710	4.0	45643.380	3.0
555.5973	16.01	-.91	109831.280	1.5	127824.930	.5
555.5989	7.00	-3.49	94830.860	2.5	112824.459	2.5
555.6152	24.00	-2.66	24299.890	2.0	42292.960	1.0
555.6254	24.00	-4.43	31377.960	4.0	49370.700	3.0
555.6280	42.00	-1.46	16615.449	0.0	34613.102	0.0
555.6410	9.00	-2.13	118427.823	1.5	136420.060	.5
555.6430	39.00	-.77	15163.614	0.0	33160.781	0.0
555.6470	18.02	-4.98	186657.200	3.0	204649.240	2.0
555.6480	70.00	-1.99	0.000	0.0	17997.005	0.0
555.6520	44.00	-2.64	7985.094	0.0	25981.970	0.0
555.6529	22.01	-4.44	47466.800	3.5	65458.650	3.5
555.6609	25.01	-2.62	49820.160	2.0	67811.750	3.0
555.6637	24.00	-3.62	46720.540	4.0	64712.040	3.0
555.6665	28.00	-2.83	31786.210	3.0	49777.619	3.0
555.6720	42.00	-.90	23955.283	0.0	41951.511	0.0
555.6748	25.00	-1.36	44523.450	3.5	62514.590	2.5
555.6758	24.00	-2.13	35813.730	3.0	53804.840	3.0
555.7040	90.00	-1.45	8711.012	0.0	26706.204	0.0
555.7227	28.01	-4.91	100389.520	2.5	118379.110	2.5
555.7261	23.01	-4.00	55304.340	4.0	73293.820	5.0
555.7310	27.00	-4.15	15184.040	2.5	33173.360	3.5
555.7344	27.00	-7.15	8460.810	2.5	26450.020	2.5
555.7374	7.00	-1.79	94770.850	.5	112759.966	1.5
555.7443	23.00	-3.82	137.380	2.5	18126.270	1.5
555.7480	21.00	-4.18	18504.050	.5	36492.820	.5
555.7558	28.01	-3.73	116167.760	1.5	134156.280	1.5
555.7626	17.01	-3.14	129065.400	2.0	147053.700	2.0
555.7638	23.02	-1.69	144772.020	3.5	162760.280	4.5
555.7653	25.00	-1.76	35114.980	2.5	53103.190	1.5
555.7697	23.00	-3.65	25930.510	1.5	43918.580	2.5
555.7836	27.00	-2.22	34133.590	3.5	52121.210	4.5
555.7883	26.00	-1.92	36079.353	3.0	54066.821	2.0
555.7900	92.01	-2.31	5726.684	0.0	23719.091	0.0
555.7906	26.00	-4.24	25091.620	0.0	43079.013	1.0
555.7960	26.00	-1.56	36079.353	3.0	54066.570	4.0
555.8027	29.01	-4.20	128569.600	2.0	146556.600	3.0
555.8148	25.01	-4.07	55696.500	4.0	73683.110	4.0
555.8163	23.01	-4.85	44098.460	3.0	62085.020	2.0
555.8290	29.01	-3.79	117747.450	3.0	135733.600	3.0
555.8350	90.00	-1.23	8065.752	0.0	26056.703	0.0
555.8475	28.01	-1.53	114942.420	1.5	132927.970	1.5
555.8698	18.00	-1.83	104102.144	1.0	122086.974	2.0
555.8750	23.00	-2.91	13801.530	1.5	31786.190	.5
555.8818	27.00	-1.77	28470.510	1.5	46454.950	1.5
555.8825	23.00	-2.57	8412.940	.5	26397.360	.5
555.8951	16.01	-.81	133399.820	1.5	151383.830	.5
555.9047	17.01	-2.76	140740.000	1.0	158723.700	1.0
555.9115	25.01	-1.57	49882.150	4.0	67865.630	4.0
555.9362	26.00	-2.12	40842.130	3.0	58824.810	2.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
555.9415	29.01	-3.05	117928.480	1.0	135910.990	2.0
555.9658	18.00	-3.46	107131.755	1.0	125113.480	2.0
555.9678	7.00	-2.77	94830.860	2.5	112812.518	2.5
555.9718	28.01	-1.24	114836.630	3.5	132818.160	4.5
555.9730	64.00	-2.00	1693.808	0.0	19680.293	0.0
555.9750	44.00	-1.82	7420.492	0.0	25406.912	0.0
555.9880	90.00	-2.60	3629.588	0.0	21615.588	0.0
555.9905	9.00	-3.90	117622.923	2.5	135603.850	2.5
556.0077	28.01	-4.99	94705.930	3.5	112686.300	2.5
556.0191	26.00	-1.59	35767.546	4.0	53747.547	3.0
556.0290	26.01	-4.20	54063.530	.5	72043.210	1.5
556.0328	7.00	-.93	94881.790	3.5	112861.348	4.5
556.0494	29.01	-1.64	120919.410	1.0	138898.430	1.0
556.0547	23.00	-3.72	323.420	3.5	18302.270	3.5
556.0584	24.00	-2.15	31048.850	1.0	49027.580	2.0
556.0620	76.00	.11	35408.651	0.0	53392.257	0.0
556.0690	64.01	-1.47	10969.423	0.0	28952.803	0.0
556.0964	25.02	-4.00	115774.000	3.5	133751.500	3.5
556.1020	25.00	-3.53	27281.850	.5	45259.170	1.5
556.1104	21.00	-3.79	18515.770	1.5	36492.820	.5
556.1170	60.00	-1.10	0.000	0.0	17981.828	0.0
556.1250	17.00	-2.09	84132.262	2.5	102108.840	1.5
556.1370	62.00	-1.69	806.575	0.0	18787.756	0.0
556.1460	58.01	-1.29	11695.340	0.0	29676.230	0.0
556.1500	25.01	-2.69	49889.860	3.0	67865.630	4.0
556.1583	28.01	-1.14	108763.320	.5	126738.820	1.5
556.1648	23.00	-3.19	13810.900	.5	31786.190	.5
556.1797	22.00	-4.41	25926.820	4.0	43901.630	4.0
556.1868	23.01	-4.55	55304.340	4.0	73278.920	4.0
556.1954	18.01	-2.06	190507.360	1.5	208481.660	.5
556.2060	23.01	-2.84	44159.430	2.0	62133.390	3.0
556.2063	29.01	-3.09	117928.480	1.0	135902.430	0.0
556.2070	70.00	-.80	24600.544	0.0	42579.462	0.0
556.2078	24.00	-2.54	37233.500	5.0	55207.400	4.0
556.2098	28.00	-4.27	36600.805	2.0	54574.640	1.0
556.2100	26.00	-.82	35379.189	5.0	53353.020	6.0
556.2201	22.00	-4.56	25107.417	2.0	43080.920	2.0
556.2684	26.00	-1.02	35767.546	4.0	53739.488	5.0
556.2697	29.01	-3.16	116388.000	2.0	134359.900	1.0
556.2713	22.00	-4.65	7255.369	2.0	25227.217	3.0
556.2722	28.01	-4.38	104298.230	4.5	122270.050	3.5
556.2775	28.01	-2.01	114874.880	2.5	132846.530	3.5
556.2790	30.02	-.49	216895.300	1.0	234866.900	1.0
556.2821	18.01	-2.67	201030.300	.5	219001.800	1.5
556.2892	25.02	-3.25	115780.230	2.5	133751.500	3.5
556.3000	41.00	-1.79	10162.848	0.0	28138.760	0.0
556.3158	28.01	-3.82	100592.980	3.5	118563.390	3.5
556.3205	18.01	-1.92	192556.840	2.5	210527.100	2.5
556.3232	7.00	-2.79	94830.860	2.5	112801.031	1.5
556.3240	75.00	-1.88	14518.354	0.0	32493.491	0.0
556.3369	28.01	-1.42	114942.420	1.5	132912.150	2.5
556.3397	28.01	-4.63	110021.920	4.5	127991.560	3.5
556.3471	25.01	-4.89	52373.180	3.0	70342.580	3.0
556.3487	6.00	-4.65	69744.030	3.0	87713.380	3.0
556.3498	26.00	-4.99	37409.530	1.0	55378.842	2.0
556.3588	26.00	-1.21	33801.555	2.0	51770.577	3.0
556.3657	24.00	-2.52	27597.220	3.0	45566.020	3.0
556.3679	27.00	-1.59	28777.270	3.5	46746.000	2.5
556.3697	26.00	-3.28	19552.474	1.0	37521.144	2.0
556.3719	30.02	.38	216607.400	5.0	234576.000	4.0
556.3809	24.00	-4.20	35572.940	2.0	53541.250	2.0
556.3874	30.02	-.07	217655.800	3.0	235623.900	3.0
556.4050	42.00	-1.39	21051.613	0.0	39024.133	0.0
556.4082	26.00	-4.03	37157.546	2.0	55124.974	3.0
556.4170	92.00	-1.19	3710.246	0.0	21682.378	0.0
556.4256	7.00	-1.70	94793.460	1.5	112760.325	2.5
556.4256	7.00	-1.31	94830.860	2.5	112797.725	3.5
556.4326	27.00	-4.69	15184.040	2.5	33150.680	1.5
556.4367	7.00	-3.10	94793.460	1.5	112759.966	1.5
556.4447	28.01	-4.53	104081.040	4.5	122047.290	3.5
556.4490	7.00	-3.52	94770.850	.5	112736.961	1.5
556.4527	23.01	-4.33	30613.970	4.0	48579.960	3.0
556.4750	27.00	-3.55	29563.170	1.5	47528.440	.5
556.4858	17.00	-2.14	83894.037	3.5	101858.960	2.5
556.4877	21.00	-2.81	15881.760	3.5	33846.620	3.5
556.4893	28.01	-4.51	116191.470	2.5	134156.280	1.5
556.4915	16.01	-.17	110268.330	2.5	128233.070	2.5
556.5078	23.01	-4.66	54717.850	1.0	72682.060	2.0
556.5187	25.02	-.26	174048.890	2.5	192012.750	1.5
556.5255	7.01	-1.04	205724.810	3.0	223688.450	2.0
556.5302	20.02	-1.54	326186.320	3.0	344149.810	2.0
556.5326	24.01	-2.65	66355.130	1.5	84318.540	1.5
556.5382	24.00	-1.65	37244.170	4.0	55207.400	4.0
556.5435	23.00	-4.07	15000.840	5.5	32963.900	6.5
556.5440	57.00	-.88	7581.807	0.0	25549.838	0.0
556.5478	22.00	-.73	18037.225	4.0	36000.144	4.0
556.5687	26.00	-.45	37162.729	3.0	55124.974	3.0
556.5713	15.00	-2.64	56339.540	2.5	74301.700	2.5
556.5720	57.00	-1.57	2984.328	0.0	20951.455	0.0
556.5732	18.01	-1.96	190732.970	.5	208695.070	1.5
556.5749	22.00	-4.66	8602.340	2.0	26564.385	3.0
556.5924	23.00	-2.19	8476.200	1.5	26437.680	1.5
556.5946	27.00	-1.82	34133.590	3.5	52095.000	3.5
556.6025	22.00	-3.24	27750.124	5.0	45711.280	4.0
556.6247	23.00	-5.20	553.020	4.5	18513.460	4.5
556.6557	24.00	-1.28	27703.840	4.0	45663.280	5.0
556.6736	25.01	-4.19	52383.720	4.0	70342.580	3.0
556.6803	26.00	-4.03	26224.961	3.0	44183.607	2.0
556.6940	57.01	-1.14	19115.832	0.0	37079.022	0.0
556.7021	16.01	-3.74	140708.510	2.5	158666.450	1.5
556.7065	30.02	-1.11	219684.900	3.0	237642.700	3.0
556.7071	28.01	-1.54	114970.190	.5	132927.970	1.5
556.7278	26.00	-2.39	35611.608	3.0	53568.720	2.0
556.7397	26.00	-2.44	21038.987	2.0	38995.717	1.0
556.7490	23.01	-4.96	54717.850	1.0	72674.280	2.0
556.7530	15.00	-3.98	64239.500	.5	82195.800	1.5
556.7657	28.01	-1.67	118563.390	3.5	136519.280	4.5
556.7704	23.00	-3.77	15571.900	2.5	33527.640	2.5
556.7732	24.00	-2.75	31355.210	2.0	49310.860	3.0
556.7732	22.00	-3.94	28882.440	3.0	46838.090	4.0
556.7744	25.02	-1.50	174436.590	2.5	192392.200	3.5
556.7750	25.00	.96	44523.450	3.5	62479.040	4.5
556.7750	39.00	-.84	15405.586	0.0	33366.163	0.0
556.8056	26.00	-1.46	33507.102	3.0	51461.707	4.0
556.8066	25.00	-3.44	27201.540	2.5	45156.110	2.5
556.8274	28.02	-2.85	98238.200	4.0	116192.100	4.0
556.8355	14.01	-1.57	103861.000	.5	121814.640	.5
556.8395	24.00	-4.31	24200.230	6.0	42153.740	5.0
556.8411	55.00	-2.45	11178.270	0.0	29136.715	0.0
556.8460	57.00	-1.21	3468.273	0.0	21426.559	0.0
556.8560	26.00	-2.84	33801.555	2.0	51754.534	1.0
556.8594	27.00	-3.55	36329.860	2.5	54282.730	2.5
556.8620	42.00	-.86	22745.421	0.0	40703.192	0.0
556.8679	26.00	-3.24	33412.706	3.0	51365.300	3.0
556.8802	17.01	.09	153257.000	2.0	171209.200	2.0
556.8814	23.00	-3.17	26738.310	4.5	44690.470	3.5
556.8821	22.00	-4.70	6742.757	4.0	24694.895	4.0
556.8879	26.00	-3.00	29320.050	1.0	47271.999	1.0
556.8907	28.01	-4.38	100490.950	1.5	118442.810	1.5
556.9016	24.01	-2.87	66256.770	.5	84208.280	.5
556.9030	44.00	-2.69	7985.094	0.0	25941.542	0.0
556.9223	28.01	-2.31	98561.220	2.5	116512.060	3.5
556.9402	22.00	-1.91	20209.444	2.0	38159.710	3.0
556.9422	28.01	-2.93	115785.060	1.5	133735.260	2.5
556.9480	42.00	-.97	23390.681	0.0	41345.679	0.0
556.9626	26.00	-.77	27559.568	2.0	45509.112	1.0
556.9697	14.00	-1.82	45276.188	1.0	63225.500	2.0
556.9946	23.00	-3.61	14949.300	4.5	32897.810	5.5
556.9968	28.01	-3.60	118379.110	2.5	136327.550	1.5
557.0054	26.00	-4.37	22946.810	1.0	40894.972	2.0
557.0197	9.00	-1.95	116143.579	.5	134091.280	1.5
557.0262	22.00	-3.31	28702.768	3.0	46650.260	3.0
557.0330	63.00	-.08	13711.778	0.0	31664.036	0.0
557.0380	57.00	-2.34	0.000	0.0	17952.097	0.0
557.0450	42.00	-.56	10646.793	0.0	28598.664	0.0
557.0493	24.00	-3.49	37205.880	3.0	55152.630	2.0
557.0561	24.00	-3.31	31364.330	3.0	49310.860	3.0
557.0564	24.00	-2.04	33113.270	4.0	51059.790	4.0
557.0601	20.02	-.20	323655.060	2.0	341601.460	2.0
557.0617	25.01	-1.70	49820.160	2.0	67766.510	2.0
557.1129	24.00	-2.99	44746.260	6.0	62690.960	5.0
557.1235	21.00	-3.70	18571.400	2.5	36515.760	1.5
557.1263	6.00	-2.78	69689.480	1.0	87633.750	2.0
557.1297	25.00	-3.41	35165.050	1.5	53109.210	2.5
557.1306	28.01	-4.93	100619.260	4.5	118563.390	3.5
557.1343	23.00	-2.59	26122.040	3.5	44066.050	3.5
557.1440	41.00	-1.04	18228.600	0.0	36177.281	0.0
557.1501	7.00	-2.71	94793.460	1.5	112736.961	1.5
557.1558	29.01	-2.83	120875.850	2.0	138819.170	3.0
557.1645	26.00	-4.04	33765.291	2.0	51708.330	2.0
557.1760	7.00	-4.31	94881.790	3.5	112824.459	2.5
557.1828	18.01	-4.33	186171.260	.5	204113.710	1.5
557.1840	89.01	-2.18	4032.876	0.0	21980.269	0.0
557.1871	24.01	-4.44	72648.790	3.5	90591.100	2.5
557.1961	24.00	-4.14	35862.820	4.0	53804.840	3.0
557.1988	22.00	-7.41	12118.394	4.0	30060.328	4.0
557.2042	23.00	-9.76	14949.300	4.5	32891.060	3.5
557.2061	23.00	-4.48	14514.750	1.5	32456.450	1.5
557.2191	26.00	-4.79	26224.961	3.0	44166.240	3.0
557.2470	90.00	-1.77	7420.492	0.0	25365.856	0.0
557.2499	27.00	-2.39	18389.570	1.5	36329.860	2.5
557.2530	64.00	-1.25	7017.204	0.0	24962.374	0.0
557.2544	18.00	-2.66	105617.315	2.0	123557.459	3.0
557.2850	26.00	-.53	27394.676	3.0	45333.834	2.0
557.3000	8.04	-.86	582984.000	0.0	600927.657	0.0
557.3011	25.00	.79	44814.730	1.5	62753.370	2.5
557.3070	92.00	-1.09	10243.505	0.0	28186.937	0.0
557.3083	26.00	-2.03	33801.555	2.0	51739.964	2.0
557.3132	23.01	-3.34	30641.710	3.0	48579.960	3.0
557.3166	25.00	-2.30	35165.050	1.5	53103.190	1.5
557.3275	23.00	-3.84	26505.880	2.5	44443.670	1.5
557.3310	90.00	-1.29	8065.752	0.0	26008.411	0.0
557.3420	62.00	-.93	3064.986	0.0	21007.291	0.0
557.3424	26.02	-1.66	114325.350	5.0	132262.660	6.0
557.3427	29.01	-4.16	128558.900	3.0	146496.200	3.0
557.3470	75.00	-1.85	17180.052	0.0	35122.196	0.0
557.3590	92.00	-1.67	6210.629	0.0	24152.386	0.0
557.3614	23.00	-8.10	14910.040	3.5	32846.740	2.5
557.3614	23.00	-4.08	14910.040	3.5	32846.740	2.5
557.3682	25.00	.89	44696.290	2.5	62632.770	3.5
557.3704	27.00	-1.95	34133.590	3.5	52070.000	2.5
557.3747	25.00	-1.92	35165.050	1.5	53101.320	.5
557.3996	23.00	-3.50	323.420	3.5	18258.890	2.5
557.4002	29.01	-3.67	117928.480	1.0	135863.930	1.0
557.4221	18.00	-1.63	107131.755	1.0	125066.501	2.0
557.4357	24.00	-1.58	35870.530	4.0	53804.840	3.0
557.4368	26.00	-3.58	35611.608	3.0	53545.882	3.0
557.4671	26.01	-3.82	62244.570	1.5	80177.870	1.5
557.4795	24.00	-2.43	31377.960	4.0	49310.860	3.0
557.4890	62.00	-1.45	241.973	0.0	18179.547	0.0
557.4994	15.00	-3.78	56339.540	2.5	74271.800	1.5
557.5115	14.00	-1.25	45293.629	2.0	63225.500	2.0
557.5128	24.00	-2.96	24286.540	1.0	42218.370	0.0
557.5190	42.00	-1.31	19841.750	0.0	37778.358	0.0
557.5261	25.00	-2.52	34938.700	4.5	52870.100	3.5
557.5470	7.00	-4.74	94881.790	3.5	112812.518	2.5
557.5542	9.00	-5.00	116040.883	1.5	133971.380	1.5
557.5815	24.00	-3.93	39158.630	4.0	57088.250	5.0
557.5821	25.01	-2.94	49882.150	4.0	67811.750	3.0
557.5833	27.00	-2.18	28777.270	3.5	46706.830	3.5
557.5833	25.02	-.11	174243.330	3.5	192172.690	2.5
557.5860	72.00	.02	26052.379	0.0	43986.832	0.0
557.5863	7.00	-2.11	94830.860	2.5	112760.325	2.5
557.5917	23.01	-3.58	55349.630	3.0	73278.920	4.0
557.5967	14.01	-1.26	103885.510	1.5	121814.640	.5
557.5975	7.00	-4.24	94830.860	2.5	112759.966	1.5
557.6029	25.02	-1.48	174436.590	2.5	192365.520	1.5
557.6039	10.00	-3.39	151038.452	1.0	168967.353	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
557.6042	27.00	-1.59	36329.860	2.5	54258.750	2.5
557.6097	26.00	-1.08	27666.334	1.0	45595.046	0.0
557.6130	64.00	-1.17	6694.574	0.0	24628.159	0.0
557.6160	41.00	-2.65	2742.356	0.0	20675.844	0.0
557.6278	25.02	-.12	174464.070	4.5	192392.200	3.5
557.6340	74.00	-1.85	20325.695	0.0	38258.604	0.0
557.6365	29.01	-3.13	118991.500	4.0	136919.350	3.0
557.6371	23.00	-3.43	26604.770	3.5	44532.600	2.5
557.6424	24.00	-2.01	44746.260	6.0	62673.920	6.0
557.6518	23.00	-1.86	8578.520	2.5	26505.880	2.5
557.6589	25.00	-.00	45156.110	2.5	63083.240	1.5
557.6700	60.00	-.95	3629.588	0.0	21561.340	0.0
557.6735	22.00	-3.22	25107.417	2.0	43034.080	1.0
557.6754	29.01	-4.37	128569.600	2.0	146496.200	3.0
557.6823	21.00	-2.14	21032.780	2.5	38959.160	3.5
557.6859	17.00	-2.56	84485.309	1.5	102411.570	.5
557.6915	10.01	-2.37	303508.480	1.5	321434.560	2.5
557.7013	26.00	-.77	40594.413	4.0	58520.180	4.0
557.7068	23.01	-3.10	44159.430	2.0	62085.020	2.0
557.7140	63.00	0.00	13389.148	0.0	31319.485	0.0
557.7239	10.01	-3.26	303509.520	2.5	321434.560	2.5
557.7315	9.00	-1.26	116040.883	1.5	133965.680	2.5
557.7376	23.00	-3.30	15770.720	4.5	33695.320	5.5
557.7420	39.00	-.32	15728.216	0.0	33657.653	0.0
557.7613	25.01	-4.39	55759.270	3.0	73683.110	4.0
557.7687	18.01	-3.67	174409.830	1.5	192333.430	.5
557.7846	6.00	-3.66	69710.660	2.0	87633.750	2.0
557.7849	25.01	-3.87	53017.160	1.0	70940.240	2.0
557.7955	24.00	-4.02	35618.510	1.0	53541.250	2.0
557.8157	18.02	-1.97	207233.090	2.0	225155.180	1.0
557.8161	26.00	-3.68	40052.080	2.0	57974.160	2.0
557.8204	17.00	-3.15	83130.900	1.5	101052.840	2.5
557.8220	25.01	-1.64	49889.860	3.0	67811.750	3.0
557.8290	41.00	-1.48	12259.943	0.0	30186.584	0.0
557.8447	23.00	-2.45	8476.200	1.5	26397.360	.5
557.8463	7.00	-2.50	94770.850	.5	112691.960	.5
557.8518	22.00	-3.59	25227.217	3.0	43148.150	3.0
557.8519	18.01	-1.25	192556.840	2.5	210477.770	3.5
557.8554	22.00	-2.76	12118.394	4.0	30039.211	5.0
557.8581	27.00	-4.08	23184.230	2.5	41104.960	2.5
557.8711	28.00	-1.77	13521.352	2.0	31441.665	2.0
557.8783	37.00	-2.28	12578.950	0.0	30504.006	0.0
557.8827	16.01	-3.35	110313.130	2.5	128233.070	2.5
557.8936	10.01	-3.33	303508.480	1.5	321428.070	2.5
557.8964	30.02	.28	216464.500	4.0	234384.000	3.0
557.9076	20.02	.21	341601.460	2.0	359520.600	2.0
557.9260	10.01	-3.03	303509.520	2.5	321428.070	2.5
557.9263	10.01	-2.42	303509.520	2.5	321428.060	3.5
557.9312	23.01	-4.32	55304.340	4.0	73222.720	4.0
557.9332	26.00	-2.60	34121.623	0.0	52039.939	1.0
557.9360	90.00	-1.67	5484.711	0.0	23407.914	0.0
557.9400	17.01	-1.33	140259.000	2.0	158177.100	1.0
557.9431	16.05	-.07	504112.000	.5	522030.000	.5
557.9630	63.00	-.28	14437.696	0.0	32360.031	0.0
557.9767	21.00	-3.55	15881.760	3.5	33798.680	2.5
557.9914	16.01	-3.07	140750.000	1.5	158666.450	1.5
557.9917	26.00	-3.72	36766.950	3.0	54683.390	4.0
558.0019	24.01	-4.12	50667.330	3.5	68583.440	2.5
558.0030	63.00	-.24	13147.176	0.0	31068.227	0.0
558.0066	23.00	-3.88	15724.220	3.5	33640.180	4.5
558.0074	7.00	-3.41	94881.790	3.5	112797.725	3.5
558.0297	26.00	-4.82	29356.780	2.0	47271.999	1.0
558.0414	18.02	-1.54	207233.090	2.0	225147.930	2.0
558.0518	24.00	-3.03	27728.870	2.0	45643.380	3.0
558.0525	17.00	-1.71	83130.900	1.5	101045.386	1.5
558.0564	23.00	-3.23	26004.220	2.5	43918.580	2.5
558.0660	76.00	.11	32908.268	0.0	50827.295	0.0
558.0739	22.00	-3.06	20062.980	1.0	37976.780	2.0
558.0763	10.01	-2.70	303509.520	2.5	321423.240	3.5
558.0820	92.01	-2.41	5323.396	0.0	23241.910	0.0
558.0938	23.00	-4.17	20202.490	2.5	38115.650	3.5
558.1080	39.00	-1.18	15889.531	0.0	33807.210	0.0
558.1278	27.00	-1.56	34352.420	1.5	52264.490	1.5
558.1334	25.00	-.05	44993.920	3.5	62905.810	2.5
558.1599	24.00	-3.97	27703.840	4.0	45614.880	4.0
558.1600	60.01	-1.90	6855.889	0.0	24771.899	0.0
558.1610	92.01	-2.69	241.973	0.0	18157.951	0.0
558.1770	28.01	-4.58	101754.800	2.5	119665.290	2.5
558.1823	24.00	-2.63	33040.100	2.0	50950.420	3.0
558.1866	18.00	-4.86	105462.804	3.0	123372.987	2.0
558.1870	39.00	-.36	10969.423	0.0	28884.566	0.0
558.1908	26.00	-4.63	21715.735	5.0	39625.784	4.0
558.1965	20.00	-.55	20349.260	2.0	38259.124	3.0
558.1965	20.00	-.84	20349.260	2.0	38259.124	3.0
558.2000	8.04	-.51	583020.000	0.0	600934.726	0.0
558.2048	27.01	-5.42	27469.200	5.0	45378.800	4.0
558.2063	23.00	-2.61	15571.900	2.5	33481.450	3.5
558.2082	28.01	-2.53	118379.110	2.5	136288.600	2.5
558.2108	17.00	-4.09	83894.037	3.5	101803.442	2.5
558.2387	17.00	-2.32	83130.900	1.5	101039.413	.5
558.2400	59.01	-2.17	8388.382	0.0	26301.824	0.0
558.2415	23.01	-3.35	19132.690	2.0	37041.110	2.0
558.2493	25.01	-3.14	85895.270	2.0	103803.440	3.0
558.2512	25.00	-2.70	27248.000	1.5	45156.110	2.5
558.2665	23.00	-3.01	14548.830	2.5	32456.450	1.5
558.2914	23.01	-2.99	30673.140	2.0	48579.960	3.0
558.3017	28.01	-4.88	119656.250	3.5	137562.740	3.5
558.3139	7.00	-2.42	94830.860	2.5	112736.961	1.5
558.3161	10.01	-4.55	303528.530	3.5	321434.560	2.5
558.3217	15.01	-.53	105550.450	2.0	123456.300	1.0
558.3301	18.01	-1.19	190106.230	1.5	208011.810	1.5
558.3435	6.00	-2.80	70743.950	1.0	88649.100	0.0
558.3591	24.00	-2.14	46846.770	3.0	64751.420	4.0
558.3680	64.01	-1.56	8469.040	0.0	26378.376	0.0
558.3750	29.01	-2.02	116080.460	3.0	133984.600	3.0
558.3753	28.01	-4.95	118828.610	2.5	136732.740	1.5
558.3794	17.02	-4.13	186220.000	.5	204124.000	1.5
558.3822	29.01	-3.12	117231.690	1.0	135135.600	1.0
558.3903	14.00	-2.12	45321.848	3.0	63225.500	2.0
558.3951	26.00	-1.89	33801.555	2.0	51705.052	2.0
558.3984	18.01	-4.18	172829.580	1.5	190732.970	.5
558.3996	24.01	-4.77	69638.770	1.5	87542.120	.5
558.4000	8.04	-.99	583020.000	0.0	600928.309	0.0
558.4012	10.01	-4.13	303527.740	4.5	321431.040	5.5
558.4015	28.01	-3.28	100475.820	3.5	118379.110	2.5
558.4020	73.00	-.17	27584.872	0.0	45493.117	0.0
558.4037	26.00	-2.69	35257.309	4.0	53160.530	3.0
558.4096	25.00	-.68	44523.450	3.5	62426.480	3.5
558.4214	6.00	-2.81	70743.950	1.0	88646.600	1.0
558.4247	26.00	-1.55	35379.189	5.0	53281.735	5.0
558.4290	23.00	-2.11	19023.470	4.5	36925.880	3.5
558.4311	29.01	-2.39	121078.960	3.0	138981.300	2.0
558.4440	76.00	-1.25	15082.956	0.0	32989.854	0.0
558.4492	23.00	-.27	8578.520	2.5	26480.280	3.5
558.4589	28.01	-3.91	101754.800	2.5	119656.250	3.5
558.4720	75.00	-1.94	16534.792	0.0	34440.793	0.0
558.4742	23.00	-1.44	15062.940	6.5	32963.900	6.5
558.4774	26.00	-2.42	28819.966	5.0	46720.824	4.0
558.4935	27.00	-4.01	15774.040	1.5	33674.380	2.5
558.5185	23.00	-1.31	19026.340	2.5	36925.880	3.5
558.5188	10.01	-3.72	303528.530	3.5	321428.060	3.5
558.5382	26.01	-3.77	67273.860	1.5	85172.770	.5
558.5509	7.00	-2.50	94793.460	1.5	112691.960	.5
558.5550	24.00	-4.52	35884.400	5.0	53782.770	4.0
558.5640	26.00	-2.81	34121.623	0.0	52019.706	1.0
558.5721	26.00	-3.21	35257.309	4.0	53155.130	4.0
558.5962	24.00	-2.25	46905.030	4.0	64802.080	5.0
558.5987	23.00	-1.51	15000.840	5.5	32897.810	5.5
558.6006	22.00	-4.72	28828.510	2.0	46725.420	3.0
558.6074	23.00	-.13	26021.890	3.5	43918.580	2.5
558.6160	64.01	-1.99	10001.532	0.0	27902.917	0.0
558.6240	63.00	-.39	12985.861	0.0	30886.989	0.0
558.6293	24.00	-2.21	37205.880	3.0	55101.870	3.0
558.6320	64.00	-1.30	7420.492	0.0	25321.364	0.0
558.6349	24.01	-3.56	50687.630	2.5	68583.440	2.5
558.6350	70.00	-1.03	24600.544	0.0	42501.320	0.0
558.6446	10.01	-4.35	303527.740	4.5	321423.240	3.5
558.6449	10.01	-4.17	303527.740	4.5	321423.230	4.5
558.6558	10.01	-2.37	303527.740	4.5	321422.880	5.5
558.6568	10.01	-3.13	303527.740	4.5	321422.850	4.5
558.6571	11.02	-4.74	442710.500	1.5	460605.600	1.5
558.6580	6.00	-2.67	70743.950	1.0	88639.020	1.0
558.6693	10.01	-3.43	303528.530	3.5	321423.240	3.5
558.6696	10.01	-2.59	303528.530	3.5	321423.230	4.5
558.6758	27.01	-7.01	27484.300	3.0	45378.800	4.0
558.6763	26.00	-.36	27166.804	4.0	45061.287	3.0
558.6767	26.00	-3.16	34362.860	1.0	52257.330	0.0
558.6767	28.01	-4.59	116261.810	.5	134156.280	1.5
558.6814	10.01	-3.00	303528.530	3.5	321422.850	4.5
558.6830	63.00	-.45	13147.176	0.0	31046.414	0.0
558.6886	23.00	-1.29	26171.960	4.5	44066.050	3.5
558.6902	27.00	-4.55	23207.760	1.5	41101.800	.5
558.6970	41.00	-2.66	1129.205	0.0	19027.995	0.0
558.7030	90.00	-1.53	4920.109	0.0	22818.706	0.0
558.7073	24.01	-4.98	70107.830	4.5	88001.320	5.5
558.7273	28.01	-3.14	114836.630	3.5	132729.480	2.5
558.7274	6.00	-2.46	70743.950	1.0	88636.800	2.0
558.7304	25.01	-4.93	52653.270	4.0	70546.020	4.0
558.7345	26.00	-4.61	26351.049	5.0	44243.668	5.0
558.7498	26.02	-1.53	181808.700	5.0	199700.830	4.0
558.7544	22.00	-5.34	8602.340	2.0	26494.322	2.0
558.7556	26.00	-1.86	33412.706	3.0	51304.650	4.0
558.7670	27.00	-3.16	33150.680	1.5	51042.260	2.5
558.7801	26.00	-3.66	35856.386	2.0	53747.547	3.0
558.7853	28.00	-2.47	15609.861	2.0	33500.854	3.0
558.7873	9.00	-2.24	116040.883	1.5	133931.810	2.5
558.8013	24.00	-1.53	27816.880	5.0	45707.360	6.0
558.8017	23.00	-4.55	15264.830	5.5	33155.300	4.5
558.8026	23.00	-1.44	18805.050	.5	36695.490	.5
558.8051	26.00	-3.95	33946.920	2.0	51837.279	3.0
558.8110	24.00	-2.84	27223.050	2.0	45113.220	3.0
558.8110	18.01	-4.87	192556.840	2.5	210447.010	3.5
558.8200	62.00	-1.12	2258.411	0.0	20153.261	0.0
558.8263	24.00	-2.01	33060.740	3.0	50950.420	3.0
558.8285	15.01	-.51	106001.990	1.0	123891.600	2.0
558.8340	57.00	-1.22	3468.273	0.0	21362.675	0.0
558.8351	28.01	-4.25	118877.090	1.5	136766.490	2.5
558.8441	26.01	-4.43	66377.370	3.5	84266.480	2.5
558.8460	23.00	-1.70	8715.720	3.5	26604.770	3.5
558.8470	70.01	-.43	35650.624	0.0	53544.609	0.0
558.8594	7.01	-3.19	187461.560	2.0	205350.180	2.0
558.8710	26.02	-4.25	181772.590	6.0	199660.840	5.0
558.8719	18.00	-3.07	105617.315	2.0	123505.536	2.0
558.8738	28.01	-4.46	100490.950	1.5	118379.110	2.5
558.8749	20.00	.31	20371.000	3.0	38259.124	3.0
558.8749	20.00	.02	20371.000	3.0	38259.124	3.0
558.8767	26.00	-4.73	26623.726	2.0	44511.795	2.0
558.8810	7.00	-2.97	94793.460	1.5	112681.389	2.5
558.8986	26.00	-3.51	36079.353	3.0	53966.720	2.0
558.9294	27.00	-1.50	33674.380	2.5	51560.760	2.5
558.9351	10.00	-2.58	151038.452	1.0	168924.651	2.0
558.9357	28.00	-1.03	31441.665	2.0	49327.845	2.0
558.9710	23.00	-3.92	553.020	4.5	18436.070	4.5
558.9807	28.01	-2.40	118442.810	1.5	136327.550	1.5
559.0023	23.01	-2.28	44200.970	1.0	62085.020	2.0
559.0114	20.00	-.58	20335.360	1.0	38219.118	2.0
559.0114	20.00	-.88	20335.360	1.0	38219.118	2.0
559.0130	26.00	-3.75	33095.922	4.0	50979.627	4.0
559.0467	7.01	-4.14	203258.980	2.0	221141.610	3.0
559.0720	27.00	-2.06	16470.600	1.5	34352.420	1.5
559.0860	25.00	-4.95	30419.610	2.5	48300.980	1.5
559.0960	39.00	-1.30	15405.586	0.0	33291.602	0.0
559.1326	21.00	-2.61	16026.520	4.5	33906.400	4.5
559.1379	26.01	-5.10	26352.800	4.5	44232.510	4.5
559.1379	28.01	-2.34	119656.250	3.5	137535.960	3.5
559.1392	29.01	-2.95	119039.680	2.0	136919.350	3.0
559.1408	27.00	-3.19	33173.360	3.5	51052.980	3.5
559.1580	42.00	-.98	24358.571	0.0	42242.604	0.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
559.1724	9.00	-2.17	116040.883	1.5	133919.490	1.5
559.1746	7.00	-4.99	94881.790	3.5	112760.325	2.5
559.1824	26.02	-3.27	206180.410	3.0	224058.700	4.0
559.1850	64.00	-.03	14599.011	0.0	32482.180	0.0
559.1858	23.00	-3.64	14910.040	3.5	32788.220	4.5
559.2020	8.02	-1.99	306584.800	2.0	324462.460	2.0
559.2033	28.01	-3.37	103025.580	2.5	120903.200	3.5
559.2141	28.00	-.62	34163.294	2.0	52040.568	2.0
559.2180	27.00	-1.92	28345.860	4.5	46223.010	4.5
559.2205	18.01	-2.65	185624.730	3.5	203501.800	2.5
559.2243	26.00	-3.10	29320.050	1.0	47197.000	2.0
559.2250	63.00	-1.11	12824.546	0.0	30706.436	0.0
559.2259	28.00	-2.69	15734.018	1.0	33610.916	2.0
559.2283	25.00	-1.65	44696.290	2.5	62573.110	1.5
559.2337	25.01	-2.77	49889.860	3.0	67766.510	2.0
559.2368	8.02	-.34	273080.070	1.0	290956.620	1.0
559.2418	23.00	-.56	8476.200	1.5	26352.590	2.5
559.2653	26.00	-2.48	34636.820	2.0	52512.460	1.0
559.2656	23.00	-9.43	10892.500	3.5	28768.130	4.5
559.2803	26.02	-2.76	181825.670	4.0	199700.830	4.0
559.2818	22.00	-4.84	20795.599	5.0	38670.710	4.0
559.2862	24.00	-2.70	39158.630	4.0	57033.600	4.0
559.2875	28.01	-.80	119656.250	3.5	137531.180	4.5
559.2878	23.01	-3.20	19166.190	1.0	37041.110	2.0
559.2959	23.00	-3.48	323.420	3.5	18198.080	2.5
559.3037	23.00	-2.12	19023.470	4.5	36897.880	4.5
559.3078	27.00	-2.53	29216.370	2.5	47090.650	2.5
559.3150	25.01	-3.44	52653.270	4.0	70527.320	5.0
559.3228	13.01	.41	106918.200	1.0	124792.000	2.0
559.3231	27.00	-2.09	34196.210	1.5	52070.000	2.5
559.3378	21.00	-.89	21085.840	3.5	38959.160	3.5
559.3406	22.00	-2.77	20795.599	5.0	38668.832	6.0
559.3450	23.01	-3.34	55349.630	3.0	73222.720	4.0
559.3516	18.01	-2.30	192712.000	1.5	210584.880	1.5
559.3538	24.00	-4.95	46878.610	3.0	64751.420	4.0
559.3620	90.01	-2.54	6936.547	0.0	24814.057	0.0
559.3733	28.00	-.84	31441.665	2.0	49313.851	3.0
559.3748	29.01	-1.12	118163.500	2.0	136035.640	3.0
559.3860	25.00	-4.90	30354.210	3.5	48225.990	3.5
559.3979	24.00	-4.74	24282.340	4.0	42153.740	5.0
559.4036	26.02	-4.40	206180.410	3.0	224051.630	3.0
559.4051	25.00	-3.20	37586.030	1.5	55457.200	.5
559.4086	6.00	-3.76	70743.950	1.0	88615.010	1.0
559.4120	39.00	-1.22	16050.847	0.0	33926.760	0.0
559.4130	64.00	-.26	13953.751	0.0	31829.632	0.0
559.4164	26.02	-2.41	181830.020	3.0	199700.830	4.0
559.4204	22.00	-.07	27614.667	4.0	45485.350	5.0
559.4208	28.01	-1.98	119665.290	2.5	137535.960	3.5
559.4267	28.01	-2.38	119656.250	3.5	137526.730	2.5
559.4430	60.01	-.77	8952.985	0.0	26827.907	0.0
559.4462	20.00	.05	20349.260	2.0	38219.118	2.0
559.4462	20.00	-.24	20349.260	2.0	38219.118	2.0
559.4493	26.02	-2.40	204907.130	1.0	222776.890	1.0
559.4572	9.00	-3.87	116040.883	1.5	133910.390	.5
559.4640	26.00	-.90	36686.159	4.0	54555.450	4.0
559.4762	27.00	-1.34	33173.360	3.5	51042.260	2.5
559.4872	28.01	-4.03	118897.940	2.5	136766.490	2.5
559.4890	41.00	-1.28	17341.367	0.0	35214.819	0.0
559.5014	17.00	-3.86	84132.262	2.5	102000.360	1.5
559.5056	26.00	-.78	40842.130	3.0	58710.090	3.0
559.5094	25.01	-5.00	49427.320	4.0	67295.160	4.0
559.5109	22.00	-2.27	12118.394	4.0	29986.185	3.0
559.5276	28.01	-.67	119656.250	3.5	137523.510	3.5
559.5329	26.02	-2.70	204907.130	1.0	222774.220	2.0
559.5899	24.00	-2.95	46846.770	3.0	64712.040	3.0
559.6140	29.01	-3.07	128558.900	3.0	146423.400	4.0
559.6156	25.01	-4.75	52653.270	4.0	70517.720	3.0
559.6320	42.00	-1.40	23390.681	0.0	41259.566	0.0
559.6565	28.00	-1.84	34408.574	1.0	52271.716	2.0
559.6616	28.01	-.91	119656.250	3.5	137519.230	2.5
559.6644	23.00	-4.28	15664.750	1.5	33527.640	2.5
559.6703	17.00	-1.96	83364.927	.5	101227.630	.5
559.6704	9.02	-1.39	442278.930	2.5	460141.630	2.5
559.6867	24.00	-3.79	27703.840	4.0	45566.020	3.0
559.6886	14.02	-2.61	227081.190	1.0	244943.310	2.0
559.7099	28.01	-1.70	119665.290	2.5	137526.730	2.5
559.7133	24.00	-4.85	44068.720	3.0	61930.050	3.0
559.7210	64.01	-1.64	11372.710	0.0	29238.754	0.0
559.7299	6.00	-3.76	70743.950	1.0	88604.750	2.0
559.7380	92.01	-2.14	6371.944	0.0	24237.445	0.0
559.7465	17.00	-2.55	83894.037	3.5	101754.307	3.5
559.7471	18.00	-1.43	107289.747	2.0	125150.000	3.0
559.7487	27.01	-6.91	28111.900	2.0	45972.100	3.0
559.7813	23.00	-2.22	8578.520	2.5	26437.680	1.5
559.7832	14.02	-1.44	227084.210	2.0	244943.310	2.0
559.7851	24.00	-2.17	30965.460	3.0	48824.500	4.0
559.7890	22.00	-2.96	18141.229	5.0	36000.144	4.0
559.7940	14.00	-1.68	39683.163	0.0	57541.918	1.0
559.7981	28.00	-4.45	32973.414	4.0	50832.039	3.0
559.8089	7.01	-3.70	187491.900	3.0	205350.180	2.0
559.8108	28.01	-1.32	119665.290	2.5	137523.510	3.5
559.8211	25.01	-4.10	52373.180	3.0	70231.070	2.0
559.8243	17.00	-1.97	85244.330	.5	103102.120	1.5
559.8271	24.00	-4.69	37244.170	4.0	55101.870	3.0
559.8272	26.00	-.49	37521.144	2.0	55378.842	2.0
559.8346	23.01	-4.12	32040.760	2.0	49898.220	2.0
559.8440	26.00	-4.82	29320.050	1.0	47177.210	1.0
559.8470	42.00	-.33	34602.076	0.0	52464.099	0.0
559.8481	20.00	-.14	20335.360	1.0	38192.392	1.0
559.8481	20.00	-.42	20335.360	1.0	38192.392	1.0
559.8539	18.00	-2.37	107496.463	1.0	125353.310	1.0
559.8553	29.01	-4.31	128558.900	3.0	146415.700	2.0
559.8750	73.00	-.49	27584.872	0.0	45446.002	0.0
559.8961	26.01	-3.88	66672.390	3.5	84527.890	4.5
559.9126	26.00	-4.71	37521.144	2.0	55376.117	1.0
559.9230	7.01	-4.97	202861.360	3.0	220716.000	3.0
559.9243	28.01	-2.24	114874.880	2.5	132729.480	2.5
559.9246	14.02	-.69	227088.720	3.0	244943.310	2.0
559.9365	26.01	-8.99	20805.830	4.5	38660.040	3.5
559.9403	23.01	-3.94	34228.790	3.0	52082.880	4.0
559.9420	45.00	-1.45	9114.300	0.0	26973.293	0.0
559.9450	28.01	-.91	119665.290	2.5	137519.230	2.5
559.9520	73.00	-.17	27665.529	0.0	45524.203	0.0
559.9524	22.00	-2.98	25227.217	3.0	43080.920	2.0
559.9590	41.00	-2.19	8952.985	0.0	26811.435	0.0
559.9673	28.01	-3.22	99040.750	1.5	116893.980	2.5
559.9698	24.01	-3.53	66355.130	1.5	84208.280	.5
559.9800	63.00	-1.09	12985.861	0.0	30843.642	0.0
559.9844	22.00	-4.41	12118.394	4.0	29971.078	4.0
560.0000	8.04	-.24	583097.000	0.0	600954.143	0.0
560.0005	14.02	-1.91	227081.190	1.0	244933.360	1.0
560.0010	28.00	-1.09	32982.280	1.0	50834.435	2.0
560.0043	22.00	-3.16	7255.369	2.0	25107.417	2.0
560.0080	22.00	-4.79	6842.964	5.0	24694.895	4.0
560.0156	25.01	-4.90	52379.380	2.0	70231.070	2.0
560.0171	28.01	-4.19	115592.250	1.5	133443.890	2.5
560.0225	26.00	-1.77	34362.860	1.0	52214.330	1.0
560.0225	25.00	-4.41	29320.050	1.0	47171.520	0.0
560.0278	25.00	-4.78	30419.610	2.5	48270.910	2.5
560.0325	26.02	-2.51	204907.130	1.0	222758.280	2.0
560.0448	29.01	-1.63	118163.500	2.0	136014.260	2.0
560.0460	18.00	-3.04	105617.315	2.0	123468.034	1.0
560.0500	76.00	.02	36618.514	0.0	54474.063	0.0
560.0520	7.00	-2.02	94830.860	2.5	112681.389	2.5
560.0542	29.01	-2.31	117883.140	4.0	135733.600	3.0
560.0551	24.00	-3.09	46985.870	5.0	64836.300	6.0
560.0670	24.00	-2.10	33040.100	2.0	50890.150	2.0
560.0770	72.00	-.92	23310.023	0.0	41164.711	0.0
560.0808	26.00	-4.33	40421.890	4.0	58271.500	5.0
560.0860	62.01	-1.19	11695.340	0.0	29549.741	0.0
560.0953	24.00	-4.62	44080.900	2.0	61930.050	3.0
560.0953	14.02	-1.45	227084.210	2.0	244933.360	1.0
560.1031	17.01	-3.46	159574.200	2.0	177423.100	1.0
560.1050	42.00	-.13	33714.843	0.0	51568.638	0.0
560.1105	18.00	-2.26	106087.305	1.0	123935.970	1.0
560.1277	20.00	-.52	20371.000	3.0	38219.118	2.0
560.1277	20.00	-.83	20371.000	3.0	38219.118	2.0
560.1307	28.01	-2.69	118442.810	1.5	136290.830	.5
560.1361	7.00	-4.00	97770.150	.5	115618.000	1.5
560.1398	23.00	-1.00	19078.150	3.5	36925.880	3.5
560.1461	14.02	-1.31	227081.190	1.0	244928.720	0.0
560.1467	22.00	-5.44	7255.369	2.0	25102.880	2.0
560.1581	15.00	-4.10	58174.450	1.5	76021.600	1.5
560.1816	24.00	-2.35	27816.880	5.0	45663.280	5.0
560.1819	24.00	-3.81	46905.030	4.0	64751.420	4.0
560.1901	23.00	-4.78	32738.140	1.5	50584.270	1.5
560.1910	29.01	-4.32	128569.600	2.0	146415.700	2.0
560.2007	28.01	-2.93	118442.810	1.5	136288.600	2.5
560.2039	25.00	.65	44288.760	4.5	62134.450	5.5
560.2189	28.01	-3.19	110021.920	4.5	127867.130	4.5
560.2230	28.01	-3.91	95332.530	2.5	113177.610	3.5
560.2277	27.00	-1.56	34196.210	1.5	52041.140	.5
560.2415	24.01	-3.96	66649.710	1.5	84494.200	2.5
560.2494	27.00	-3.74	36092.440	2.5	53936.680	2.5
560.2519	26.02	-4.82	105906.230	2.0	123750.390	3.0
560.2525	26.00	-.99	39969.830	3.0	57813.970	3.0
560.2632	18.01	-3.83	186074.350	2.5	203918.150	1.5
560.2677	22.00	-3.23	25388.334	4.0	43231.990	4.0
560.2727	23.03	-2.52	265879.200	1.0	283722.700	1.0
560.2727	23.03	-3.53	265879.200	2.0	283722.700	1.0
560.2757	26.00	-1.38	33507.102	3.0	51350.505	4.0
560.2760	42.00	-.55	25326.461	0.0	43174.807	0.0
560.2792	28.01	-4.55	118923.200	3.5	136766.490	2.5
560.2841	20.00	-.56	20349.260	2.0	38192.392	1.0
560.2841	20.00	-.86	20349.260	2.0	38192.392	1.0
560.2874	25.01	-3.00	85960.410	3.0	103803.440	3.0
560.2877	14.00	-2.44	39955.053	2.0	57798.072	2.0
560.2910	92.01	-2.24	6371.944	0.0	24219.812	0.0
560.2953	26.00	-1.13	27666.334	1.0	45509.112	1.0
560.3040	25.00	-2.70	35041.370	3.5	52883.870	2.5
560.3046	28.01	-3.61	104298.230	4.5	122140.710	4.5
560.3140	44.00	-2.08	10566.135	0.0	28413.271	0.0
560.3386	28.02	-3.64	121412.200	2.0	139253.600	2.0
560.3520	41.00	-2.70	1532.493	0.0	19378.418	0.0
560.3650	60.01	-2.44	2984.328	0.0	20829.839	0.0
560.3728	6.00	-2.45	70743.950	1.0	88584.260	2.0
560.3832	25.02	-1.30	174332.910	1.5	192172.890	2.5
560.3930	41.00	-3.16	2097.096	0.0	19941.716	0.0
560.3932	18.01	-1.42	189437.690	.5	207277.350	1.5
560.4165	23.00	-1.66	14949.300	4.5	32788.220	4.5
560.4190	23.00	-4.47	15688.800	2.5	33527.640	2.5
560.4196	21.00	-1.06	21032.780	2.5	38871.600	2.5
560.4206	28.01	-4.66	113225.060	.5	131063.850	.5
560.4214	7.00	-2.80	94770.850	.5	112609.612	1.5
560.4281	25.02	-.80	177477.230	2.5	195315.780	2.5
560.4330	74.00	-.23	31617.748	0.0	49461.094	0.0
560.4363	18.00	-2.63	107496.463	1.0	125334.750	0.0
560.4721	24.00	-2.80	33113.270	4.0	50950.420	3.0
560.4752	27.00	-3.54	34196.210	1.5	52033.260	1.5
560.4894	28.01	-4.49	77736.790	4.5	95573.390	3.5
560.4912	23.00	-.96	8412.940	.5	26249.480	1.5
560.5194	16.00	-2.31	63445.115	1.0	81280.760	2.0
560.5340	26.00	-3.57	36975.640	3.0	54810.820	4.0
560.5340	25.00	-4.05	41031.480	4.5	58866.660	4.5
560.5343	26.02	-4.48	181825.670	4.0	199660.840	5.0
560.5437	23.00	-2.53	15062.940	6.5	32897.810	5.5
560.5459	28.01	-4.49	118897.940	2.5	136732.740	1.5
560.5500	73.00	-2.00	17260.709	0.0	35100.331	0.0
560.5513	10.01	-4.95	303599.930	3.5	321434.560	2.5
560.5667	23.00	-3.09	14514.750	1.5	32346.890	.5
560.5692	10.01	-3.82	303600.500	2.5	321434.560	2.5
560.5736	28.01	-4.88	95573.390	3.5	113407.310	2.5
560.5827	26.02	-2.88	204943.260	2.0	222776.890	1.0
560.5860	63.00	-.57	17260.709	0.0	35099.185	0.0
560.5906	26.01	-6.35	25787.600	1.5	43620.980	1.5
560.6000	8.04	-.99	583097.000	0.0	600935.031	0.0
560.6088	16.01	-.09	110766.310	4.5	128599.110	3.5
560.6330	39.00	-1.03	11453.368	0.0	29290.349	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
560.6666	26.02	-2.29	204943.260	2.0	222774.220	2.0
560.6728	18.00	-1.88	104102.144	1.0	121932.908	1.0
560.6730	44.00	-.01	29036.707	0.0	46872.415	0.0
560.6819	22.00	-2.83	31205.985	3.0	49036.460	4.0
560.6996	28.00	-2.89	31441.665	2.0	49271.578	3.0
560.7119	26.01	-5.02	20830.520	2.5	38660.040	3.5
560.7154	24.00	-2.90	33060.740	3.0	50890.150	2.0
560.7210	75.00	-1.01	27342.899	0.0	45177.080	0.0
560.7305	28.01	-2.39	115785.060	1.5	133613.990	1.5
560.7368	25.00	-3.49	35041.370	3.5	52870.100	3.5
560.7556	10.01	-4.16	303599.930	3.5	321428.060	3.5
560.7660	9.00	-2.32	116143.579	.5	133971.380	1.5
560.7710	45.00	-4.20	33795.501	0.0	51628.092	0.0
560.7711	28.01	-3.08	116145.690	3.5	133973.330	2.5
560.7732	10.01	-4.89	303600.500	2.5	321428.070	2.5
560.7736	10.01	-3.38	303600.500	2.5	321428.060	3.5
560.7899	24.00	-3.53	39158.630	4.0	56985.670	3.0
560.7959	7.00	-2.72	97770.150	.5	115597.000	1.5
560.7962	27.00	-7.51	7442.410	3.5	25269.250	3.5
560.8000	8.04	-2.16	583097.000	0.0	600928.669	0.0
560.8022	29.01	-1.51	118163.500	2.0	135990.150	3.0
560.8041	28.01	-4.98	116468.400	1.5	134294.990	2.5
560.8157	26.02	-3.96	181808.700	5.0	199634.920	6.0
560.8350	45.00	-1.61	16050.847	0.0	33881.403	0.0
560.8415	24.00	-4.93	31987.060	4.0	49812.460	3.0
560.8447	21.00	-3.05	14926.240	2.5	32751.540	3.5
560.8497	26.00	-4.90	29371.860	3.0	47197.000	2.0
560.8620	42.00	-.65	26455.667	0.0	44285.365	0.0
560.8677	16.00	-2.08	63456.192	2.0	81280.760	2.0
560.8699	23.03	-.52	237638.800	2.0	255463.300	2.0
560.8796	22.00	-4.05	13981.750	1.0	31805.940	2.0
560.8799	24.00	-4.99	38537.680	5.0	56361.860	5.0
560.8834	25.00	-.91	45259.170	1.5	63083.240	1.5
560.8887	21.00	-3.04	16022.720	2.5	33846.620	3.5
560.8940	18.00	-2.56	107289.747	2.0	125113.480	2.0
560.8964	26.00	-1.73	33946.920	2.0	51770.577	3.0
560.9001	22.00	-4.69	27887.740	3.0	45711.280	4.0
560.9073	10.01	-3.30	303599.930	3.5	321423.240	3.5
560.9076	10.01	-3.58	303599.930	3.5	321423.230	4.5
560.9123	24.00	-4.74	27820.230	3.0	45643.380	3.0
560.9133	18.01	-1.67	190942.650	.5	208765.770	.5
560.9196	10.01	-3.18	303599.930	3.5	321422.850	4.5
560.9230	42.00	-.71	26052.379	0.0	43880.138	0.0
560.9240	26.02	-2.33	204943.260	2.0	222766.040	3.0
560.9253	10.01	-3.36	303600.500	2.5	321423.240	3.5
560.9375	28.01	-1.95	118379.110	2.5	136201.460	3.5
560.9520	23.01	-4.01	19132.690	2.0	36954.580	1.0
560.9574	18.01	-1.60	190507.360	1.5	208329.080	.5
560.9737	30.02	-2.15	282254.900	1.0	300076.100	2.0
560.9844	26.02	-4.72	205002.470	3.0	222823.330	4.0
560.9979	26.00	-3.73	29356.780	2.0	47177.210	1.0
561.0083	21.00	-3.66	16026.520	4.5	33846.620	3.5
561.0112	25.00	-3.35	41031.480	4.5	58851.490	5.5
561.0194	26.01	-4.90	62065.570	3.5	79885.320	2.5
561.0200	23.00	-1.16	19078.150	3.5	36897.880	4.5
561.0220	59.01	-1.45	9275.615	0.0	27100.228	0.0
561.0247	29.01	-4.59	129116.900	3.0	146936.480	2.0
561.0250	90.00	-1.92	7420.492	0.0	25245.010	0.0
561.0260	58.01	-1.01	8388.382	0.0	26212.868	0.0
561.0291	23.00	-3.76	553.020	4.5	18372.460	3.5
561.0301	25.00	-4.24	34938.700	4.5	52758.110	4.5
561.0395	25.00	-2.71	37586.030	1.5	55405.140	2.5
561.0604	22.00	-2.99	31205.985	3.0	49024.430	3.0
561.0644	26.02	-3.66	206233.310	2.0	224051.630	3.0
561.0650	25.00	-1.69	44696.290	2.5	62514.590	2.5
561.0670	90.00	-1.21	11534.025	0.0	29357.208	0.0
561.0890	92.00	-.98	6210.629	0.0	24033.113	0.0
561.0905	6.00	-3.35	71352.510	0.0	89170.000	1.0
561.0930	42.00	-.29	24358.571	0.0	42180.928	0.0
561.1130	22.00	-4.18	26564.385	3.0	44381.160	4.0
561.1270	25.02	-.55	174575.870	3.5	192392.200	3.5
561.1308	24.00	-4.63	46985.870	5.0	64802.080	5.0
561.1314	7.00	-2.37	97805.810	1.5	115622.000	2.5
561.1326	7.00	-1.99	94793.460	1.5	112609.612	1.5
561.1372	26.00	-4.54	29320.050	1.0	47136.058	2.0
561.1377	18.00	-2.97	106087.305	1.0	123903.295	2.0
561.1484	18.01	-1.63	190196.160	.5	208011.810	1.5
561.1576	28.01	-4.97	116468.400	1.5	134283.760	.5
561.1633	18.01	-3.16	201345.220	1.5	219160.400	2.5
561.1652	26.00	-4.31	40894.972	2.0	58710.090	3.0
561.1655	17.00	-2.03	83130.900	1.5	100946.010	.5
561.1658	18.01	-1.69	192712.000	1.5	210527.100	2.5
561.1677	18.01	-2.03	196076.390	1.5	213891.430	2.5
561.1683	26.02	-3.51	204943.260	2.0	222758.280	2.0
561.1743	18.01	-2.77	196076.390	1.5	213891.220	1.5
561.1778	21.00	-3.10	18515.770	1.5	36330.490	2.5
561.1800	6.00	-3.33	70743.950	1.0	88558.600	1.0
561.2110	40.00	-3.22	0.000	0.0	17818.610	0.0
561.2339	17.00	-3.48	84132.262	2.5	101945.200	1.5
561.2360	26.01	-4.82	50187.950	3.5	68000.820	4.5
561.2477	15.00	-4.48	57876.700	.5	75689.200	1.5
561.2523	9.00	-2.72	117872.916	1.5	135685.270	1.5
561.2562	6.00	-3.60	71352.510	0.0	89164.740	1.0
561.2575	7.00	-4.28	97805.810	1.5	115618.000	1.5
561.2575	7.00	-2.24	97805.810	1.5	115618.000	2.5
561.2770	24.00	-3.92	31028.330	2.0	48839.900	1.0
561.3070	42.01	-1.45	20003.065	0.0	37818.628	0.0
561.3270	72.00	-2.28	5565.369	0.0	23380.297	0.0
561.3334	24.01	-4.07	50667.330	3.5	68477.110	4.5
561.3356	24.01	-4.90	52298.120	3.5	70107.830	4.5
561.3391	13.01	-.98	124792.000	2.0	142601.600	3.0
561.3413	8.01	-4.48	189068.370	1.5	206877.900	2.5
561.3628	18.01	-3.00	201351.550	2.5	219160.400	2.5
561.3690	25.00	-4.66	44978.980	1.5	62787.630	1.5
561.3700	58.01	-1.00	11372.710	0.0	29186.273	0.0
561.3719	28.01	-4.18	98467.250	3.5	116275.810	3.5
561.3902	23.00	-4.73	32846.740	2.5	50654.720	2.5
561.4009	20.02	-1.01	341349.190	1.0	359156.830	1.0
561.4010	72.00	-.88	21616.215	0.0	39428.795	0.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
561.4014	17.00	-3.18	83364.927	.5	101172.553	1.5
561.4017	26.00	-4.53	33946.920	2.0	51754.534	1.0
561.4169	26.00	-4.31	29798.960	4.0	47606.092	5.0
561.4207	24.00	-4.50	46905.030	4.0	64712.040	3.0
561.4220	26.02	-2.54	204943.260	2.0	222750.230	3.0
561.4280	26.00	-.95	41018.029	2.0	58824.810	2.0
561.4300	60.01	-1.66	8307.725	0.0	26119.385	0.0
561.4305	23.03	-1.76	237638.800	2.0	255445.500	3.0
561.4318	16.00	-1.94	63474.101	3.0	81280.760	2.0
561.4336	6.00	-3.37	71364.900	1.0	89171.500	0.0
561.4431	23.01	-5.36	19112.930	4.0	36919.230	3.0
561.4450	64.00	-2.01	1693.808	0.0	19504.992	0.0
561.4768	28.00	-.64	33500.854	3.0	51306.085	3.0
561.4806	6.00	-2.96	70743.950	1.0	88549.060	1.0
561.4809	6.00	-4.46	71364.900	1.0	89170.000	1.0
561.4866	26.00	-3.78	36686.159	4.0	54491.080	3.0
561.5144	29.01	-.85	121078.960	3.0	138883.000	4.0
561.5166	26.00	-3.57	35257.309	4.0	53061.280	5.0
561.5304	26.00	-2.20	20874.482	3.0	38678.015	2.0
561.5320	90.00	-1.89	3790.903	0.0	21599.327	0.0
561.5339	23.00	-3.84	15724.220	3.5	33527.640	2.5
561.5472	22.00	-4.06	24921.110	1.0	42724.110	2.0
561.5545	24.00	-1.82	30858.820	2.0	48661.590	3.0
561.5601	26.00	-1.59	33801.555	2.0	51604.146	3.0
561.5652	26.00	-.22	26874.534	5.0	44676.963	4.0
561.5740	22.00	-4.96	27887.740	3.0	45689.890	3.0
561.5914	17.02	-4.83	186220.000	.5	204021.600	.5
561.5926	27.00	-2.94	29563.170	1.5	47364.730	1.5
561.5926	18.01	-3.20	196089.870	2.5	213891.430	2.5
561.5992	18.01	-3.75	196089.870	2.5	213891.220	1.5
561.6021	26.01	-7.65	21308.080	1.5	39109.340	.5
561.6084	27.00	-.74	33466.870	3.5	51267.930	4.5
561.6210	64.01	-1.86	8469.040	0.0	26274.642	0.0
561.6469	6.00	-3.95	71364.900	1.0	89164.740	1.0
561.6478	6.00	-3.54	70743.950	1.0	88543.760	0.0
561.6545	7.00	-1.37	94881.790	3.5	112681.389	2.5
561.6580	92.00	-1.37	8065.752	0.0	25870.181	0.0
561.6611	23.00	-2.32	19023.470	4.5	36822.860	3.5
561.6614	16.01	-1.90	110176.830	1.5	127976.210	1.5
561.6955	30.02	-.66	282254.900	1.0	300053.200	2.0
561.7050	24.00	-4.79	27816.880	5.0	45614.880	4.0
561.7080	74.00	-2.06	17583.339	0.0	35386.183	0.0
561.7118	26.00	-3.04	34039.495	4.0	51837.279	3.0
561.7189	26.00	-4.52	26224.961	3.0	44022.518	4.0
561.7223	6.00	-3.01	70743.950	1.0	88541.400	2.0
561.7236	18.01	-3.73	196076.390	1.5	213873.800	2.5
561.7248	26.02	-4.78	206261.330	4.0	224058.700	4.0
561.7460	30.02	-1.46	217655.800	3.0	235452.500	2.0
561.7510	23.00	-2.51	26122.040	3.5	43918.580	2.5
561.7517	23.00	-1.85	19026.340	2.5	36822.860	3.5
561.7578	22.00	-3.45	12118.394	4.0	29914.720	3.0
561.7665	23.01	-4.54	55349.630	3.0	73145.680	3.0
561.7710	73.00	-1.27	23229.366	0.0	41030.214	0.0
561.7910	64.00	-1.26	0.000	0.0	17800.214	0.0
561.7998	18.00	-2.99	106087.305	1.0	123882.300	1.0
561.8009	29.01	-2.59	118163.500	2.0	135958.460	1.0
561.8025	26.02	-2.82	181808.700	5.0	199603.610	4.0
561.8107	25.02	-4.34	94850.660	1.5	112645.310	.5
561.8116	7.00	-2.31	94770.850	.5	112565.470	.5
561.8173	23.01	-4.94	55499.380	5.0	73293.820	5.0
561.8300	23.00	-4.11	15103.770	4.5	32897.810	5.5
561.8312	28.01	-3.50	100078.780	1.5	117872.780	2.5
561.8354	22.00	-1.57	12118.394	4.0	29912.262	3.0
561.8450	42.00	-1.95	16534.792	0.0	34333.295	0.0
561.8470	18.01	-4.30	186340.480	1.5	204133.980	2.5
561.8530	23.01	-3.57	19161.270	0.0	36954.580	1.0
561.8536	23.00	-2.27	19145.130	5.5	36938.420	5.5
561.8596	30.02	-1.73	217073.800	2.0	234866.900	1.0
561.8614	26.00	-1.32	33946.920	2.0	51739.964	2.0
561.8625	25.01	-4.34	53597.130	2.0	71390.140	3.0
561.8685	28.01	-2.38	103663.500	1.5	121456.320	1.5
561.8739	23.00	-4.49	15688.800	2.5	33481.450	3.5
561.8770	42.00	-1.56	22100.161	0.0	39897.650	0.0
561.8810	63.00	-.75	13147.176	0.0	30944.539	0.0
561.8824	25.00	-2.18	27201.540	2.5	44993.920	3.5
561.9165	25.02	-.75	174874.500	4.5	192665.800	4.5
561.9199	7.00	-3.00	97805.810	1.5	115597.000	1.5
561.9225	26.00	-2.64	29798.960	4.0	47590.070	4.0
561.9244	24.00	-3.28	31048.850	1.0	48839.900	1.0
561.9275	26.02	-4.44	105906.230	2.0	123697.180	2.0
561.9367	25.00	-4.85	45060.810	3.5	62851.470	3.5
561.9380	42.00	-.52	27584.872	0.0	45380.430	0.0
561.9440	46.00	.08	40570.733	0.0	58366.101	0.0
561.9487	14.02	-1.61	227081.190	1.0	244871.470	1.0
561.9525	23.00	-2.37	8715.720	3.5	26505.880	2.5
561.9569	26.00	-2.43	35379.189	5.0	53169.210	6.0
561.9633	18.00	-4.55	107496.463	1.0	125286.280	1.0
561.9730	27.00	-2.04	28470.510	1.5	46260.020	1.5
561.9800	27.00	-4.91	29735.180	3.5	47524.470	4.5
561.9835	25.00	-3.41	44978.980	1.5	62768.160	.5
561.9876	29.01	-4.84	118163.500	2.0	135952.550	2.0
561.9878	22.00	-2.74	20062.980	1.0	37852.021	1.0
561.9932	28.01	-3.59	115739.150	4.5	133528.020	3.5
561.9955	30.02	-1.24	217663.700	1.0	235452.500	2.0
561.9958	18.03	-4.53	268171.380	1.5	285960.170	.5
562.0010	26.00	-2.04	33412.706	3.0	51201.330	2.0
562.0040	77.00	.14	37344.432	0.0	55137.900	0.0
562.0049	26.00	-3.58	36766.950	3.0	54555.450	4.0
562.0062	23.00	-3.06	19026.340	2.5	36814.800	1.5
562.0080	76.00	-2.24	10082.190	0.0	27875.531	0.0
562.0084	23.01	-4.48	19166.190	1.0	36954.580	1.0
562.0140	40.00	-1.72	4113.534	0.0	21906.685	0.0
562.0255	23.00	-4.18	21603.170	4.5	39391.020	4.5
562.0393	26.00	-4.49	26623.726	2.0	44411.137	1.0
562.0403	23.00	-2.51	15000.840	5.5	32788.220	4.5
562.0441	14.02	-1.13	227084.210	2.0	244871.470	1.0
562.0473	26.00	-2.29	33507.102	3.0	51294.262	3.0
562.0504	28.01	-1.63	114942.420	1.5	132729.480	2.5
562.0508	24.00	-2.67	37205.880	3.0	54992.930	2.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
562.0540	60.00	-.50	0.000	0.0	17791.885	0.0
562.0669	23.01	-3.58	19132.690	2.0	36919.230	3.0
562.0669	28.01	-4.15	100845.410	.5	118631.950	.5
562.0672	24.01	-1.63	52321.300	4.5	70107.830	4.5
562.0678	18.01	-4.33	155043.070	2.5	172829.580	1.5
562.0680	73.00	-2.00	12179.286	0.0	29970.728	0.0
562.0748	28.01	-4.71	116468.400	1.5	134254.690	1.5
562.0757	29.01	-1.57	118484.000	3.0	136270.260	4.0
562.0780	92.00	-1.67	564.603	0.0	18355.728	0.0
562.0798	28.01	-4.46	100592.980	3.5	118379.110	2.5
562.0914	18.00	-2.68	106087.305	1.0	123873.070	0.0
562.0915	21.00	-2.32	21085.840	3.5	38871.600	2.5
562.1049	17.00	-2.24	82918.893	2.5	100704.230	1.5
562.1159	26.02	-4.25	117950.320	4.0	135735.310	5.0
562.1276	6.00	-3.47	71385.380	2.0	89170.000	1.0
562.1282	12.02	-1.39	564289.800	1.0	582074.400	2.0
562.1282	12.02	-1.39	564289.800	1.0	582074.400	2.0
562.1430	64.01	-.82	18551.230	0.0	36340.298	0.0
562.1443	24.01	-4.17	47372.750	1.5	65156.840	2.5
562.1494	18.01	-2.60	196089.870	2.5	213873.800	2.5
562.1510	92.00	-1.58	3710.246	0.0	21499.061	0.0
562.1661	28.01	-2.96	99040.750	1.5	116824.150	2.5
562.1759	29.01	-3.22	116576.810	0.0	134359.900	1.0
562.1790	62.00	-1.22	241.973	0.0	18029.902	0.0
562.1831	22.00	-4.10	27907.026	2.0	45689.890	3.0
562.1850	59.01	-2.22	3871.561	0.0	21659.300	0.0
562.1905	25.00	-3.28	37586.030	1.5	55368.660	1.5
562.1980	28.01	-3.14	101144.630	3.5	118927.020	4.5
562.2070	26.00	-4.53	35611.608	3.0	53393.715	4.0
562.2075	28.01	-3.36	118294.170	3.5	136076.260	4.5
562.2088	23.00	-1.77	14910.040	3.5	32692.090	3.5
562.2148	28.01	-4.85	116191.470	2.5	133973.330	2.5
562.2170	21.00	-4.47	18711.030	.5	36492.820	.5
562.2199	29.01	-3.14	128778.100	4.0	146559.800	4.0
562.2219	14.00	-1.48	39760.285	1.0	57541.918	1.0
562.2328	26.01	-4.92	54870.620	2.5	72651.910	3.5
562.2423	24.00	-.60	47055.310	5.0	64836.300	6.0
562.2440	63.00	-.45	13953.751	0.0	31739.623	0.0
562.2897	38.01	-.60	53286.310	0.0	71070.737	0.0
562.2938	6.00	-3.48	71385.380	2.0	89164.740	1.0
562.2964	26.00	-3.53	29356.780	2.0	47136.058	2.0
562.3131	7.00	-1.70	94830.860	2.5	112609.612	1.5
562.3188	28.01	-3.43	101144.630	3.5	118923.200	3.5
562.3262	26.00	-2.28	35767.546	4.0	53545.882	3.0
562.3388	26.02	-2.36	181825.670	4.0	199603.610	4.0
562.3445	6.00	-3.06	71364.900	1.0	89142.660	2.0
562.3502	25.01	-4.96	49517.580	5.0	67295.160	4.0
562.3530	40.00	-2.24	4113.534	0.0	21895.959	0.0
562.3536	22.00	-2.98	14028.470	2.0	31805.940	2.0
562.3558	26.02	-3.05	206261.330	4.0	224038.730	5.0
562.3609	28.01	-3.50	116275.810	3.5	134053.050	2.5
562.3628	25.00	.25	44523.450	3.5	62300.630	4.5
562.3653	30.02	-1.10	217846.800	2.0	235623.900	3.0
562.3656	22.00	-2.90	20795.599	5.0	38572.692	5.0
562.3717	21.00	-3.22	16021.780	1.5	33798.680	2.5
562.3742	6.00	-2.64	71385.380	2.0	89162.200	2.0
562.3763	18.00	-2.56	107289.747	2.0	125066.501	2.0
562.3875	17.01	-2.11	141010.000	2.0	158786.400	3.0
562.3910	39.00	-1.38	15970.189	0.0	33751.412	0.0
562.3916	23.00	-4.98	21646.390	3.5	39422.660	2.5
562.3998	26.02	-3.29	183431.280	5.0	201207.290	4.0
562.4014	21.00	-3.57	16022.720	2.5	33798.680	2.5
562.4014	18.01	-2.95	172816.210	.5	190592.170	1.5
562.4020	26.00	-1.92	35379.189	5.0	53155.130	4.0
562.4030	9.00	-1.10	116143.579	.5	133919.490	1.5
562.4188	23.00	-1.94	18805.050	.5	36580.460	1.5
562.4353	26.01	-3.22	44915.070	3.5	62689.960	2.5
562.4536	24.00	-2.36	35398.020	4.0	53172.330	5.0
562.4550	26.00	-1.02	27559.568	2.0	45333.834	2.0
562.4580	74.00	-2.04	19438.462	0.0	37217.567	0.0
562.4609	25.00	-3.26	45013.550	2.5	62787.630	1.5
562.4612	23.00	-1.26	8578.520	2.5	26352.590	2.5
562.4672	29.01	-3.19	118991.500	4.0	136765.380	4.0
562.4862	23.00	-1.41	8476.200	1.5	26249.480	1.5
562.4878	18.01	-4.46	186340.480	1.5	204113.710	1.5
562.5042	21.00	-3.51	18504.050	.5	36276.760	1.5
562.5138	18.01	-4.25	196119.020	3.5	213891.430	2.5
562.5265	7.00	-2.31	94793.460	1.5	112565.470	.5
562.5312	28.00	-.72	32982.280	1.0	50754.137	2.0
562.5346	26.02	-2.81	205002.470	3.0	222774.220	2.0
562.5498	24.00	-1.79	30787.300	1.0	48558.570	2.0
562.5508	27.00	-7.13	8460.810	2.5	26232.050	3.5
562.5517	25.00	-2.52	44523.450	3.5	62294.660	3.5
562.5550	77.00	-1.42	15970.189	0.0	33746.229	0.0
562.5581	22.01	-3.90	45673.750	4.5	63444.760	3.5
562.5581	25.01	-4.17	52379.380	2.0	70150.390	1.0
562.5675	18.01	-3.80	172335.520	2.5	190106.230	1.5
562.5697	18.01	-1.90	196089.870	2.5	213860.510	3.5
562.5710	21.00	-2.30	14926.240	2.5	32696.840	2.5
562.5720	60.01	-1.78	7420.492	0.0	25195.995	0.0
562.5799	6.00	-3.57	71385.380	2.0	89155.700	3.0
562.5818	18.01	-4.83	196103.310	4.5	213873.570	3.5
562.5992	28.01	-3.00	101144.630	3.5	118914.340	4.5
562.6008	23.00	-1.31	8412.940	.5	26182.600	.5
562.6010	62.00	-1.09	0.000	0.0	17774.586	0.0
562.6017	26.02	-3.97	181825.670	4.0	199595.300	3.0
562.6252	25.00	-2.96	35114.980	2.5	52883.870	1.5
562.6252	25.00	-3.39	35114.980	2.5	52883.870	2.5
562.6407	12.02	-.43	546531.600	1.0	564300.000	0.0
562.6744	22.00	-2.75	20209.444	2.0	37976.780	2.0
562.6838	24.01	-2.71	66727.160	2.5	84494.200	2.5
562.6838	26.00	-3.71	40207.120	3.0	57974.160	2.0
562.6904	28.01	-1.77	104503.220	2.5	122270.050	3.5
562.6910	9.00	-1.28	116143.579	.5	133910.390	.5
562.6964	26.02	-3.32	181828.660	2.0	199595.300	3.0
562.7395	26.02	-2.59	181830.020	3.0	199595.300	3.0
562.7446	25.02	-1.32	174247.630	.5	192012.750	1.5
562.7490	26.01	-4.60	27314.930	3.5	45079.910	2.5
562.7541	26.00	-3.10	37046.000	4.0	54810.820	4.0
562.7623	23.00	-.92	8715.720	3.5	26480.280	3.5
562.7738	26.00	-4.82	29371.860	3.0	47136.058	2.0
562.7791	27.00	-3.17	33439.720	4.5	51203.750	5.5
562.7937	26.02	-3.53	205002.470	3.0	222766.040	3.0
562.7959	26.02	-2.20	205002.470	3.0	222765.970	4.0
562.8020	92.01	-2.55	5726.684	0.0	23494.922	0.0
562.8084	22.00	-2.80	25317.813	1.0	43080.920	2.0
562.8114	23.00	-4.73	32988.820	3.5	50751.630	3.5
562.8244	13.01	-4.12	121480.300	3.0	139242.900	3.0
562.8260	41.00	-2.86	2097.096	0.0	19864.577	0.0
562.8270	72.00	-1.18	23310.023	0.0	41077.472	0.0
562.8292	9.01	-4.46	236960.830	1.0	254723.280	1.0
562.8361	28.01	-1.81	119773.600	6.5	137535.830	5.5
562.8368	23.00	-4.78	20767.570	3.5	38529.780	4.5
562.8435	13.01	-3.22	121480.900	2.0	139242.900	3.0
562.8621	24.00	-1.13	27597.220	3.0	45358.630	4.0
562.8754	21.00	-4.41	18515.770	1.5	36276.760	1.5
562.8834	28.01	-4.34	118828.610	2.5	136589.350	3.5
562.8951	26.01	-4.31	44929.590	2.5	62689.960	2.5
562.9047	22.00	-4.31	26494.322	2.0	44254.390	3.0
562.9112	27.00	-3.03	33439.720	4.5	51199.580	3.5
562.9115	7.00	-4.04	97770.150	.5	115530.000	.5
562.9115	7.00	-2.68	97770.150	.5	115530.000	1.5
562.9126	22.00	-3.06	25388.334	4.0	43148.150	3.0
562.9170	41.00	-1.21	12259.943	0.0	30024.551	0.0
562.9176	26.01	-3.75	62125.660	1.5	79885.320	2.5
562.9242	25.00	-2.64	44993.920	3.5	62753.370	2.5
562.9512	17.01	-1.60	141010.000	2.0	158768.600	2.0
562.9537	6.00	-2.67	71385.380	2.0	89143.900	3.0
562.9550	64.00	-1.72	161.315	0.0	17924.724	0.0
562.9582	25.00	-3.12	44814.730	1.5	62573.110	1.5
562.9638	12.02	-1.64	546531.600	1.0	564289.800	1.0
562.9650	74.00	-2.39	15002.299	0.0	32765.393	0.0
562.9660	26.00	-3.58	33946.920	2.0	51705.052	2.0
562.9790	44.00	-.93	22422.791	0.0	40185.443	0.0
562.9946	23.00	-4.88	15724.220	3.5	33481.450	3.5
562.9955	18.01	-4.16	196103.310	4.5	213860.510	3.5
562.9990	18.01	-3.17	196103.310	4.5	213860.400	4.5
563.0130	39.00	-.43	10888.765	0.0	28650.344	0.0
563.0149	9.02	-2.16	440202.480	2.5	457959.070	3.5
563.0323	18.01	-3.86	196103.310	4.5	213859.350	4.5
563.0330	22.00	-2.07	25102.880	2.0	42858.900	3.0
563.0358	18.01	-2.08	196103.310	4.5	213859.240	5.5
563.0384	9.01	-3.97	236960.830	1.0	254716.680	2.0
563.0409	28.01	-.85	119773.600	6.5	137529.370	6.5
563.0440	18.00	-4.82	105617.315	2.0	123372.987	2.0
563.0574	26.02	-3.61	117950.320	4.0	135705.570	3.0
563.0615	25.00	-4.83	35114.980	2.5	52870.100	3.5
563.0758	6.00	-4.13	70743.950	1.0	88498.620	2.0
563.0796	18.01	-3.26	196119.020	3.5	213873.570	3.5
563.1015	21.00	-3.40	16009.710	.5	33763.570	1.5
563.1018	7.00	-4.71	97770.150	.5	115524.000	.5
563.1018	7.00	-2.91	97770.150	.5	115524.000	1.5
563.1034	30.02	-.63	282254.900	1.0	300008.700	1.0
563.1053	28.01	-3.00	100010.170	.5	117763.910	1.5
563.1155	18.01	-3.01	191012.350	1.5	208765.770	.5
563.1189	28.01	-4.01	101144.630	3.5	118897.940	2.5
563.1220	57.00	-.98	2984.328	0.0	20742.469	0.0
563.1260	74.00	-.19	33150.241	0.0	50908.256	0.0
563.1281	26.02	-3.53	114351.920	3.0	132104.940	2.0
563.1367	23.00	-1.93	19145.130	5.5	36897.880	4.5
563.1380	18.01	-4.71	192712.000	1.5	210464.710	2.5
563.1400	69.00	-1.85	0.000	0.0	17757.574	0.0
563.1710	50.00	-1.70	17018.737	0.0	34775.333	0.0
563.1719	7.01	-.90	205350.180	2.0	223101.820	1.0
563.1730	26.00	-2.33	36079.353	3.0	53830.960	3.0
563.1769	22.00	-4.73	25107.417	2.0	42858.900	3.0
563.1789	27.00	-3.55	33449.180	.5	51200.600	1.5
563.1970	74.00	-2.25	12098.628	0.0	29854.404	0.0
563.2030	57.00	-.87	6936.547	0.0	24692.134	0.0
563.2049	26.02	-2.40	183456.690	3.0	201207.290	4.0
563.2170	23.00	-7.73	14910.040	3.5	32660.260	2.5
563.2195	26.02	-2.74	183457.150	4.0	201207.290	4.0
563.2250	39.00	-1.20	15728.216	0.0	33483.110	0.0
563.2250	64.00	-1.52	0.000	0.0	17754.894	0.0
563.2335	25.00	-.38	45156.110	2.5	62905.810	2.5
563.2366	22.00	-3.78	15108.121	3.0	32857.721	3.0
563.2470	42.00	-1.42	10888.765	0.0	28642.965	0.0
563.2477	23.00	-3.40	553.020	4.5	18302.270	3.5
563.2538	28.01	-4.28	104298.230	4.5	122047.290	3.5
563.2540	63.00	-.48	12985.861	0.0	30739.841	0.0
563.2541	26.02	-2.61	181828.660	2.0	199577.710	2.0
563.2560	26.01	-4.82	54870.620	2.5	72619.610	2.5
563.2656	18.01	-1.96	190732.970	.5	208481.660	.5
563.2770	45.00	-2.15	16050.847	0.0	33804.102	0.0
563.2890	39.00	-1.23	16050.847	0.0	33803.723	0.0
563.2944	25.00	-4.57	45013.550	2.5	62761.330	2.5
563.2950	26.02	-2.11	205002.470	3.0	222750.230	3.0
563.2973	26.02	-4.38	181830.020	3.0	199577.710	2.0
563.3036	29.01	-1.60	118163.500	2.0	135910.990	2.0
563.3061	26.01	-3.34	54904.500	3.5	72651.910	3.5
563.3138	24.00	-.64	47054.910	4.0	64802.080	5.0
563.3226	18.01	-2.03	186171.260	.5	203918.150	1.5
563.3265	24.00	-1.74	47055.310	5.0	64802.080	5.0
563.3468	26.01	-4.71	54904.500	3.5	72650.630	4.5
563.3490	64.00	-1.18	7017.204	0.0	24766.190	0.0
563.3496	25.01	-2.89	86057.400	4.0	103803.440	3.0
563.3499	28.01	-.14	119773.600	6.5	137519.630	7.5
563.3527	9.00	-3.53	118405.267	.5	136151.210	.5
563.3592	29.01	-2.76	116080.460	3.0	133826.200	2.0
563.3598	28.01	-4.98	120268.810	3.5	138014.530	2.5
563.3683	15.01	-3.98	87805.000	2.0	105550.450	2.0
563.3775	20.02	-1.32	323003.560	1.0	340748.720	2.0
563.3919	23.00	-1.27	19078.150	3.5	36822.860	3.5
563.3960	26.00	.15	40257.300	5.0	58001.880	6.0
563.4036	24.00	-4.89	46967.700	2.0	64712.040	3.0
563.4074	28.01	-3.77	114052.040	3.5	131796.260	2.5
563.4144	22.00	-3.72	13981.750	1.0	31725.750	1.0
563.4380	92.00	-1.11	7581.807	0.0	25329.989	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
563.4510	26.00	-1.47	40231.312	2.0	57974.160	2.0
563.4528	23.00	-2.69	14949.300	4.5	32692.090	3.5
563.4658	18.01	-1.84	190507.360	1.5	208249.740	1.5
563.4754	22.00	-4.96	28788.372	4.0	46530.450	4.0
563.4817	24.00	-3.78	38537.680	5.0	56279.560	4.0
563.4846	21.00	-3.71	16021.780	1.5	33763.570	1.5
563.4860	42.00	-1.55	16615.449	0.0	34362.119	0.0
563.4906	17.01	-.95	127726.900	1.0	145468.500	1.0
563.4963	25.00	-1.48	44288.760	4.5	62030.180	4.5
563.4976	18.01	-4.66	196119.020	3.5	213860.400	4.5
563.5144	21.00	-4.75	16022.720	2.5	33763.570	1.5
563.5288	26.00	-3.62	32873.623	4.0	50614.020	4.0
563.5310	18.01	-2.16	196119.020	3.5	213859.350	4.5
563.5348	29.01	-2.43	121078.960	3.0	138819.170	3.0
563.5354	28.01	-4.51	53037.930	2.5	70778.120	3.5
563.5427	26.02	-2.90	114339.950	4.0	132079.910	3.0
563.5430	26.02	-3.70	205092.530	4.0	222832.480	5.0
563.5446	28.01	-2.99	116468.400	1.5	134208.300	2.5
563.5478	23.03	-2.24	266600.300	5.0	284340.100	4.0
563.5556	18.00	-1.78	106087.305	1.0	123826.850	2.0
563.5710	73.00	-2.43	10888.765	0.0	28632.758	0.0
563.5777	25.02	-4.35	94906.450	.5	112645.310	.5
563.5791	26.00	-4.84	27543.000	1.0	45281.816	2.0
563.5822	26.00	-3.12	34328.733	3.0	52067.450	2.0
563.5862	23.00	-3.96	21603.170	4.5	39341.760	3.5
563.5863	6.00	-4.64	71352.510	0.0	89091.100	1.0
563.5875	18.01	-1.38	190511.190	2.5	208249.740	1.5
563.6066	26.02	-4.41	165719.200	4.0	183457.150	4.0
563.6123	27.00	-.48	33462.830	2.5	51200.600	1.5
563.6189	26.00	-4.51	33095.922	4.0	50833.485	5.0
563.6225	26.00	-2.01	34017.084	1.0	51754.534	1.0
563.6240	44.00	-1.20	8469.040	0.0	26211.365	0.0
563.6345	23.00	-2.31	19026.340	2.5	36763.410	2.5
563.6447	27.00	-.71	33462.830	2.5	51199.580	3.5
563.6590	25.02	-.56	174436.590	2.5	192172.890	2.5
563.6713	26.00	-3.04	29356.780	2.0	47092.693	3.0
563.6931	22.00	-2.89	27750.124	5.0	45485.350	5.0
563.7115	28.00	-1.25	32982.280	1.0	50716.927	1.0
563.7129	26.00	-2.80	29371.860	3.0	47106.463	4.0
563.7143	27.00	-2.35	33439.720	4.5	51174.280	5.5
563.7184	29.01	-1.85	118991.500	4.0	136725.930	5.0
563.7298	18.00	-2.27	107054.319	0.0	124788.390	1.0
563.7390	58.01	-.87	11211.395	0.0	28950.100	0.0
563.7410	76.00	-2.18	15324.929	0.0	33063.571	0.0
563.7413	26.01	-3.39	62151.610	2.5	79885.320	2.5
563.7474	29.01	-1.90	119039.680	2.0	136773.200	1.0
563.7648	21.00	-2.74	14926.240	2.5	32659.210	1.5
563.7672	28.00	-4.12	32973.414	4.0	50706.310	4.0
563.7731	27.00	-.67	33466.870	3.5	51199.580	3.5
563.8001	26.02	-2.55	205002.470	3.0	222734.330	4.0
563.8164	24.00	-2.29	28637.000	3.0	46368.350	3.0
563.8218	24.00	-4.44	25177.390	4.0	42908.570	4.0
563.8249	26.00	-1.40	34039.495	4.0	51770.577	3.0
563.8259	22.00	-3.63	31184.021	1.0	48915.070	2.0
563.8296	9.00	-4.91	117872.916	1.5	135603.850	2.5
563.8338	26.02	-4.84	205092.530	4.0	222823.330	4.0
563.8386	15.00	-4.05	58174.450	1.5	75905.100	2.5
563.8440	28.01	-2.08	93390.060	2.5	111120.540	1.5
563.8440	26.02	-3.37	206328.220	3.0	224058.700	4.0
563.8459	27.00	-3.85	33439.720	4.5	51170.140	4.5
563.8532	25.00	-.62	44696.290	2.5	62426.480	3.5
563.8561	7.01	-3.62	202765.260	2.0	220495.360	2.0
563.8745	28.00	-1.97	31441.665	2.0	49171.187	1.0
563.8758	28.01	-2.87	101144.630	3.5	118874.110	3.5
563.8851	7.00	-3.11	97805.810	1.5	115535.000	2.5
563.8882	14.02	-2.77	240284.280	2.0	258013.370	3.0
563.8889	27.00	-4.95	21920.090	4.5	39649.160	3.5
563.9038	27.01	-6.29	27469.200	5.0	45197.800	5.0
563.9086	18.00	-2.98	107054.319	0.0	124782.770	1.0
563.9158	18.00	-3.20	106087.305	1.0	123815.530	1.0
563.9191	23.01	-4.31	22273.540	1.0	40001.660	2.0
563.9232	26.02	-4.18	114351.920	3.0	132079.910	3.0
563.9305	26.00	-1.25	39969.830	3.0	57697.590	4.0
563.9310	57.00	-1.04	7420.492	0.0	25153.158	0.0
563.9388	11.02	-1.90	399182.700	1.5	416910.200	.5
563.9630	26.02	-3.88	206324.890	2.0	224051.630	3.0
563.9644	17.00	-2.15	84132.262	2.5	101858.960	2.5
563.9750	90.01	-2.74	1451.835	0.0	19183.117	0.0
563.9779	28.01	-3.87	113407.310	2.5	131133.580	2.5
563.9802	6.00	-4.10	71364.900	1.0	89091.100	1.0
563.9980	16.01	.37	113461.220	1.5	131186.860	2.5
563.9989	27.00	-3.02	16470.600	1.5	34196.210	1.5
564.0117	28.01	-2.60	118563.390	3.5	136288.600	2.5
564.0180	73.00	-1.93	12743.888	0.0	30473.819	0.0
564.0225	28.01	-4.21	113408.710	1.5	131133.580	2.5
564.0313	16.01	-.40	110508.480	3.5	128233.070	2.5
564.0362	22.00	-3.45	31190.631	2.0	48915.070	2.0
564.0409	22.00	-9.46	14105.680	3.0	31829.972	4.0
564.0441	7.00	-4.37	97805.810	1.5	115530.000	.5
564.0441	7.00	-3.47	97805.810	1.5	115530.000	1.5
564.0549	6.01	-.67	166967.130	.5	184690.980	1.5
564.0581	22.00	-3.03	26657.409	4.0	44381.160	4.0
564.0689	26.02	-4.82	206328.220	3.0	224051.630	3.0
564.0696	9.00	-2.65	118427.823	1.5	136151.210	.5
564.0841	17.00	-2.63	84688.637	.5	102411.570	.5
564.0858	26.00	-2.81	34017.084	1.0	51739.964	2.0
564.0988	21.01	-1.01	12101.450	1.0	29823.920	2.0
564.1043	28.01	-4.09	103663.500	1.5	121385.800	1.5
564.1083	26.00	-3.84	37157.546	2.0	54879.720	2.0
564.1117	28.00	-2.49	33112.368	3.0	50834.435	2.0
564.1138	29.01	-4.64	128853.300	2.0	146575.300	2.0
564.1180	29.01	-.31	122867.530	1.0	140589.400	0.0
564.1358	25.00	-3.76	45130.160	4.5	62851.470	3.5
564.1362	18.00	-2.91	106087.305	1.0	123808.600	2.0
564.1422	23.00	-.05	26344.940	4.5	44066.050	3.5
564.1429	26.00	-1.70	34328.733	3.0	52049.820	2.0
564.1510	26.00	-3.26	29371.860	3.0	47092.693	3.0
564.1536	18.01	-3.61	172213.800	1.5	189934.550	.5
564.1552	23.00	-4.92	33155.300	4.5	50876.000	4.5
564.1660	44.00	-2.12	12743.888	0.0	30469.167	0.0
564.1684	22.00	-1.64	18037.225	4.0	35757.510	4.0
564.1692	24.00	-.91	30787.300	1.0	48507.560	1.0
564.1880	28.00	-1.36	33112.368	3.0	50832.039	3.0
564.1928	24.00	-3.25	35398.020	4.0	53117.540	4.0
564.1950	28.01	-3.60	111783.790	3.5	129503.240	4.5
564.2040	74.00	-4.09	1613.150	0.0	19337.236	0.0
564.2052	23.01	-1.12	36425.070	4.0	54144.200	4.0
564.2083	9.00	-1.81	118405.267	.5	136124.300	.5
564.2103	26.02	.10	188013.400	4.0	205732.370	3.0
564.2110	41.00	-1.57	5887.999	0.0	23611.865	0.0
564.2151	25.00	-4.67	35165.050	1.5	52883.870	2.5
564.2151	25.00	-3.56	35165.050	1.5	52883.870	1.5
564.2351	7.00	-4.25	97805.810	1.5	115524.000	1.5
564.2351	7.00	-2.92	97805.810	1.5	115524.000	2.5
564.2370	24.00	-.93	31106.370	4.0	48824.500	4.0
564.2380	29.01	-3.82	128778.100	4.0	146496.200	3.0
564.2396	25.00	-3.48	35165.050	1.5	52883.100	.5
564.2409	24.00	.03	47222.270	6.0	64940.280	7.0
564.2421	8.01	-4.83	189068.370	1.5	206786.340	1.5
564.2425	18.01	-3.79	143371.350	1.5	161089.310	.5
564.2437	22.01	-4.84	47466.800	3.5	65184.720	3.5
564.2523	28.01	-3.66	113407.310	2.5	131124.960	3.5
564.2546	27.00	-1.07	34352.420	1.5	52070.000	2.5
564.2560	76.00	-1.33	18954.517	0.0	36670.969	0.0
564.2604	28.00	-1.30	31441.665	2.0	49159.060	2.0
564.2651	29.01	-2.40	120875.850	2.0	138593.100	1.0
564.2690	46.00	-.16	40651.390	0.0	58373.434	0.0
564.2718	21.00	-3.66	18855.760	1.5	36572.800	2.5
564.2733	22.00	-1.30	30060.328	4.0	47777.320	5.0
564.2733	26.00	-3.57	37162.729	3.0	54879.720	2.0
564.2813	25.00	-4.84	35041.370	3.5	52758.110	4.5
564.2964	22.00	-3.94	25317.813	1.0	43034.080	1.0
564.3072	28.00	-1.33	33590.159	4.0	51306.085	3.0
564.3081	27.00	-1.14	28470.510	1.5	46186.410	1.5
564.3240	64.00	-1.12	161.315	0.0	17881.632	0.0
564.3291	28.01	-4.82	118874.110	3.5	136589.350	3.5
564.3348	23.00	-.20	24838.560	3.5	42553.620	4.5
564.3368	6.00	-2.67	71364.900	1.0	89079.900	2.0
564.3498	28.01	-4.41	98561.220	2.5	116275.810	3.5
564.3549	29.01	-2.08	119039.680	2.0	136754.110	2.0
564.3782	17.01	-2.27	141010.000	2.0	158723.700	1.0
564.3788	24.01	-3.35	67012.280	2.5	84725.960	3.5
564.3858	26.02	-3.69	182810.660	5.0	200524.120	5.0
564.3858	23.00	-3.57	26352.590	2.5	44066.050	3.5
564.3874	26.01	-3.42	66012.830	4.5	83726.240	3.5
564.3885	17.00	-3.92	84132.262	2.5	101845.640	1.5
564.3930	26.00	-2.24	32873.623	4.0	50586.857	3.0
564.3938	26.01	-2.20	61726.090	3.5	79439.300	3.5
564.4052	7.00	-3.09	97770.150	.5	115483.000	.5
564.4052	7.00	-3.99	97770.150	.5	115483.000	1.5
564.4137	22.00	.05	18287.560	4.0	36000.144	4.0
564.4164	24.00	-3.49	28637.000	3.0	46349.500	2.0
564.4337	26.00	-3.85	33507.102	3.0	51219.059	3.0
564.4495	10.02	-3.10	356766.200	1.0	374477.660	0.0
564.4690	39.00	-1.07	11211.395	0.0	28927.160	0.0
564.4728	23.00	-3.43	15770.720	4.5	33481.450	3.5
564.4738	38.01	-1.55	60991.700	0.0	78707.314	0.0
564.4738	36.01	-2.85	60991.700	0.0	78707.314	0.0
564.4801	11.02	-4.86	442710.500	1.5	460421.000	2.5
564.4840	64.01	-1.83	8791.670	0.0	26506.964	0.0
564.4918	14.00	-3.28	45276.188	1.0	62986.320	2.0
564.4951	26.01	-4.63	67000.630	2.5	84710.660	3.5
564.5008	7.00	-3.43	97770.150	.5	115480.000	.5
564.5008	7.00	-3.42	97770.150	.5	115480.000	1.5
564.5033	14.00	-2.97	45276.188	1.0	62985.960	1.0
564.5069	26.02	-3.81	183456.690	3.0	201166.350	3.0
564.5088	25.02	-1.71	177185.180	.5	194894.780	1.5
564.5101	21.00	-2.02	15041.980	3.5	32751.540	3.5
564.5199	22.00	-1.83	25438.898	2.0	43148.150	3.0
564.5216	26.02	-3.82	183457.150	4.0	201166.350	3.0
564.5250	76.00	-1.23	18954.517	0.0	36668.524	0.0
564.5300	41.00	-2.35	5242.739	0.0	22956.589	0.0
564.5425	9.00	-3.30	118405.267	.5	136113.810	1.5
564.5435	7.01	-4.65	203537.660	1.0	221246.170	1.0
564.5458	28.01	-4.25	117074.700	3.5	134783.140	2.5
564.5477	28.01	-.20	121180.550	5.5	138888.930	6.5
564.5560	24.00	-4.58	27935.260	4.0	45643.380	3.0
564.5613	14.00	-1.42	39760.285	1.0	57468.239	2.0
564.5636	16.01	-1.14	110268.330	2.5	127976.210	1.5
564.5751	26.02	-4.54	183456.690	3.0	201164.210	2.0
564.5800	63.00	-1.62	0.000	0.0	17712.282	0.0
564.5880	90.01	-1.75	11050.080	0.0	28762.111	0.0
564.5910	73.00	-1.77	9194.957	0.0	26906.894	0.0
564.6045	28.01	-4.68	115739.150	4.5	133445.750	4.5
564.6108	23.00	-1.19	8476.200	1.5	26182.600	.5
564.6255	9.00	-1.52	115917.909	2.5	133623.850	1.5
564.6296	28.01	-2.66	100609.010	2.5	118314.820	2.5
564.6325	6.00	-3.85	71385.380	2.0	89091.100	1.0
564.6370	21.00	-4.58	16141.040	2.5	33846.620	3.5
564.6491	26.01	-8.12	21308.080	1.5	39013.280	1.5
564.6571	24.00	-3.30	24833.860	3.0	42538.810	3.0
564.6686	26.00	-4.69	34362.860	1.0	52067.450	2.0
564.6822	9.00	-1.99	118405.267	.5	136109.430	.5
564.6826	22.00	-3.66	13981.750	1.0	31685.900	0.0
564.6938	26.02	-3.83	182810.660	5.0	200514.460	4.0
564.6979	16.01	.11	112937.330	.5	130641.000	1.5
564.7097	29.01	-4.09	128853.300	2.0	146556.600	3.0
564.7107	27.00	-1.28	33466.870	3.5	51170.140	4.5
564.7148	23.00	-8.23	10892.500	3.5	28595.640	3.5
564.7212	24.00	-1.45	47048.480	3.0	64751.420	4.0
564.7234	27.00	-1.93	18389.570	1.5	36092.440	2.5
564.7247	28.01	-1.54	119833.000	5.5	137535.830	5.5
564.7448	17.00	-4.37	84485.309	1.5	102167.510	2.5
564.7544	23.03	-1.91	236766.900	3.0	254468.800	2.0
564.7572	25.02	-2.17	177269.340	1.5	194971.150	2.5
564.7745	25.00	-3.63	51014.950	3.5	68716.220	4.5
564.7778	26.00	-4.71	18378.187	2.0	36079.353	3.0
564.7779	37.00	-1.70	12578.950	0.0	30285.025	0.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
564.7852	22.00	-2.93	15156.787	4.0	32857.721	3.0
564.7853	24.00	-.90	30787.300	1.0	48488.230	0.0
564.7863	28.01	-4.60	115827.120	3.5	133528.020	3.5
564.7984	25.00	-3.42	45060.810	3.5	62761.330	2.5
564.8013	29.01	-2.43	118163.500	2.0	135863.930	1.0
564.8067	22.00	-4.70	14105.680	3.0	31805.940	2.0
564.8070	6.01	-.37	166990.730	1.5	184690.980	1.5
564.8195	25.00	-.99	44814.730	1.5	62514.590	2.5
564.8230	24.00	-.77	30858.820	2.0	48558.570	2.0
564.8250	57.00	.04	9840.217	0.0	27544.816	0.0
564.8380	74.00	-1.04	18873.860	0.0	36578.051	0.0
564.8447	23.00	-3.41	15264.830	5.5	32963.900	6.5
564.8470	39.00	-.53	15566.901	0.0	33270.810	0.0
564.8479	24.00	-4.24	27176.220	1.0	44875.190	2.0
564.8567	22.00	-.51	20126.055	3.0	37824.748	4.0
564.8568	28.01	-3.11	114052.040	3.5	131750.730	3.5
564.8669	18.00	-2.40	106237.597	2.0	123935.970	1.0
564.8731	28.01	-2.19	119833.000	5.5	137531.180	4.5
564.8887	26.00	-4.94	26224.961	3.0	43922.652	3.0
564.8916	29.01	-4.76	130945.000	2.0	148642.600	2.0
564.8980	76.00	-1.85	18954.517	0.0	36656.828	0.0
564.9018	22.00	-3.37	14028.470	2.0	31725.750	1.0
564.9075	38.01	-1.62	60991.700	0.0	78693.713	0.0
564.9197	6.00	-3.09	71385.380	2.0	89082.100	3.0
564.9264	24.00	-1.72	47054.910	4.0	64751.420	4.0
564.9274	9.00	-2.93	118427.823	1.5	136124.300	.5
564.9308	28.01	-1.24	119833.000	5.5	137529.370	6.5
564.9385	24.00	-.76	30965.460	3.0	48661.590	3.0
564.9392	24.00	-3.30	47055.310	5.0	64751.420	4.0
564.9404	28.01	-2.89	92325.850	3.5	110021.920	4.5
564.9468	28.01	-4.47	113407.310	2.5	131103.180	2.5
564.9554	21.00	-2.86	16210.800	3.5	33906.400	4.5
564.9554	28.01	-2.89	118631.950	.5	136327.550	1.5
564.9560	44.00	-2.78	9033.642	0.0	26734.135	0.0
564.9636	26.00	-2.59	29313.008	6.0	47008.351	5.0
564.9692	28.00	-.86	33610.916	2.0	51306.085	3.0
564.9890	10.02	-3.19	356766.200	1.0	374460.750	1.0
564.9899	6.00	-4.01	71385.380	2.0	89079.900	2.0
565.0005	26.00	-.40	41130.620	1.0	58824.810	2.0
565.0024	20.02	-1.22	323655.060	2.0	341349.190	1.0
565.0104	25.00	-3.03	37586.030	1.5	55279.910	1.5
565.0130	42.00	-1.56	11050.080	0.0	28748.788	0.0
565.0270	26.02	-2.33	182830.760	6.0	200524.120	5.0
565.0295	26.00	-3.66	36686.159	4.0	54379.440	3.0
565.0439	38.01	-.48	53372.970	0.0	71070.710	0.0
565.0439	38.01	-1.78	53372.970	0.0	71070.710	0.0
565.0483	14.00	-3.23	45293.629	2.0	62986.320	2.0
565.0598	14.00	-3.61	45293.629	2.0	62985.960	1.0
565.0684	26.00	-.25	41018.029	2.0	58710.090	3.0
565.0700	18.00	-2.30	104102.144	1.0	121794.158	0.0
565.0800	24.00	-3.83	24897.550	4.0	42589.250	5.0
565.0830	72.00	-2.38	10404.820	0.0	28101.335	0.0
565.0892	28.01	-3.76	118897.940	2.5	136589.350	3.5
565.1110	63.00	-.61	17583.339	0.0	35278.978	0.0
565.1164	23.01	-3.77	32040.760	2.0	49731.320	2.0
565.1189	28.01	-3.54	111783.790	3.5	129474.270	3.5
565.1193	22.00	-4.66	24921.110	1.0	42611.580	1.0
565.1295	25.02	.24	174975.650	5.5	192665.800	4.5
565.1341	22.00	-3.11	26564.385	3.0	44254.390	3.0
565.1449	26.00	-1.85	36079.353	3.0	53769.020	4.0
565.1461	23.00	-2.92	15078.250	.5	32767.880	1.5
565.1504	26.00	-4.90	35856.386	2.0	53545.882	3.0
565.1752	27.00	-.99	34352.420	1.5	52041.140	.5
565.1780	29.01	-3.02	118071.340	1.0	135759.970	2.0
565.1789	9.00	-3.70	115917.909	2.5	133606.510	3.5
565.1870	42.00	-.54	30004.597	0.0	47697.856	0.0
565.1907	22.00	-4.08	26892.926	3.0	44581.160	2.0
565.1992	26.00	-1.76	34017.084	1.0	51705.052	2.0
565.2000	70.01	-.69	30085.255	0.0	47778.107	0.0
565.2129	22.01	-4.21	47625.170	2.5	65312.710	2.5
565.2314	26.00	-1.66	34362.860	1.0	52049.820	2.0
565.2333	28.02	-4.02	121566.700	1.0	139253.600	2.0
565.2557	29.01	-4.97	130945.000	2.0	148631.200	3.0
565.2567	24.00	-3.11	28682.180	2.0	46368.350	3.0
565.2625	9.00	-1.76	118427.823	1.5	136113.810	1.5
565.2857	23.00	-3.03	19078.150	3.5	36763.410	2.5
565.2871	26.00	-4.74	33507.102	3.0	51192.320	4.0
565.2899	28.01	-3.38	100078.780	1.5	117763.910	1.5
565.3077	9.00	-1.80	118405.267	.5	136089.840	1.5
565.3116	23.00	-4.52	15103.770	4.5	32788.220	4.5
565.3187	10.02	-3.01	356776.520	0.0	374460.750	1.0
565.3187	10.02	-3.08	356776.520	2.0	374460.750	1.0
565.3267	28.01	-3.14	101144.630	3.5	118828.610	2.5
565.3300	44.00	-2.40	12098.628	0.0	29787.412	0.0
565.3330	64.00	-1.51	7581.807	0.0	25270.497	0.0
565.3622	6.00	-4.02	64086.920	3.0	81769.790	2.0
565.3670	18.01	-1.95	191012.350	1.5	208695.070	1.5
565.3740	20.01	-4.36	56839.250	1.5	74521.750	1.5
565.3744	37.00	-2.02	12816.545	0.0	30503.939	0.0
565.3871	26.00	-1.97	35379.189	5.0	53061.280	5.0
565.4026	9.00	-3.06	118427.823	1.5	136109.430	.5
565.4063	24.00	-2.79	24833.860	3.0	42515.350	2.0
565.4140	41.00	-2.05	10162.848	0.0	27849.004	0.0
565.4271	27.00	-1.85	34352.420	1.5	52033.260	1.5
565.4393	17.00	-2.08	83364.927	.5	101045.386	1.5
565.4410	92.01	-2.50	4355.506	0.0	22040.817	0.0
565.4453	18.01	-.55	189414.960	3.5	207095.230	2.5
565.4590	25.02	-.63	174332.910	1.5	192012.750	1.5
565.4911	6.00	-4.79	64090.950	2.0	81769.790	2.0
565.4920	14.00	-.93	45276.188	1.0	62955.000	2.0
565.5163	26.00	-.11	40842.130	3.0	58520.180	4.0
565.5249	18.01	-4.42	172829.580	1.5	190507.360	1.5
565.5420	46.00	-.21	40570.733	0.0	58252.886	0.0
565.5438	7.00	-3.39	97805.810	1.5	115483.000	.5
565.5438	7.00	-3.29	97805.810	1.5	115483.000	1.5
565.5471	26.00	.02	40594.413	4.0	58271.500	5.0
565.5474	26.00	-1.37	34362.860	1.0	52039.939	1.0
565.5486	23.00	-.78	24727.850	2.5	42404.890	3.5
565.5681	18.02	-1.77	213950.870	2.0	231627.300	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
565.5857	24.00	-4.02	35398.020	4.0	53073.900	3.0
565.5873	28.01	-.83	101247.370	2.5	118923.200	3.5
565.5982	22.00	-3.75	31184.021	1.0	48859.510	1.0
565.6014	28.01	-4.66	118379.110	2.5	136054.500	1.5
565.6088	24.00	-4.54	31352.420	1.0	49027.580	2.0
565.6094	27.00	-4.70	15774.040	1.5	33449.180	.5
565.6303	17.00	-2.97	83364.927	.5	101039.413	.5
565.6318	23.00	-2.30	19026.340	2.5	36700.780	2.5
565.6398	7.00	-3.73	97805.810	1.5	115480.000	.5
565.6398	7.00	-2.72	97805.810	1.5	115480.000	1.5
565.6540	57.00	-1.17	9598.245	0.0	27276.897	0.0
565.6558	29.01	-.99	120919.410	1.0	138593.100	1.0
565.6616	26.02	-2.81	205092.530	4.0	222766.040	3.0
565.6638	26.02	-1.86	205092.530	4.0	222765.970	4.0
565.6875	23.00	-1.37	18805.050	.5	36477.750	.5
565.6981	24.00	-3.64	31355.210	2.0	49027.580	2.0
565.7256	23.00	-4.17	15688.800	2.5	33360.310	3.5
565.7362	17.00	-1.84	84132.262	2.5	101803.442	2.5
565.7432	23.00	-1.03	8578.520	2.5	26249.480	1.5
565.7605	17.00	-1.86	82918.893	2.5	100589.312	2.5
565.7720	57.00	-1.11	2581.041	0.0	20256.005	0.0
565.7826	25.00	-.98	45754.270	3.5	63424.000	3.5
565.7874	21.01	-.50	12154.340	2.0	29823.920	2.0
565.7915	26.01	-4.51	27620.390	2.5	45289.840	1.5
565.8028	23.00	-4.30	26249.480	1.5	43918.580	2.5
565.8053	28.01	-4.80	118927.020	4.5	136596.040	5.5
565.8098	22.00	-4.36	31190.631	2.0	48859.510	1.0
565.8111	28.01	-2.53	53037.930	2.5	70706.770	1.5
565.8114	24.01	-4.50	66649.710	1.5	84318.540	1.5
565.8130	6.00	-4.23	71385.380	2.0	89054.160	2.0
565.8191	28.01	-3.28	97273.830	2.5	114942.420	1.5
565.8260	92.00	-1.54	5726.684	0.0	23399.962	0.0
565.8300	69.00	-1.39	8711.012	0.0	26384.165	0.0
565.8342	21.01	-1.12	12074.000	0.0	29742.120	1.0
565.8405	25.00	-1.69	37737.220	3.5	55405.140	2.5
565.8412	30.02	-.75	220668.300	2.0	238336.200	2.0
565.8444	25.02	-.76	174247.630	.5	191915.430	.5
565.8444	10.02	-2.93	356766.200	1.0	374434.000	2.0
565.8457	23.00	-.76	24838.560	3.5	42506.320	4.5
565.8540	26.00	-2.11	27666.334	1.0	45333.834	2.0
565.8546	23.00	-7.50	11100.650	4.5	28768.130	4.5
565.8598	24.00	-2.38	28682.180	2.0	46349.500	2.0
565.8604	24.00	-3.36	24897.550	4.0	42564.850	4.0
565.8656	26.00	-1.97	34547.192	2.0	52214.330	1.0
565.8767	25.01	-3.78	53597.130	2.0	71263.920	1.0
565.8825	26.00	-1.06	27394.676	3.0	45061.287	3.0
565.8972	28.01	-3.45	118923.200	3.5	136589.350	3.5
565.9103	22.00	-2.93	7255.369	2.0	24921.110	1.0
565.9117	18.00	-2.10	106237.597	2.0	123903.295	2.0
565.9120	27.00	-2.72	16467.900	4.5	34133.590	3.5
565.9129	9.00	-1.34	115917.909	2.5	133583.570	2.5
565.9162	22.00	-3.13	17369.590	1.0	35035.147	2.0
565.9251	25.00	-4.98	34463.370	1.5	52128.650	2.5
565.9386	28.01	-2.42	103653.030	3.5	121317.890	3.5
565.9479	24.00	-.36	47047.470	2.0	64712.040	3.0
565.9510	14.00	-3.26	45321.848	3.0	62986.320	2.0
565.9527	9.00	-3.30	118427.823	1.5	136092.240	2.5
565.9620	45.00	-2.07	14276.381	0.0	31945.412	0.0
565.9687	25.02	-2.31	177185.180	.5	194849.100	1.5
565.9757	18.01	-3.76	186470.280	1.5	204133.980	2.5
565.9802	24.00	-1.75	47048.480	3.0	64712.040	3.0
565.9825	28.01	-4.74	112906.930	1.5	130570.420	.5
565.9860	62.00	-.70	806.575	0.0	18474.857	0.0
565.9888	20.01	-3.41	56858.460	2.5	74521.750	1.5
565.9930	24.00	-4.19	31987.060	4.0	49650.220	3.0
565.9937	6.00	-1.96	68856.330	1.0	86519.470	1.0
565.9956	16.01	-.84	110313.130	2.5	127976.210	1.5
566.0070	74.00	-2.06	18147.942	0.0	35815.568	0.0
566.0196	28.01	-4.34	118927.020	4.5	136589.350	3.5
566.0296	9.00	-3.29	118427.823	1.5	136089.840	1.5
566.0308	26.02	-3.80	204943.260	2.0	222605.240	3.0
566.0433	28.01	-4.34	103663.500	1.5	121325.090	2.5
566.0504	14.00	-1.66	45293.629	2.0	62955.000	2.0
566.0626	28.01	-4.49	116312.340	1.5	133973.330	2.5
566.0632	18.01	-1.17	191012.350	1.5	208673.320	2.5
566.0677	14.00	-1.16	45293.629	2.0	62954.460	3.0
566.0750	74.00	-1.26	19519.120	0.0	37184.624	0.0
566.0818	26.00	-3.07	29356.780	2.0	47017.170	3.0
566.0898	26.00	-3.03	34636.820	2.0	52296.960	2.0
566.0943	21.00	-3.54	18855.760	1.5	36515.760	1.5
566.1023	26.00	-2.09	36940.600	2.0	54600.350	3.0
566.1043	17.00	-2.40	85442.430	1.5	103102.120	1.5
566.1106	9.00	-1.53	115917.909	2.5	133577.400	1.5
566.1293	17.00	-1.80	85442.430	1.5	103101.340	2.5
566.1302	28.01	-2.92	118631.950	.5	136290.830	.5
566.1318	28.01	-3.02	115785.060	1.5	133443.890	2.5
566.1346	26.00	-1.87	34555.586	0.0	52214.330	1.0
566.1389	26.02	.47	188013.400	4.0	205672.010	4.0
566.1443	29.01	-3.85	116326.160	3.0	133984.600	3.0
566.1463	18.01	-2.12	201345.220	1.5	219003.600	2.5
566.1491	24.00	-4.20	27597.220	3.0	45255.510	3.0
566.1680	26.02	-1.88	205092.530	4.0	222750.230	3.0
566.1713	26.02	-4.85	105895.350	1.0	123552.950	1.0
566.1751	10.02	-2.56	356776.520	2.0	374434.000	2.0
566.1790	9.02	-.89	442147.190	2.5	459804.550	1.5
566.1832	26.00	-3.28	33946.920	2.0	51604.146	3.0
566.1863	24.00	-3.42	47054.910	4.0	64712.040	3.0
566.1931	24.01	-4.47	47372.750	1.5	65029.670	.5
566.1954	26.00	-3.92	34362.860	1.0	52019.706	1.0
566.2022	18.00	-3.20	107131.755	1.0	124786.390	1.0
566.2040	18.01	-2.63	201345.220	1.5	219001.800	1.5
566.2062	28.01	-4.72	118939.530	5.5	136596.040	6.5
566.2062	18.01	-3.89	186074.350	2.5	203730.860	1.5
566.2161	22.00	.07	18695.230	4.0	36351.430	5.0
566.2190	59.01	-2.12	8388.382	0.0	26049.393	0.0
566.2197	28.01	-2.14	99418.610	3.5	117074.700	3.5
566.2200	24.01	-4.63	52298.120	3.5	69954.200	2.5
566.2460	6.01	-.19	167035.710	2.5	184690.980	1.5
566.2506	26.00	-1.05	33695.378	5.0	51350.505	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
566.2549	10.00	-2.15	148257.790	1.0	165912.782	1.0
566.2591	21.00	-2.61	15041.980	3.5	32696.840	2.5
566.2614	24.00	-2.13	27703.840	4.0	45358.630	4.0
566.2627	26.02	-3.16	205672.010	4.0	223326.760	4.0
566.2730	22.00	-2.73	25493.722	2.0	43148.150	3.0
566.2838	23.00	-4.13	21646.390	3.5	39300.480	2.5
566.2845	28.01	-4.69	116275.810	3.5	133929.880	3.5
566.2901	22.00	-.68	20006.032	2.0	37659.927	3.0
566.2940	39.01	-.30	15566.901	0.0	33225.573	0.0
566.2950	26.00	-2.86	29798.960	4.0	47452.702	4.0
566.3085	24.00	-4.01	37233.500	5.0	54886.820	6.0
566.3251	17.00	-2.69	84485.309	1.5	102138.110	.5
566.3425	26.02	-2.46	205092.530	4.0	222744.790	5.0
566.3464	24.00	-3.77	27223.050	2.0	44875.190	2.0
566.3492	18.01	-3.07	201351.550	2.5	219003.600	2.5
566.3528	28.01	-2.98	100010.170	.5	117662.110	1.5
566.3666	20.02	-.71	346692.340	0.0	364343.850	1.0
566.3767	9.00	-2.21	118936.797	1.5	136587.990	1.5
566.3825	18.00	-3.21	107131.755	1.0	124782.770	1.0
566.3948	55.00	-1.51	11178.270	0.0	28833.799	0.0
566.3949	22.00	-4.24	31373.801	3.0	49024.430	3.0
566.3958	30.02	-.82	218909.400	1.0	236560.000	0.0
566.3968	28.01	-.77	101247.370	2.5	118897.940	2.5
566.3975	28.00	-.57	36600.805	2.0	54251.353	3.0
566.3987	25.01	-4.21	64493.830	4.0	82144.340	3.0
566.4017	9.00	-1.60	118427.823	1.5	136078.240	2.5
566.4032	6.00	-4.37	68856.330	1.0	86506.700	2.0
566.4041	24.00	-1.05	27703.840	4.0	45354.180	5.0
566.4070	18.01	-4.45	201351.550	2.5	219001.800	1.5
566.4340	42.00	-.57	29681.967	0.0	47336.274	0.0
566.4340	74.00	-2.08	17986.627	0.0	35640.934	0.0
566.4436	22.00	-3.23	31190.631	2.0	48839.740	3.0
566.4452	29.01	-2.57	118484.000	3.0	136133.060	4.0
566.4510	40.00	-1.50	5000.766	0.0	22654.544	0.0
566.4555	24.00	-.59	30858.820	2.0	48507.560	1.0
566.4710	41.00	-2.29	1129.205	0.0	18782.359	0.0
566.4760	16.01	-.80	110176.830	1.5	127824.930	.5
566.4890	71.01	-1.16	30730.515	0.0	48383.108	0.0
566.4900	73.00	-2.74	1935.780	0.0	19588.342	0.0
566.4904	9.00	-2.03	118936.797	1.5	136584.450	2.5
566.5081	28.01	-1.78	116275.810	3.5	133922.910	4.5
566.5200	44.00	-2.01	13631.121	0.0	31282.748	0.0
566.5203	26.02	-4.94	105906.230	2.0	123552.950	1.0
566.5223	23.01	-4.64	55304.340	4.0	72951.000	4.0
566.5229	25.00	-1.22	45259.170	1.5	62905.810	2.5
566.5229	14.00	-3.74	45321.848	3.0	62968.490	4.0
566.5239	23.00	-3.09	15078.250	.5	32724.860	.5
566.5258	26.02	.19	201919.530	4.0	219566.080	3.0
566.5319	28.01	-.73	119889.470	5.5	137535.830	5.5
566.5338	23.00	-4.14	9824.580	2.5	27470.880	3.5
566.5402	29.01	-4.30	128569.600	2.0	146215.700	1.0
566.5541	20.01	-3.98	56839.250	1.5	74484.920	.5
566.5555	14.00	-2.16	39683.163	0.0	57328.789	1.0
566.5566	9.02	-1.92	440069.510	1.5	457715.100	2.5
566.5601	28.01	-4.88	112686.300	2.5	130331.780	1.5
566.5630	41.00	-.71	12905.203	0.0	30555.491	0.0
566.5659	29.01	-3.86	128778.100	4.0	146423.400	4.0
566.5701	28.01	-3.35	118874.110	3.5	136519.280	4.5
566.5836	22.00	-3.79	29818.310	3.0	47463.060	4.0
566.5851	18.00	-2.63	106237.597	2.0	123882.300	1.0
566.5990	20.02	-2.27	344149.810	2.0	361794.080	1.0
566.6270	17.02	-4.02	221862.900	.5	239506.300	1.5
566.6280	40.00	-.85	17744.654	0.0	35392.917	0.0
566.6430	29.01	-3.78	128853.300	2.0	146496.200	3.0
566.6534	22.00	-3.40	20209.444	2.0	37852.021	1.0
566.6600	25.01	-4.80	64493.830	4.0	82136.200	4.0
566.6629	7.01	-.02	148940.170	1.0	166582.450	2.0
566.6676	14.00	-1.05	45293.629	2.0	62935.760	3.0
566.6712	22.00	-1.84	25438.898	2.0	43080.920	2.0
566.6783	26.02	-2.08	205092.530	4.0	222734.330	4.0
566.6786	26.00	-3.42	33507.102	3.0	51148.892	2.0
566.6793	28.00	-1.97	33112.368	3.0	50754.137	2.0
566.6793	28.01	-2.30	104503.220	2.5	122144.990	2.5
566.6812	28.01	-1.45	119889.470	5.5	137531.180	4.5
566.6835	28.01	-1.66	103653.030	3.5	121294.670	4.5
566.6860	41.00	-1.43	15163.614	0.0	32810.071	0.0
566.6957	24.00	-2.91	24897.550	4.0	42538.810	3.0
566.7121	26.01	-3.87	62244.570	1.5	79885.320	2.5
566.7146	21.01	-1.20	12101.450	1.0	29742.120	1.0
566.7233	24.01	-4.72	69954.200	2.5	87594.600	1.5
566.7300	42.00	-.77	27584.872	0.0	45229.959	0.0
566.7313	18.01	-1.16	190106.230	1.5	207746.380	2.5
566.7384	28.01	-2.64	101258.010	1.5	118897.940	2.5
566.7389	18.00	-3.95	107131.755	1.0	124771.670	2.0
566.7394	28.01	-.36	119889.470	5.5	137529.370	6.5
566.7484	26.02	-4.04	205195.150	5.0	222834.770	6.0
566.7515	9.00	-.88	115917.909	2.5	133557.430	2.5
566.7674	26.00	-4.65	21038.987	2.0	38678.015	2.0
566.7731	25.00	-1.73	44993.920	3.5	62632.770	3.5
566.7843	24.00	-1.52	33762.740	6.0	51401.240	5.0
566.7880	75.00	-1.46	15647.559	0.0	33290.840	0.0
566.7982	28.01	-1.92	118563.390	3.5	136201.460	3.5
566.8210	26.02	-2.56	205672.010	4.0	223309.370	5.0
566.8306	21.00	-4.23	18855.760	1.5	36492.820	.5
566.8367	23.00	-1.07	8715.720	3.5	26352.590	2.5
566.8422	25.01	-3.92	55759.270	3.0	73395.970	2.0
566.8531	25.00	-3.05	41230.300	3.5	58866.660	4.5
566.8551	17.01	-.21	132162.000	3.0	149798.300	2.0
566.8618	23.00	-4.60	15724.220	3.5	33360.310	3.5
566.8695	25.01	-4.44	55759.270	3.0	73395.120	3.0
566.8705	21.00	-3.64	16210.800	3.5	33846.620	3.5
566.8714	28.01	-3.94	111783.790	3.5	129419.580	4.5
566.8721	23.00	-1.22	24727.850	2.5	42363.620	3.5
566.8782	25.02	-1.98	177477.230	2.5	195112.810	3.5
566.8870	60.01	-1.01	11292.053	0.0	28932.253	0.0
566.8940	58.01	-.96	8065.752	0.0	25705.734	0.0
566.8943	6.00	-2.43	68856.330	1.0	86491.410	1.0
566.9042	21.01	-1.09	12101.450	1.0	29736.220	0.0
566.9123	28.01	-2.52	114052.040	3.5	131686.560	4.5
566.9165	22.00	-3.72	28896.062	5.0	46530.450	4.0
566.9361	26.02	-4.05	205694.090	1.0	223327.870	2.0
566.9369	22.00	-3.49	31205.985	3.0	48839.740	3.0
566.9409	24.00	-3.79	31987.060	4.0	49620.690	4.0
566.9420	92.00	-1.98	564.603	0.0	18203.092	0.0
566.9447	23.00	-2.78	21963.500	3.5	39597.010	4.5
566.9563	14.00	-2.75	45321.848	3.0	62955.000	2.0
566.9618	23.00	-4.04	15264.830	5.5	32897.810	5.5
566.9640	26.00	-2.02	34121.623	0.0	51754.534	1.0
566.9737	14.00	-1.34	45321.848	3.0	62954.460	3.0
566.9935	28.00	-1.01	34408.574	1.0	52040.568	2.0
566.9998	18.01	-.27	190511.190	2.5	208142.990	3.5
567.0035	22.00	-4.25	25227.217	3.0	42858.900	3.0
567.0070	46.00	.39	37183.117	0.0	54819.584	0.0
567.0277	28.01	-4.21	101246.160	.5	118877.090	1.5
567.0531	23.00	-4.26	17116.920	3.5	34747.060	3.5
567.0534	23.01	-3.92	55206.870	5.0	72837.000	6.0
567.0666	28.01	-1.13	101247.370	2.5	118877.090	1.5
567.0827	23.00	-1.12	8715.720	3.5	26344.940	4.5
567.0833	17.02	-4.43	222100.700	1.5	239729.900	2.5
567.1020	41.00	-1.34	11292.053	0.0	28925.565	0.0
567.1142	25.02	-.10	177687.540	3.5	195315.780	2.5
567.1226	24.00	-4.30	27597.220	3.0	45225.200	2.0
567.1242	26.02	.18	188109.580	3.0	205737.510	2.0
567.1496	24.00	-4.76	31009.000	3.0	48636.140	3.0
567.1550	57.01	-.98	17744.654	0.0	35376.518	0.0
567.1612	24.01	-3.82	30864.610	2.5	48491.390	2.5
567.1625	28.01	-1.99	101247.370	2.5	118874.110	3.5
567.1660	9.00	-.55	115917.909	2.5	133544.540	3.5
567.1771	28.00	-2.70	44206.185	3.0	61832.470	4.0
567.1795	21.00	.55	11677.310	4.5	29303.520	5.5
567.1809	26.00	-2.32	35767.546	4.0	53393.715	4.0
567.1910	41.00	-1.12	12017.970	0.0	29648.715	0.0
567.1914	25.01	-4.70	83875.460	4.0	101501.300	3.0
567.1953	24.00	-.34	47125.700	3.0	64751.420	4.0
567.2017	23.00	-4.69	19189.280	1.5	36814.800	1.5
567.2024	12.02	-1.20	564664.600	2.0	582290.100	3.0
567.2024	12.02	-1.20	564664.600	2.0	582290.100	3.0
567.2043	25.02	-2.59	177269.340	1.5	194894.780	1.5
567.2070	42.00	-.23	34844.049	0.0	52474.297	0.0
567.2130	26.02	.05	202030.380	3.0	219655.550	2.0
567.2249	29.01	-2.56	128778.100	4.0	146402.900	5.0
567.2278	26.00	-3.36	36975.640	3.0	54600.350	3.0
567.2645	25.01	-4.51	83875.460	4.0	101499.030	4.0
567.2658	28.01	-2.31	104646.520	3.5	122270.050	3.5
567.2658	17.00	-2.52	84485.309	1.5	102108.840	1.5
567.2819	18.02	-2.17	207532.150	1.0	225155.180	1.0
567.2896	26.02	.18	188109.580	3.0	205732.370	3.0
567.2935	24.00	-3.10	33040.100	2.0	50662.770	1.0
567.2948	23.00	-1.92	19078.150	3.5	36700.780	2.5
567.2948	28.01	-1.65	119913.330	4.5	137535.960	3.5
567.2967	18.01	-1.33	189654.780	2.5	207277.350	1.5
567.2990	28.01	-.79	119913.330	4.5	137535.830	5.5
567.3086	26.01	-2.83	54902.420	1.5	72524.620	1.5
567.3136	17.00	-1.07	84132.262	2.5	101754.307	3.5
567.3390	26.00	-3.37	29798.960	4.0	47420.215	5.0
567.3392	25.02	-1.12	177687.540	3.5	195308.790	4.5
567.3398	22.00	-2.29	25102.880	2.0	42724.110	2.0
567.3560	74.00	-1.94	19115.832	0.0	36741.450	0.0
567.3630	42.00	-1.44	20164.380	0.0	37789.780	0.0
567.3791	27.00	-3.45	23207.760	1.5	40827.770	1.5
567.3850	63.00	-.56	13147.176	0.0	30771.893	0.0
567.3997	7.01	-3.29	168892.210	1.0	186511.580	2.0
567.4010	22.01	-3.18	45548.900	1.5	63168.230	2.5
567.4091	28.01	-2.33	101258.010	1.5	118877.090	1.5
567.4129	26.00	-3.92	36940.600	2.0	54559.560	3.0
567.4152	24.00	-2.72	28679.430	1.0	46298.320	1.0
567.4342	22.00	-4.82	31184.021	1.0	48802.320	0.0
567.4362	9.00	-1.64	116040.883	1.5	133659.120	.5
567.4380	76.00	-1.96	18147.942	0.0	35771.013	0.0
567.4406	24.01	-4.28	50687.630	2.5	68305.730	1.5
567.4420	74.00	-1.39	19115.832	0.0	36738.778	0.0
567.4470	42.00	-1.04	20245.038	0.0	37867.829	0.0
567.4487	28.01	-.87	119913.330	4.5	137531.180	4.5
567.4558	25.01	-4.94	64518.570	5.0	82136.200	4.0
567.4622	29.01	-3.78	121524.670	3.0	139142.100	2.0
567.4755	18.00	-1.65	107496.463	1.0	125113.480	2.0
567.4757	28.01	-1.32	119909.720	1.5	137526.730	2.5
567.4761	29.01	-3.49	118142.970	3.0	135759.970	2.0
567.4809	23.02	-.20	145143.430	4.5	162760.280	4.5
567.4980	90.00	-1.32	11695.340	0.0	29316.547	0.0
567.4992	22.00	-3.85	18141.229	5.0	35757.510	4.0
567.4993	24.00	-2.47	35501.260	3.0	53117.540	4.0
567.5153	18.02	-2.54	207532.150	1.0	225147.930	2.0
567.5170	25.00	-2.68	51100.490	4.5	68716.220	4.5
567.5244	11.02	-3.79	417415.500	1.5	435031.000	.5
567.5270	39.00	-1.22	10969.423	0.0	28589.730	0.0
567.5337	25.00	-2.61	37789.930	2.5	55405.140	2.5
567.5380	74.00	-2.15	17986.627	0.0	35606.593	0.0
567.5417	14.00	-1.03	45321.848	3.0	62936.810	4.0
567.5427	22.00	-.10	18593.990	3.0	36208.920	4.0
567.5450	27.00	-1.51	33945.900	2.5	51560.760	2.5
567.5514	24.00	-3.56	33040.100	2.0	50654.760	2.0
567.5717	24.00	-1.15	47222.270	6.0	64836.300	6.0
567.5756	14.00	-1.78	45321.848	3.0	62935.760	3.0
567.5850	69.00	-1.57	0.000	0.0	17616.506	0.0
567.5966	27.00	-2.56	33439.720	4.5	51052.980	3.5
567.5970	60.00	-.58	1048.548	0.0	18666.682	0.0
567.5985	28.01	-3.40	121227.800	2.5	138841.000	3.5
567.5988	29.01	-1.96	116371.410	4.0	133984.600	3.0
567.5988	25.00	-4.82	27201.540	2.5	44814.730	1.5
567.6017	7.01	-.34	148908.590	0.0	166521.690	1.0
567.6020	23.02	-2.23	144772.020	3.5	162385.110	3.5
567.6095	24.00	-7.33	7593.160	2.0	25206.020	3.0
567.6304	24.00	-.43	47189.870	4.0	64802.080	5.0
567.6468	27.00	-1.02	36092.440	2.5	53704.140	2.5
567.6552	23.00	-.74	18805.050	.5	36416.490	1.5
567.6599	22.00	-4.03	17423.853	2.0	35035.147	2.0
567.6610	74.00	-2.58	12098.628	0.0	29714.776	0.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
567.6755	28.01	-2.54	75917.630	3.5	93528.440	3.5
567.6910	10.01	-4.64	303824.230	3.5	321434.560	2.5
567.6930	74.00	-1.83	17583.339	0.0	35198.494	0.0
567.6958	28.01	-1.27	119913.330	4.5	137523.510	3.5
567.7016	25.00	-4.72	45060.810	3.5	62670.810	4.5
567.7040	59.01	-2.53	5081.424	0.0	22696.237	0.0
567.7055	10.01	-3.50	303824.680	2.5	321434.560	2.5
567.7116	27.00	-3.82	36092.440	2.5	53702.130	3.5
567.7174	28.01	-2.31	119909.720	1.5	137519.230	2.5
567.7450	64.00	-.31	14195.724	0.0	31809.265	0.0
567.7470	41.00	-2.40	5887.999	0.0	23501.478	0.0
567.7598	22.00	-2.56	26772.965	5.0	44381.160	4.0
567.7664	26.00	-2.97	33095.922	4.0	50703.912	5.0
567.7722	24.00	-3.44	31028.330	2.0	48636.140	3.0
567.7822	24.00	-.29	47228.800	5.0	64836.300	6.0
567.7890	42.00	-1.64	16534.792	0.0	34146.968	0.0
567.8032	26.00	-3.33	40207.120	3.0	57813.970	3.0
567.8040	28.00	-3.31	40361.254	3.0	57968.080	3.0
567.8042	27.00	-3.95	36329.860	2.5	53936.680	2.5
567.8064	17.00	-2.54	83130.900	1.5	100737.650	.5
567.8126	26.02	-2.70	205092.530	4.0	222699.090	5.0
567.8364	26.00	-3.44	31322.603	3.0	48928.423	2.0
567.8367	26.02	-.64	188131.700	1.0	205737.510	2.0
567.8403	30.02	-2.12	217846.800	2.0	235452.500	2.0
567.8416	20.02	-.58	347758.220	2.0	365363.880	1.0
567.8519	24.01	-1.73	52298.120	3.5	69903.460	3.5
567.8605	26.00	-4.77	19552.474	1.0	37157.546	2.0
567.8648	28.01	-3.07	118914.340	4.5	136519.280	4.5
567.8690	18.01	-3.46	187589.230	2.5	205194.040	1.5
567.8922	26.02	-3.86	117950.320	4.0	135554.410	4.0
567.9003	10.01	-4.83	303824.230	3.5	321428.070	2.5
567.9006	26.00	-1.06	37521.144	2.0	55124.974	3.0
567.9006	10.01	-3.78	303824.230	3.5	321428.060	3.5
567.9148	10.01	-4.76	303824.680	2.5	321428.070	2.5
567.9151	10.01	-3.14	303824.680	2.5	321428.060	3.5
567.9161	26.02	-3.46	205002.470	3.0	222605.820	4.0
567.9216	23.00	-3.93	18805.050	.5	36408.230	1.5
567.9348	26.02	-4.10	205002.470	3.0	222605.240	3.0
567.9400	24.00	-4.52	27703.840	4.0	45306.450	5.0
567.9500	27.00	-7.90	8460.810	2.5	26063.110	1.5
567.9555	27.00	-1.59	36092.440	2.5	53694.570	3.5
567.9558	7.01	.27	149076.520	2.0	166678.640	3.0
567.9630	44.00	-.79	22180.818	0.0	39787.599	0.0
567.9800	23.01	-4.80	55349.630	3.0	72951.000	4.0
567.9903	28.01	-2.95	97273.830	2.5	114874.880	2.5
567.9937	22.00	-.87	19937.859	1.0	37538.804	2.0
568.0180	56.00	-1.45	9114.300	0.0	26719.376	0.0
568.0210	28.01	-3.82	121240.900	3.5	138841.000	3.5
568.0239	26.00	-2.67	33765.291	2.0	51365.300	3.0
568.0304	9.02	-.76	440359.260	3.5	457959.070	3.5
568.0370	92.00	-1.61	6210.629	0.0	23815.116	0.0
568.0381	28.01	-3.34	95573.390	3.5	113172.960	4.5
568.0562	10.01	-3.47	303824.230	3.5	321423.240	3.5
568.0565	10.01	-3.19	303824.230	3.5	321423.230	4.5
568.0571	23.01	-3.92	32299.240	1.0	49898.220	2.0
568.0649	14.00	-2.01	47284.061	1.0	64882.800	2.0
568.0688	10.01	-2.84	303824.230	3.5	321422.850	4.5
568.0707	10.01	-3.01	303824.680	2.5	321423.240	3.5
568.0768	25.00	-2.14	44696.290	2.5	62294.660	3.5
568.0778	26.02	-3.63	205732.370	3.0	223330.710	3.0
568.0880	76.00	.47	34602.076	0.0	52204.983	0.0
568.0900	40.00	-1.70	4355.506	0.0	21958.351	0.0
568.0994	27.00	-4.24	15184.040	2.5	32781.710	2.5
568.1039	28.01	-3.08	53037.930	2.5	70635.460	2.5
568.1081	28.01	-4.99	100845.410	.5	118442.810	1.5
568.1100	63.00	-.91	13147.176	0.0	30749.401	0.0
568.1126	25.00	-2.94	45156.110	2.5	62753.370	2.5
568.1204	25.02	-.32	174575.870	3.5	192172.890	2.5
568.1217	22.00	-2.73	26657.409	4.0	44254.390	3.0
568.1302	28.00	-4.43	26665.903	3.0	44262.619	2.0
568.1340	29.01	-4.22	116388.000	2.0	133984.600	3.0
568.1352	23.00	-5.30	13801.530	1.5	31398.090	2.5
568.1452	18.01	-1.18	191169.520	1.5	208765.770	.5
568.1497	18.01	-2.20	190732.970	.5	208329.080	.5
568.1695	26.02	-4.91	205732.370	3.0	223327.870	2.0
568.1797	22.00	-2.70	25438.898	2.0	43034.080	1.0
568.1887	18.00	-1.56	106237.597	2.0	123832.500	3.0
568.1898	26.02	-.44	188142.640	2.0	205737.510	2.0
568.1900	59.01	-1.46	9275.615	0.0	26875.362	0.0
568.1911	29.01	-2.59	121524.670	3.0	139119.500	3.0
568.2053	26.02	-3.08	205732.370	3.0	223326.760	4.0
568.2150	26.01	-4.92	66672.390	3.5	84266.480	2.5
568.2173	24.00	-4.55	33060.740	3.0	50654.760	2.0
568.2198	28.00	-.54	33112.368	3.0	50706.310	4.0
568.2437	26.02	-3.45	205737.510	2.0	223330.710	3.0
568.2467	24.00	-.36	30965.460	3.0	48558.570	2.0
568.2467	17.00	-3.15	84132.262	2.5	101725.370	1.5
568.2502	29.01	-2.55	118071.340	1.0	135664.340	1.0
568.2633	11.00	-.70	16956.172	.5	34548.766	1.5
568.2654	25.00	-3.69	51100.490	4.5	68693.020	5.5
568.2890	25.03	-3.79	152986.000	2.0	170577.800	1.0
568.2890	42.00	-1.21	20809.640	0.0	38406.321	0.0
568.2893	22.00	-2.43	20062.980	1.0	37654.770	2.0
568.2915	20.02	-.90	341349.190	1.0	358940.910	0.0
568.3025	24.01	-3.93	66727.160	2.5	84318.540	1.5
568.3355	26.02	-4.07	205737.510	2.0	223327.870	2.0
568.3423	27.00	-2.09	33462.830	2.5	51052.980	3.5
568.3470	9.00	-3.24	118405.267	.5	135995.270	.5
568.3559	26.02	-.72	188142.640	2.0	205732.370	3.0
568.3604	23.00	-4.80	15770.720	4.5	33360.310	3.5
568.3713	18.00	-3.47	106237.597	2.0	123826.850	2.0
568.3770	58.01	-1.08	11372.710	0.0	28966.666	0.0
568.4014	23.00	-3.33	15103.770	4.5	32692.090	3.5
568.4022	22.00	-2.24	25643.695	3.0	43231.990	4.0
568.4114	24.00	-4.94	33040.100	2.0	50628.110	3.0
568.4156	21.00	-4.84	16210.800	3.5	33798.680	2.5
568.4160	28.01	-4.01	103653.030	3.5	121240.900	3.5
568.4189	21.01	-1.01	12154.340	2.0	29742.120	1.0
568.4240	63.00	-.14	19357.805	0.0	36950.306	0.0
568.4377	22.00	-4.07	25493.722	2.0	43080.920	2.0
568.4470	26.02	-.14	202156.130	2.0	219743.040	1.0
568.4485	14.00	-2.02	39955.053	2.0	57541.918	1.0
568.4554	25.01	-4.37	83912.380	5.0	101499.030	4.0
568.4638	18.01	-4.92	196305.040	3.5	213891.430	2.5
568.4654	24.00	-1.28	47125.700	3.0	64712.040	3.0
568.4662	10.00	-3.02	152970.733	0.0	170557.050	1.0
568.4774	24.00	-4.92	31987.060	4.0	49573.030	4.0
568.4838	23.00	-3.18	26480.280	3.5	44066.050	3.5
568.4935	23.00	-1.50	19026.340	2.5	36611.610	2.5
568.5068	28.01	-4.83	114052.040	3.5	131637.100	3.5
568.5162	26.02	-.96	188109.320	0.0	205694.090	1.0
568.5190	92.00	-1.83	4355.506	0.0	21945.068	0.0
568.5301	25.01	-3.57	53805.800	4.0	71390.140	3.0
568.5417	17.00	-3.00	82918.893	2.5	100502.871	1.5
568.5420	40.00	-.92	18147.942	0.0	35736.792	0.0
568.5605	30.02	-1.74	218040.500	3.0	235623.900	3.0
568.5610	59.01	-2.08	9275.615	0.0	26863.877	0.0
568.5627	28.01	-4.01	100078.780	1.5	117662.110	1.5
568.5744	9.00	-1.60	116040.883	1.5	133623.850	1.5
568.5792	16.01	-1.20	115817.000	2.5	133399.820	1.5
568.5814	15.01	-2.92	87967.700	3.0	105550.450	2.0
568.5818	23.00	-3.93	15724.220	3.5	33306.960	4.5
568.5845	26.00	-1.18	40231.312	2.0	57813.970	3.0
568.5889	25.02	-.88	174332.910	1.5	191915.430	.5
568.5928	30.02	.07	218041.500	4.0	235623.900	3.0
568.5951	28.01	-2.43	101357.200	4.5	118939.530	5.5
568.5980	24.00	-3.75	27703.840	4.0	45286.080	4.0
568.6006	24.01	-2.91	52321.300	4.5	69903.460	3.5
568.6136	26.00	-3.07	29320.050	1.0	46901.808	1.0
568.6196	28.01	-2.02	104503.220	2.5	122084.790	1.5
568.6212	7.01	-.60	148940.170	1.0	166521.690	1.0
568.6303	28.01	-2.02	101247.370	2.5	118826.610	2.5
568.6354	17.00	-2.65	83364.927	.5	100946.010	.5
568.6380	45.00	-1.54	13389.148	0.0	30975.029	0.0
568.6510	26.00	-.75	36686.159	4.0	54266.760	5.0
568.6639	23.03	-2.69	265879.200	2.0	283459.400	3.0
568.6660	64.00	-2.20	161.315	0.0	17746.330	0.0
568.6766	24.00	-2.56	47222.270	6.0	64802.080	5.0
568.6782	25.02	-.77	177269.340	1.5	194849.100	1.5
568.6785	28.01	-3.55	118939.530	5.5	136519.280	4.5
568.6837	21.00	.43	11610.240	3.5	29189.830	4.5
568.6856	26.02	-.46	201892.440	5.0	219471.970	4.0
568.6889	27.00	-3.59	33462.830	2.5	51042.260	2.5
568.6980	62.00	-1.31	3952.218	0.0	21536.243	0.0
568.6989	27.00	-1.08	28345.860	4.5	45924.980	3.5
568.7115	25.00	-1.81	37789.930	2.5	55368.660	1.5
568.7190	59.01	-2.50	4032.876	0.0	21616.252	0.0
568.7373	18.00	-3.56	106237.597	2.0	123815.530	1.0
568.7458	18.01	-2.65	186340.480	1.5	203918.150	1.5
568.7503	22.00	-3.71	17369.590	1.0	34947.120	1.0
568.7526	20.01	-4.36	72722.230	1.5	90299.690	2.5
568.7640	42.00	-1.57	22100.161	0.0	39682.146	0.0
568.7665	28.01	-4.27	104503.220	2.5	122080.250	2.5
568.7697	25.01	-3.78	83912.380	5.0	101489.310	5.0
568.7895	23.00	-4.43	15270.420	1.5	32846.740	2.5
568.7895	23.00	-3.85	15270.420	1.5	32846.740	2.5
568.7947	25.02	-.57	174436.590	2.5	192012.750	1.5
568.8025	18.01	-3.61	196315.510	2.5	213891.430	2.5
568.8083	25.01	-4.29	90596.800	2.0	108172.540	1.0
568.8093	18.01	-4.97	196315.510	2.5	213891.220	1.5
568.8194	11.00	-1.40	16973.368	1.5	34548.766	1.5
568.8196	27.00	-1.38	33466.870	3.5	51042.260	2.5
568.8205	11.00	-.45	16973.368	1.5	34548.731	2.5
568.8250	73.00	-1.48	17099.394	0.0	34679.493	0.0
568.8397	28.01	-1.90	103653.030	3.5	121227.800	2.5
568.8406	24.00	-3.75	24940.610	2.0	42515.350	2.0
568.8530	60.01	-.95	7904.437	0.0	25483.671	0.0
568.8549	29.01	-4.05	128853.300	2.0	146427.600	1.0
568.8562	27.00	-3.00	16778.160	2.5	34352.420	1.5
568.8604	23.00	-1.45	19189.280	1.5	36763.410	2.5
568.8862	17.00	-2.53	83130.900	1.5	100704.230	1.5
568.8879	24.00	-1.11	47228.800	5.0	64802.080	5.0
568.9063	18.01	-3.45	185624.730	3.5	203197.440	3.5
568.9086	24.00	-3.09	35501.260	3.0	53073.900	3.0
568.9122	9.00	-1.33	116040.883	1.5	133613.410	.5
568.9140	42.00	-1.26	11050.080	0.0	28627.429	0.0
568.9167	21.00	-3.82	21085.840	3.5	38658.230	4.5
568.9180	59.01	-1.66	10888.765	0.0	28465.991	0.0
568.9487	22.00	-.29	18525.070	2.0	36096.470	3.0
568.9616	18.00	-2.00	106237.597	2.0	123808.600	2.0
568.9675	26.02	-4.64	205195.150	5.0	222765.970	4.0
568.9747	28.01	-4.25	101258.010	1.5	118828.610	2.5
568.9816	10.00	-1.52	148257.790	1.0	165828.175	2.0
568.9928	18.00	-4.66	107496.463	1.0	125066.501	2.0
568.9999	28.01	-1.98	101357.200	4.5	118927.020	4.5
569.0048	26.00	-1.27	40404.492	1.0	57974.160	2.0
569.0054	23.00	-9.50	10892.500	3.5	28462.150	2.5
569.0140	46.00	-.30	40651.390	0.0	58225.650	0.0
569.0226	14.02	-.85	240262.280	1.0	257831.400	2.0
569.0342	20.01	-4.21	72730.930	2.5	90299.690	3.5
569.0342	18.01	-4.83	196305.040	3.5	213873.800	2.5
569.0385	26.00	-4.30	33801.555	2.0	51370.184	2.0
569.0425	14.00	-4.89	39760.285	1.0	57328.789	1.0
569.0445	26.00	-3.67	29320.050	1.0	46888.494	2.0
569.0475	20.02	-1.86	343784.960	1.0	361353.310	1.0
569.0738	16.01	-4.25	113461.220	1.5	131028.760	1.5
569.0741	25.01	-4.28	83933.770	3.0	1015u1.300	3.0
569.0768	9.00	-2.58	118427.823	1.5	135995.270	.5
569.0848	24.00	-3.20	25038.610	5.0	42605.810	6.0
569.1000	25.00	-4.40	27248.000	1.5	44814.730	1.5
569.1042	15.01	-3.90	112607.700	2.0	130174.300	2.0
569.1130	23.00	-.13	24838.560	3.5	42404.890	3.5
569.1181	26.00	-4.76	22838.320	2.0	40404.492	1.0
569.1214	25.01	-4.43	83933.770	3.0	101499.840	2.0
569.1237	28.01	-2.77	101357.200	4.5	118923.200	3.5
569.1240	23.00	-4.00	26352.590	2.5	43918.580	2.5
569.1324	21.00	-2.46	18711.030	.5	36276.760	1.5
569.1340	24.00	-2.08	37233.500	5.0	54799.180	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
569.1373	26.01	-6.28	26055.400	2.5	43620.980	1.5
569.1390	92.01	-2.01	6371.944	0.0	23942.344	0.0
569.1467	28.01	-4.91	118379.110	2.5	135944.400	3.5
569.1486	28.00	-1.75	33112.368	3.0	50677.599	3.0
569.1489	25.01	-4.27	53698.700	2.0	71263.920	1.0
569.1496	26.00	-2.07	34692.130	1.0	52257.330	0.0
569.1535	23.00	-3.47	17181.980	4.5	34747.060	3.5
569.1625	25.02	-3.72	115711.600	4.5	133276.400	4.5
569.1658	18.01	-2.71	174409.830	1.5	191974.530	1.5
569.1674	23.00	-4.38	17054.870	2.5	34619.520	2.5
569.1674	26.00	-3.75	34039.495	4.0	51604.146	3.0
569.1930	23.02	-.27	144772.020	3.5	162335.880	3.5
569.1985	22.01	-6.52	12676.990	4.5	30240.680	5.5
569.2130	64.00	-1.08	7420.492	0.0	24988.608	0.0
569.2267	26.01	-3.90	62322.500	3.5	79885.320	2.5
569.2274	28.01	-3.48	97273.830	2.5	114836.630	3.5
569.2377	28.01	-4.05	116732.510	2.5	134294.990	2.5
569.2393	26.02	-.15	188109.580	3.0	205672.010	4.0
569.2403	29.01	-3.46	128853.300	2.0	146415.700	2.0
569.2406	26.02	-2.01	188131.700	1.0	205694.090	1.0
569.2543	28.01	-2.20	101247.370	2.5	118809.340	1.5
569.2679	24.00	-1.11	47189.870	4.0	64751.420	4.0
569.2817	9.00	-2.08	118405.267	.5	135966.390	1.5
569.2941	23.00	-1.15	24992.880	3.5	42553.620	4.5
569.2974	28.01	-4.43	101754.800	2.5	119315.440	2.5
569.2996	26.02	-4.63	105895.350	1.0	123455.920	0.0
569.3090	41.00	-2.40	5887.999	0.0	23453.153	0.0
569.3095	18.00	-2.88	107131.755	1.0	124692.020	2.0
569.3109	6.00	-1.85	68856.330	1.0	86416.550	1.0
569.3220	28.01	-4.82	120002.860	3.5	137562.740	3.5
569.3252	22.00	-4.26	22081.198	2.0	39640.980	3.0
569.3311	18.01	-4.48	186171.260	.5	203730.860	1.5
569.3630	39.00	-1.25	16454.134	0.0	34017.622	0.0
569.3645	24.01	-3.25	66649.710	1.5	84208.280	.5
569.3655	23.01	-4.75	55349.630	3.0	72908.170	3.0
569.3810	18.01	-3.92	196315.510	2.5	213873.570	3.5
569.3901	24.00	-4.28	45113.220	3.0	62671.000	4.0
569.4034	23.00	-2.66	21841.450	2.5	39398.820	3.5
569.4050	14.02	-2.79	209531.400	2.0	227088.720	3.0
569.4109	28.01	-3.11	101357.200	4.5	118914.340	4.5
569.4135	28.01	-2.84	101366.140	2.5	118923.200	3.5
569.4390	42.00	-1.40	23551.996	0.0	41113.140	0.0
569.4537	29.01	-2.92	117928.480	1.0	135484.300	0.0
569.4650	18.01	-3.52	196305.040	3.5	213860.510	3.5
569.4683	20.02	-.40	341601.460	2.0	359156.830	1.0
569.4686	18.01	-4.00	196305.040	3.5	213860.400	4.5
569.4731	24.00	-.17	31106.370	4.0	48661.590	3.0
569.4738	25.01	-3.80	83912.380	5.0	101467.580	6.0
569.4799	24.00	-3.20	37244.170	4.0	54799.180	5.0
569.4977	28.00	-.36	32982.280	1.0	50536.742	1.0
569.5088	23.00	-2.81	19026.340	2.5	36580.460	1.5
569.5090	46.00	.27	37183.117	0.0	54742.102	0.0
569.5312	28.01	-3.60	99340.550	3.5	116893.980	2.5
569.5514	14.02	-1.24	209531.400	2.0	227084.210	2.0
569.5520	28.01	-4.33	118774.760	.5	136327.550	1.5
569.5633	26.02	.47	201919.530	4.0	219471.970	4.0
569.5883	24.00	-4.19	27703.840	4.0	45255.510	3.0
569.5893	29.01	-3.02	118484.000	3.0	136035.640	3.0
569.5896	25.00	-4.07	34463.370	1.5	52015.000	1.5
569.5913	18.01	-3.58	201608.820	3.5	219160.400	2.5
569.5930	59.01	-1.82	9598.245	0.0	27154.641	0.0
569.5935	27.00	-3.83	36875.130	1.5	54426.640	1.5
569.5955	26.02	.06	188142.640	2.0	205694.090	1.0
569.5994	28.01	-4.02	101258.010	1.5	118809.340	1.5
569.6000	6.02	.09	258931.000	0.0	276487.180	0.0
569.6030	42.00	-.49	30004.597	0.0	47560.684	0.0
569.6087	26.00	-2.44	36686.159	4.0	54237.200	4.0
569.6140	26.01	-7.61	21308.080	1.5	38858.960	2.5
569.6162	23.00	-4.89	9636.960	1.5	27187.770	2.5
569.6190	57.00	-1.47	1048.548	0.0	18604.142	0.0
569.6217	24.00	-3.67	25038.610	5.0	42589.250	5.0
569.6220	64.00	-.92	483.945	0.0	18039.447	0.0
569.6493	14.02	-.51	209531.400	2.0	227081.190	1.0
569.6542	26.02	-4.13	205195.150	5.0	222744.790	5.0
569.6603	13.02	.23	126164.050	.5	143713.500	1.5
569.6740	27.00	-4.11	15184.040	2.5	32733.070	3.5
569.6944	17.02	-4.94	188390.100	2.5	205938.500	1.5
569.7360	14.02	-1.58	240284.280	2.0	257831.400	2.0
569.7360	14.02	-.68	240284.280	2.0	257831.400	3.0
569.7386	25.00	-2.91	51169.180	5.5	68716.220	4.5
569.7396	22.00	-4.61	31489.451	4.0	49036.460	4.0
569.7583	28.00	-2.46	31786.210	3.0	49332.643	4.0
569.7617	28.01	-3.77	121294.670	4.5	138841.000	3.5
569.7820	74.00	-2.31	13711.778	0.0	31262.350	0.0
569.7900	41.00	-1.34	13550.463	0.0	31100.789	0.0
569.8039	26.00	-2.87	29356.780	2.0	46901.808	1.0
569.8049	18.01	-4.73	196315.510	2.5	213860.510	3.5
569.8227	26.00	-4.82	22946.810	1.0	40491.260	0.0
569.8270	42.01	-.60	29439.995	0.0	46989.181	0.0
569.8325	24.00	-.01	31280.350	5.0	48824.500	4.0
569.8351	28.01	-3.38	104503.220	2.5	122047.290	3.5
569.8373	26.00	-2.03	34636.820	2.0	52180.820	1.0
569.8396	22.00	-2.26	18141.229	5.0	35685.160	6.0
569.8489	22.00	-2.52	25537.276	1.0	43080.920	2.0
569.8529	23.00	-.37	8578.520	2.5	26122.040	3.5
569.8529	26.00	-4.28	35611.608	3.0	53155.130	4.0
569.8800	9.00	-3.40	116040.883	1.5	133583.570	2.5
569.8930	60.01	-1.08	12340.601	0.0	29887.755	0.0
569.9049	24.00	-4.97	25106.340	3.0	42648.260	3.0
569.9050	44.00	-1.38	8711.012	0.0	26257.796	0.0
569.9104	24.00	-4.03	27816.880	5.0	45358.630	4.0
569.9142	28.00	-3.28	31786.210	3.0	49327.845	2.0
569.9202	25.01	-3.73	53781.700	3.0	71323.150	2.0
569.9240	73.00	-2.38	9194.957	0.0	26741.156	0.0
569.9261	22.00	-3.65	31373.801	3.0	48915.070	2.0
569.9280	42.00	-1.28	21454.900	0.0	39000.976	0.0
569.9351	28.01	-2.84	116512.060	3.5	134053.050	2.5
569.9390	57.00	-1.94	4032.876	0.0	21578.613	0.0
569.9406	23.01	-3.25	19132.690	2.0	36673.510	2.0
569.9410	22.00	-4.57	31184.021	1.0	48724.830	1.0
569.9446	17.02	-4.37	198983.900	1.5	216524.600	2.5
569.9462	25.00	-3.67	45130.160	4.5	62670.810	4.5
569.9569	22.00	-4.36	31184.021	1.0	48724.340	2.0
569.9774	7.00	-2.61	96750.810	1.5	114290.500	2.5
569.9865	17.00	-1.70	84648.100	2.5	102187.510	2.5
569.9939	26.02	-3.04	205195.150	5.0	222734.330	4.0
569.9995	18.01	-2.57	190942.650	.5	208481.660	.5
570.0024	21.00	-4.09	21032.780	2.5	38571.700	3.5
570.0138	9.00	-2.55	118427.823	1.5	135966.390	1.5
570.0141	21.00	.30	11557.640	2.5	29096.200	3.5
570.0240	29.00	-2.34	13227.833	0.0	30770.964	0.0
570.0518	24.00	-1.47	28637.000	3.0	46174.400	3.0
570.0550	24.00	-2.92	27816.880	5.0	45354.180	5.0
570.0583	30.02	-.73	220668.300	2.0	238205.500	1.0
570.0648	29.01	-3.91	130945.000	2.0	148482.000	3.0
570.0690	90.01	-1.62	9678.902	0.0	27220.638	0.0
570.0805	9.00	-1.06	116040.883	1.5	133577.400	1.5
570.0868	18.00	-4.34	106237.597	2.0	123773.920	3.0
570.0888	24.00	-3.89	35501.260	3.0	53037.520	2.0
570.0895	23.00	-3.33	15770.720	4.5	33306.960	4.5
570.0921	20.02	-.96	344257.920	1.0	361794.080	1.0
570.1041	28.01	-1.66	101357.200	4.5	118892.990	5.5
570.1071	26.02	.01	202030.380	3.0	219566.080	3.0
570.1104	14.00	-1.82	39760.285	1.0	57295.881	0.0
570.1305	22.00	-4.81	31489.451	4.0	49024.430	3.0
570.1350	64.00	-1.55	161.315	0.0	17701.021	0.0
570.1425	26.00	-4.72	25899.974	4.0	43434.585	3.0
570.1435	24.01	-4.27	30864.610	2.5	48399.190	1.5
570.1464	22.00	-1.56	20209.444	2.0	37743.933	3.0
570.1551	26.00	-2.02	20641.110	4.0	38175.332	3.0
570.1559	22.00	-3.99	31190.631	2.0	48724.830	1.0
570.1665	22.00	-1.87	20126.055	3.0	37659.927	3.0
570.1718	22.00	-3.74	31190.631	2.0	48724.340	2.0
570.1734	23.00	-1.87	19078.150	3.5	36611.810	2.5
570.1878	26.00	-4.70	33695.378	5.0	51228.595	5.0
570.1916	28.01	-.73	120002.860	3.5	137535.960	3.5
570.1919	24.01	-4.72	53051.550	1.5	70584.640	2.5
570.1932	6.00	-3.84	68856.330	1.0	86389.380	2.0
570.2023	22.00	-1.77	20006.032	2.0	37538.804	2.0
570.2110	42.00	-1.05	25810.406	0.0	43347.774	0.0
570.2219	17.00	-1.66	83894.037	3.5	101426.204	2.5
570.2240	60.01	-1.43	5968.656	0.0	23505.624	0.0
570.2270	22.00	-4.55	17995.750	0.0	35527.760	1.0
570.2323	24.00	-.90	27816.880	5.0	45348.730	6.0
570.2339	28.01	-2.61	101366.140	2.5	118897.940	2.5
570.2367	26.00	-2.88	29356.780	2.0	46888.494	2.0
570.2470	45.00	.16	33795.501	0.0	51331.762	0.0
570.2693	22.00	-.52	18482.860	1.0	36013.570	2.0
570.2706	24.00	-3.27	37205.880	3.0	54736.550	4.0
570.2716	28.01	-.08	103663.500	1.5	121194.140	2.5
570.2840	29.01	-3.31	118484.000	3.0	136014.260	2.0
570.3045	27.00	-1.25	29216.370	2.5	46746.000	2.5
570.3113	16.01	-1.34	115870.400	1.5	133399.820	1.5
570.3123	14.02	-1.25	209559.330	3.0	227088.720	3.0
570.3282	28.01	-2.22	104646.520	3.5	122175.420	2.5
570.3330	57.01	-2.53	5646.026	0.0	23179.642	0.0
570.3380	28.01	-4.12	101246.160	.5	118774.760	.5
570.3471	28.01	-1.91	120002.860	3.5	137531.180	4.5
570.3477	28.00	-.69	44314.980	4.0	61843.280	5.0
570.3507	7.01	-4.65	205350.180	2.0	222878.390	2.0
570.3569	23.00	-.38	8476.200	1.5	26004.220	2.5
570.3676	23.01	-4.41	32040.760	2.0	49568.450	3.0
570.3692	28.00	-3.03	31786.210	3.0	49313.851	3.0
570.3744	27.00	-3.26	29563.170	1.5	47090.650	2.5
570.3796	26.01	-3.46	54902.420	1.5	72429.740	.5
570.4073	18.01	-3.96	185624.730	3.5	203151.200	2.5
570.4148	24.00	-3.08	25038.610	5.0	42564.850	4.0
570.4154	27.00	-2.06	33674.380	2.5	51200.600	1.5
570.4310	73.00	-1.32	21051.613	0.0	38582.217	0.0
570.4349	9.02	.01	442278.930	2.5	459804.550	1.5
570.4372	18.01	-1.69	191169.520	1.5	208695.070	1.5
570.4437	15.00	-4.23	58174.450	1.5	75699.600	.5
570.4486	27.00	-2.26	33674.380	2.5	51199.580	3.5
570.4532	23.00	-.92	24838.560	3.5	42363.620	3.5
570.4551	15.00	-2.81	64239.500	.5	81764.500	1.5
570.4590	14.02	-.34	209559.330	3.0	227084.210	2.0
570.4919	28.01	-1.26	120002.860	3.5	137526.730	2.5
570.4929	25.00	-2.38	51169.180	5.5	68693.020	5.5
570.4942	13.01	-2.54	132819.700	3.0	150343.500	2.0
570.4942	13.01	-1.36	132819.700	3.0	150343.500	3.0
570.4942	13.01	.07	132819.700	3.0	150343.500	4.0
570.4961	9.00	-4.25	129381.860	2.5	146905.600	2.5
570.5007	13.01	-.99	132819.900	2.0	150343.500	2.0
570.5007	13.01	-.26	132819.900	1.0	150343.500	2.0
570.5007	13.01	-.46	132819.900	2.0	150343.500	3.0
570.5076	23.00	-3.66	15264.830	5.5	32788.220	4.5
570.5116	22.00	-3.89	17423.853	2.0	34947.120	1.0
570.5140	7.00	-3.14	96750.810	1.5	114274.000	2.5
570.5147	26.02	.70	201892.440	5.0	219415.610	5.0
570.5167	28.01	-3.44	121317.890	3.5	138841.000	3.5
570.5326	24.00	-2.42	47228.800	5.0	64751.420	4.0
570.5397	22.00	-2.42	18037.225	4.0	35559.627	5.0
570.5463	26.00	-1.98	34692.130	1.0	52214.330	1.0
570.5463	14.00	-4.68	62141.800	1.0	79664.000	1.0
570.5469	28.01	-4.42	116732.510	2.5	134254.690	1.5
570.5473	24.00	-2.51	47189.870	4.0	64712.040	3.0
570.5720	42.01	-.34	24681.201	0.0	42207.473	0.0
570.5961	25.00	-1.37	44993.920	3.5	62514.590	2.5
570.5964	26.00	-.75	37162.729	3.0	54683.390	4.0
570.5968	28.01	-2.64	120002.860	3.5	137523.510	3.5
570.6069	28.01	-4.13	116732.510	2.5	134252.850	3.5
570.6089	16.00	-.95	63474.101	3.0	80994.380	4.0
570.6095	26.00	-3.62	34547.192	2.0	52067.450	2.0
570.6131	28.01	-1.45	92325.850	3.5	109846.000	3.5
570.6160	27.00	-.89	35450.560	3.5	52970.620	2.5
570.6160	41.00	-1.04	15163.614	0.0	32688.534	0.0
570.6200	62.00	-.85	1451.835	0.0	18976.633	0.0
570.6210	60.01	-1.44	7420.492	0.0	24945.259	0.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
570.6280	73.00	-.63	24842.516	0.0	42367.068	0.0
570.6456	26.02	-1.95	205195.150	5.0	222714.300	6.0
570.6480	41.00	-1.58	8307.725	0.0	25831.663	0.0
570.6626	26.02	-2.04	205092.530	4.0	222611.160	5.0
570.6715	22.00	-3.83	31205.985	3.0	48724.340	2.0
570.6727	25.02	-3.15	121117.140	3.5	138635.460	2.5
570.6730	39.00	-.33	16131.504	0.0	33654.674	0.0
570.6739	9.00	-1.73	118936.797	1.5	136455.080	1.5
570.6799	10.01	-4.59	290583.170	1.5	308101.270	2.5
570.6929	25.02	-.06	174874.500	4.5	192392.200	3.5
570.6935	26.02	-4.99	165939.470	5.0	183457.150	4.0
570.6971	23.00	-.47	8412.940	.5	25930.510	1.5
570.6997	28.00	-.89	44314.980	4.0	61832.470	4.0
570.7070	26.00	-2.61	29371.860	3.0	46889.126	4.0
570.7100	90.01	-2.05	6129.972	0.0	23652.006	0.0
570.7186	28.01	-4.28	101357.200	4.5	118874.110	3.5
570.7232	18.01	-1.86	190732.970	.5	208249.740	1.5
570.7232	14.02	-3.11	240314.630	3.0	257831.400	2.0
570.7232	14.02	-1.57	240314.630	3.0	257831.400	3.0
570.7232	14.02	-.50	240314.630	3.0	257831.400	4.0
570.7238	26.01	-3.34	62829.160	.5	80345.910	.5
570.7238	28.01	-2.35	101258.010	1.5	118774.760	.5
570.7276	26.00	-4.03	29371.860	3.0	46888.494	2.0
570.7305	9.00	-1.08	116040.883	1.5	133557.430	2.5
570.7632	9.00	-1.85	116143.579	.5	133659.120	.5
570.7773	23.00	-1.14	19023.470	4.5	36538.580	4.5
570.7791	17.00	-2.33	84485.309	1.5	102000.360	1.5
570.7861	24.00	-2.47	33113.270	4.0	50628.110	3.0
570.7880	22.00	-3.17	18825.890	1.0	36340.670	2.0
570.7889	15.00	-4.73	58174.450	1.5	75689.200	1.5
570.7908	9.00	-2.84	118936.797	1.5	136451.490	2.5
570.8073	26.00	-1.38	35767.546	4.0	53281.735	5.0
570.8095	28.01	-4.85	111783.790	3.5	129297.910	3.5
570.8235	22.00	-.80	18695.230	4.0	36208.920	4.0
570.8280	60.01	-1.21	6855.889	0.0	24374.301	0.0
570.8281	28.01	-4.71	95893.760	1.5	113407.310	2.5
570.8317	23.00	-1.06	24992.880	3.5	42506.320	4.5
570.8366	26.02	-3.17	205092.530	4.0	222605.820	4.0
570.8399	14.00	-1.23	39955.053	2.0	57468.239	2.0
570.8584	9.02	-.58	440202.480	2.5	457715.100	2.5
570.8617	21.00	-.58	11677.310	4.5	29189.830	4.5
570.8623	18.01	-3.20	174820.930	.5	192333.430	.5
570.8890	40.00	-2.84	0.000	0.0	17516.540	0.0
570.8891	28.00	-3.70	31441.665	2.0	48953.344	1.0
570.8949	23.00	-.93	19189.280	1.5	36700.780	2.5
570.9129	28.01	-2.93	101366.140	2.5	118877.090	1.5
570.9187	22.01	-2.03	47466.800	3.5	64977.570	3.5
570.9330	41.00	-1.41	13389.148	0.0	30904.338	0.0
570.9360	9.02	-4.28	442294.310	1.5	459804.550	1.5
570.9370	76.00	.23	37747.719	0.0	55262.786	0.0
570.9386	26.00	-1.30	27166.804	4.0	44676.963	4.0
570.9420	64.00	-1.75	0.000	0.0	17514.914	0.0
570.9539	28.00	-2.66	13521.352	2.0	31031.042	3.0
570.9605	22.01	-5.23	15257.530	4.5	32767.020	3.5
570.9862	22.00	-2.46	25102.880	2.0	42611.580	1.0
570.9912	26.00	-3.83	34328.733	3.0	51837.279	3.0
570.9967	25.00	-2.36	44978.980	1.5	62487.360	2.5
571.0091	23.03	-.81	237638.800	2.0	255146.800	2.0
571.0100	28.01	-4.17	101366.140	2.5	118874.110	3.5
571.0237	22.00	-4.05	18145.400	2.0	35652.950	3.0
571.0247	16.01	-2.04	115892.300	.5	133399.820	1.5
571.0312	23.01	-3.12	19166.190	1.0	36673.510	2.0
571.0320	64.00	-.20	14599.011	0.0	32111.164	0.0
571.0358	28.00	-.67	44336.100	4.0	61843.280	5.0
571.0364	22.01	-3.83	44902.420	2.5	62409.580	3.5
571.0505	25.00	-3.67	44523.450	3.5	62030.180	4.5
571.0674	23.00	-1.64	19189.280	1.5	36695.490	.5
571.0681	6.00	-2.71	68856.330	1.0	86362.520	1.0
571.0688	9.00	-1.77	119081.820	.5	136587.990	1.5
571.0691	23.00	-1.28	24898.730	2.5	42404.890	3.5
571.0694	29.01	-1.96	118484.000	3.0	135990.150	3.0
571.0717	24.00	-4.45	31009.000	3.0	48515.080	3.0
571.0766	7.01	-.53	149076.520	2.0	166582.450	2.0
571.0850	57.00	-1.35	9598.245	0.0	27108.773	0.0
571.0922	25.01	-4.28	90596.800	2.0	108102.250	3.0
571.0952	9.02	.19	442636.270	3.5	460141.630	2.5
571.1088	12.00	-1.55	35051.264	1.0	52556.206	0.0
571.1092	28.01	-2.92	116468.400	1.5	133973.330	2.5
571.1247	22.00	-2.14	25643.695	3.0	43148.150	3.0
571.1249	18.01	-2.53	190507.360	1.5	208011.810	1.5
571.1342	22.00	-4.17	25107.417	2.0	42611.580	1.0
571.1415	26.02	-1.70	205195.150	5.0	222699.090	5.0
571.1428	25.01	-4.26	65567.070	2.0	83070.970	2.0
571.1430	75.00	-1.25	22261.476	0.0	39770.226	0.0
571.1450	58.01	-.82	11695.340	0.0	29204.029	0.0
571.1450	62.00	-1.53	2258.411	0.0	19767.100	0.0
571.1460	18.01	-1.17	191169.520	1.5	208673.320	2.5
571.1562	29.01	-3.23	118532.150	2.0	136035.640	3.0
571.1650	59.01	-1.42	10888.765	0.0	28396.841	0.0
571.1699	22.00	-2.93	18911.399	2.0	36414.470	3.0
571.1705	24.00	-4.36	37233.500	5.0	54736.550	4.0
571.1745	27.01	-2.87	68843.800	4.0	86346.730	3.0
571.1770	7.00	-3.67	96787.650	1.5	114290.500	2.5
571.1776	17.00	-1.55	84485.309	1.5	101988.140	2.5
571.1800	42.00	-1.28	21454.900	0.0	38962.516	0.0
571.1813	21.00	.17	11520.150	1.5	29022.870	2.5
571.1843	26.00	-1.70	34547.192	2.0	52049.820	2.0
571.1852	23.00	-3.56	17116.920	3.5	34619.520	2.5
571.1883	28.00	-2.64	15609.861	2.0	33112.368	3.0
571.1891	22.00	-.65	18593.990	3.0	36096.470	3.0
571.1917	25.02	-2.21	115774.000	3.5	133276.400	4.5
571.2009	23.01	-3.74	36425.070	4.0	53927.190	3.0
571.2140	26.00	-2.25	27559.568	2.0	45061.287	3.0
571.2237	22.01	-7.87	15265.600	3.5	32767.020	3.5
571.2387	24.00	-2.61	35572.940	2.0	53073.900	3.0
571.2400	57.01	-2.91	1371.178	0.0	18876.955	0.0
571.2469	28.01	-4.07	111783.790	3.5	129284.500	2.5
571.2498	18.00	-3.63	107054.319	0.0	124554.939	1.0
571.2498	18.01	-3.43	190511.190	2.5	208011.810	1.5
571.2505	26.01	-4.10	86482.750	3.5	103983.350	3.5
571.2570	24.00	-3.55	36577.730	4.0	54078.130	5.0
571.2636	30.02	-2.05	220006.600	1.0	237506.800	1.0
571.2688	29.01	-3.60	116326.160	3.0	133826.200	2.0
571.2750	24.00	-1.21	24282.340	4.0	41782.190	4.0
571.2890	26.02	-.23	202156.130	2.0	219655.550	2.0
571.2933	26.02	.15	181828.660	2.0	199327.950	1.0
571.3047	28.01	-4.44	118828.610	2.5	136327.550	1.5
571.3093	17.02	-4.18	188448.100	1.5	205946.900	2.5
571.3200	28.01	-2.91	104646.520	3.5	122144.990	2.5
571.3253	28.01	-.08	103663.500	1.5	121161.810	1.5
571.3280	72.00	-.52	24600.544	0.0	42103.625	0.0
571.3292	15.01	-3.38	87805.000	2.0	105303.190	1.0
571.3337	9.00	-1.89	118936.797	1.5	136434.850	2.5
571.3439	9.02	-3.25	427459.370	.5	444957.110	1.5
571.3490	71.01	-1.14	29278.680	0.0	46781.117	0.0
571.3530	23.00	-3.82	15270.420	1.5	32767.880	1.5
571.3699	26.00	-4.95	33695.378	5.0	51192.320	4.0
571.3715	22.00	-4.29	25227.217	3.0	42724.110	2.0
571.3739	24.00	-4.91	33060.740	3.0	50557.560	4.0
571.3744	22.00	-3.06	25537.276	1.0	43034.080	1.0
571.3746	30.02	-1.85	285411.700	3.0	302908.500	4.0
571.3795	28.01	-3.82	100475.820	3.5	117972.470	3.5
571.3886	28.00	-.82	44336.100	4.0	61832.470	4.0
571.3929	22.00	-.82	18462.830	0.0	35959.070	1.0
571.3981	26.02	-1.05	201919.530	4.0	219415.610	5.0
571.3994	24.00	-7.16	7593.160	2.0	25089.200	2.0
571.4020	57.00	-1.11	6936.547	0.0	24437.361	0.0
571.4352	22.00	-4.35	17540.205	3.0	35035.147	2.0
571.4415	25.00	-3.90	27201.540	2.5	44696.290	2.5
571.4550	57.00	-1.22	9840.217	0.0	27339.408	0.0
571.4595	25.00	-4.23	45259.170	1.5	62753.370	2.5
571.4598	28.01	-1.99	104646.520	3.5	122140.710	4.5
571.4673	28.01	-4.69	113321.950	4.5	130815.910	3.5
571.4686	25.02	-1.21	177477.230	2.5	194971.150	2.5
571.5066	28.00	-.41	32973.414	4.0	50466.172	4.0
571.5070	26.00	-2.49	34547.192	2.0	52039.939	1.0
571.5083	26.00	-3.47	33801.555	2.0	51294.262	3.0
571.5123	22.00	-.59	18192.577	6.0	35685.160	6.0
571.5150	27.02	-2.55	155702.400	1.5	173194.900	2.5
571.5150	27.02	-2.55	155702.400	1.5	173194.900	2.5
571.5189	24.00	-2.28	37244.170	4.0	54736.550	4.0
571.5240	73.00	-2.28	10566.135	0.0	28063.213	0.0
571.5242	24.00	-2.73	28682.180	2.0	46174.400	3.0
571.5290	58.01	-.83	12340.601	0.0	29837.526	0.0
571.5399	25.00	-2.45	45013.550	2.5	62505.290	3.5
571.5509	13.01	-1.24	132819.700	3.0	150311.100	3.0
571.5575	13.01	-.33	132819.900	2.0	150311.100	3.0
571.5590	41.00	-1.81	12179.286	0.0	29675.293	0.0
571.5637	28.01	-1.89	120044.950	4.5	137535.960	3.5
571.5680	28.01	-.83	120044.950	4.5	137535.830	5.5
571.5781	26.00	-4.84	36766.950	3.0	54257.520	2.0
571.5814	26.00	-4.38	40207.120	3.0	57697.590	4.0
571.5817	27.00	-2.93	29216.370	2.5	46706.830	3.5
571.5821	20.00	-3.46	21849.634	2.0	39340.080	2.0
571.5821	20.00	-3.51	21849.634	2.0	39340.080	2.0
571.5966	9.00	-2.41	118936.797	1.5	136426.800	1.5
571.5974	25.00	-2.93	37789.930	2.5	55279.910	1.5
571.6019	18.01	-2.20	187589.230	2.5	205079.070	2.5
571.6044	22.00	-3.71	24694.895	4.0	42184.660	4.0
571.6108	24.00	-3.50	27816.880	5.0	45306.450	5.0
571.6174	26.00	-3.67	36079.353	3.0	53568.720	2.0
571.6287	14.02	-.17	209599.700	4.0	227088.720	3.0
571.6326	18.00	-2.98	108722.668	0.0	126211.570	1.0
571.6350	41.00	-1.23	12259.943	0.0	29753.623	0.0
571.6457	22.00	-.67	18525.070	2.0	36013.570	2.0
571.6483	20.02	-2.67	365363.880	1.0	382852.300	2.0
571.6484	25.00	-4.23	41031.480	4.5	58519.900	3.5
571.6530	73.00	-2.71	12179.286	0.0	29672.416	0.0
571.6644	28.01	-3.47	111783.790	3.5	129271.720	3.5
571.6650	26.01	-3.13	62689.960	2.5	80177.870	1.5
571.6870	92.00	-1.66	4355.506	0.0	21847.595	0.0
571.6950	75.00	-.87	26536.324	0.0	44028.168	0.0
571.7020	27.00	-3.40	28470.510	1.5	45957.290	.5
571.7032	28.00	-4.95	30979.789	4.0	48466.530	5.0
571.7160	7.00	-3.99	96787.650	1.5	114274.000	2.5
571.7199	28.01	-.99	120044.950	4.5	137531.180	4.5
571.7288	21.00	-.48	11610.240	3.5	29096.200	3.5
571.7320	21.00	-4.75	21085.840	3.5	38571.700	3.5
571.7340	30.02	-4.46	282640.200	5.0	300126.000	4.0
571.7377	20.00	-4.26	21849.634	2.0	39335.322	1.0
571.7377	20.00	-4.65	21849.634	2.0	39335.322	1.0
571.7386	9.02	-.65	440069.510	1.5	457555.170	1.5
571.7481	28.00	-3.14	31786.210	3.0	49271.578	3.0
571.7562	25.00	-1.56	44993.920	3.5	62479.040	4.5
571.7703	24.00	-3.05	31355.210	2.0	48839.900	1.0
571.7813	26.00	-1.24	34555.586	0.0	52039.939	1.0
571.7995	28.00	-3.94	40484.282	2.0	57968.080	3.0
571.8060	28.01	-3.18	99340.550	3.5	116824.150	2.5
571.8099	28.01	-.33	103663.500	1.5	121146.980	2.5
571.8120	60.01	-.97	11292.053	0.0	28780.318	0.0
571.8170	9.00	-2.97	118936.797	1.5	136420.060	.5
571.8171	28.01	-4.70	100389.520	2.5	117872.780	2.5
571.8190	30.02	-.56	282640.200	5.0	300123.400	5.0
571.8233	25.00	.79	45940.930	2.5	63424.000	3.5
571.8472	23.00	-3.92	17054.870	2.5	34537.210	1.5
571.8547	29.01	-3.58	118532.150	2.0	136014.260	2.0
571.8577	18.02	-2.73	207673.160	0.0	225155.180	1.0
571.8602	24.00	-3.77	24093.160	2.0	41575.100	3.0
571.8609	24.01	-2.86	67012.280	2.5	84494.200	2.5
571.8609	18.00	-3.14	107289.747	2.0	124771.670	2.0
571.8782	7.00	-2.45	96750.810	1.5	114232.200	1.5
571.8831	28.01	-2.89	119796.980	2.5	137278.220	1.5
571.8894	25.01	-4.95	53597.130	2.0	71076.180	1.0
571.9090	59.01	-1.92	6371.944	0.0	23857.243	0.0
571.9148	9.00	-2.10	116143.579	.5	133623.650	1.5
571.9172	22.00	-3.07	18818.230	0.0	36296.430	1.0
571.9180	72.00	-1.66	8872.327	0.0	26357.351	0.0
571.9234	21.00	-3.72	20237.100	4.5	37717.110	3.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
571.9263	25.00	-4.03	33825.490	2.5	51305.410	2.5
571.9401	30.02	-.83	282628.600	2.0	300108.100	3.0
571.9440	28.01	-2.89	113321.950	4.5	130801.330	4.5
571.9479	28.01	-3.50	118809.340	1.5	136288.600	2.5
571.9630	90.00	-1.73	7420.492	0.0	24904.140	0.0
571.9708	28.01	-1.60	120044.950	4.5	137523.510	3.5
571.9810	24.00	-1.76	24303.940	3.0	41782.190	4.0
572.0010	70.00	.34	27504.214	0.0	44986.701	0.0
572.0020	57.00	-1.47	3468.273	0.0	20950.729	0.0
572.0167	25.00	.76	45754.270	3.5	63231.430	4.5
572.0190	62.00	-1.47	241.973	0.0	17723.910	0.0
572.0200	90.00	-1.80	3629.588	0.0	21111.494	0.0
572.0252	25.00	-3.88	37630.620	4.5	55107.520	3.5
572.0317	15.00	-4.85	57876.700	.5	75353.400	1.5
572.0330	25.00	-2.64	45156.110	2.5	62632.770	3.5
572.0448	27.01	-6.40	27902.500	4.0	45378.800	4.0
572.0477	22.00	-.82	18482.860	1.0	35959.070	1.0
572.0599	23.00	-1.23	22121.170	4.5	39597.010	4.5
572.0610	39.00	-1.15	16292.819	0.0	33773.472	0.0
572.0775	27.00	-3.61	16470.600	1.5	33945.900	2.5
572.0775	6.00	-2.71	68856.330	1.0	86331.630	1.0
572.0782	26.00	-3.89	40421.890	4.0	57897.170	5.0
572.0866	26.00	-2.28	36686.159	4.0	54161.182	3.0
572.0962	21.00	-2.23	18855.760	1.5	36330.490	2.5
572.0998	25.01	-3.53	54846.000	0.0	72320.620	1.0
572.1263	25.00	-1.80	45013.550	2.5	62487.360	2.5
572.1679	22.00	-2.99	18825.890	1.0	36298.430	1.0
572.1684	26.00	-3.18	33507.102	3.0	50979.627	4.0
572.1688	26.00	-3.61	34547.192	2.0	52019.706	1.0
572.1715	28.01	-4.57	75917.630	3.5	93390.060	2.5
572.1771	24.00	-2.55	28637.000	3.0	46109.260	2.0
572.1790	18.00	-4.18	107131.755	1.0	124603.957	2.0
572.1930	76.00	-2.18	5081.424	0.0	22558.045	0.0
572.1990	64.01	-1.39	13308.491	0.0	30784.928	0.0
572.2023	26.02	-.48	181828.660	2.0	199300.150	2.0
572.2069	7.00	-3.30	96787.650	1.5	114259.000	1.5
572.2193	24.00	-3.92	23512.000	1.0	40982.970	2.0
572.2226	24.00	-4.73	25177.390	4.0	42648.260	3.0
572.2326	22.00	-2.10	25388.334	4.0	42858.900	3.0
572.2360	27.00	-4.16	15184.040	2.5	32654.500	2.5
572.2429	26.00	-3.87	36766.950	3.0	54237.200	4.0
572.2468	26.02	.30	181830.020	3.0	199300.150	2.0
572.2527	22.00	-.86	18287.560	4.0	35757.510	4.0
572.2560	26.01	-5.48	27314.930	3.5	44784.780	2.5
572.2566	9.00	-1.69	116143.579	.5	133613.410	.5
572.2730	13.02	-.07	126164.050	.5	143633.380	.5
572.2737	18.01	-1.75	191012.350	1.5	208481.660	.5
572.2740	42.01	-1.56	11372.710	0.0	28846.857	0.0
572.2773	24.00	-4.43	27816.880	5.0	45286.080	4.0
572.2842	28.01	-2.62	109269.830	1.5	126738.820	1.5
572.2986	29.01	-4.28	118484.000	3.0	135952.550	2.0
572.3060	74.00	-1.19	25810.406	0.0	43283.576	0.0
572.3110	42.01	-.60	29439.995	0.0	46913.012	0.0
572.3363	38.01	-1.16	55769.700	0.0	73241.945	0.0
572.3497	18.01	-3.79	187589.230	2.5	205056.220	1.5
572.3630	92.01	-2.02	6371.944	0.0	23843.374	0.0
572.3648	26.00	-3.62	36079.353	3.0	53545.882	3.0
572.3664	23.00	-1.23	25111.500	4.5	42577.980	5.5
572.3749	22.00	-4.36	18061.540	1.0	35527.760	1.0
572.3864	22.01	-4.79	12774.810	5.5	30240.680	5.5
572.3949	6.00	-4.00	68856.330	1.0	86321.940	0.0
572.4074	21.00	-.60	11557.640	2.5	29022.870	2.5
572.4125	37.00	-1.30	12816.545	0.0	30286.464	0.0
572.4185	23.00	-.98	24898.730	2.5	42363.620	3.5
572.4287	24.00	-3.06	35572.940	2.0	53037.520	2.0
572.4323	18.01	-3.63	138243.550	1.5	155708.020	.5
572.4438	26.00	-4.72	34555.586	0.0	52019.706	1.0
572.4608	14.02	-.73	240549.770	2.0	258013.370	3.0
572.4611	22.00	-4.06	29818.310	3.0	47281.900	3.0
572.4619	37.00	-2.25	12816.545	0.0	30284.956	0.0
572.4750	64.00	-.49	11775.998	0.0	29244.010	0.0
572.4820	44.00	-2.03	12743.888	0.0	30211.686	0.0
572.4979	28.01	-3.38	101366.140	2.5	118828.610	2.5
572.5074	24.00	-4.49	35501.260	3.0	52963.440	4.0
572.5359	6.00	-3.08	68856.330	1.0	86317.640	2.0
572.5369	23.00	-3.93	26604.770	3.5	44066.050	3.5
572.5494	17.01	-1.46	144174.000	3.0	161634.900	2.0
572.5520	9.02	-3.04	427545.310	1.5	445006.130	2.5
572.5546	17.00	-2.28	84648.100	2.5	102108.840	1.5
572.5647	23.00	-.26	19078.150	3.5	36538.580	4.5
572.5660	41.00	-.93	17905.969	0.0	35371.204	0.0
572.5730	44.00	-2.55	8469.040	0.0	25934.062	0.0
572.5792	28.01	-3.99	118828.610	2.5	136288.600	2.5
572.5825	17.00	-3.66	84485.309	1.5	101945.200	.5
572.5825	17.00	-3.97	84485.309	1.5	101945.200	1.5
572.5946	26.01	-5.27	27620.390	2.5	45079.910	2.5
572.5969	28.01	-3.33	116275.810	3.5	133735.260	2.5
572.6021	24.00	-4.70	23512.000	1.0	40971.290	2.0
572.6061	28.01	-2.33	116275.810	3.5	133734.980	3.5
572.6309	17.00	-1.99	83130.900	1.5	100589.312	2.5
572.6313	29.01	-4.68	129116.900	3.0	146575.300	2.0
572.6412	30.02	-3.79	285411.700	3.0	302869.800	3.0
572.6444	29.01	-2.21	118532.150	2.0	135990.150	3.0
572.6477	30.02	-1.55	282640.200	5.0	300098.100	4.0
572.6766	7.01	-2.65	203258.980	2.0	220716.000	3.0
572.6830	60.01	-1.44	8307.725	0.0	25769.392	0.0
572.7022	23.00	.05	8715.720	3.5	26171.960	4.5
572.7290	57.01	-2.83	5162.081	0.0	22622.346	0.0
572.7300	45.00	-2.23	14679.669	0.0	32139.903	0.0
572.7557	28.01	-4.94	117662.110	1.5	135116.720	2.5
572.7612	23.00	-4.55	15270.420	1.5	32724.860	.5
572.7626	30.02	-.51	282628.600	2.0	300083.000	3.0
572.7655	23.00	-.75	8476.200	1.5	25930.510	1.5
572.7655	15.01	-.63	106001.990	1.0	123456.300	1.0
572.7744	25.00	-3.68	41031.480	4.5	58485.520	4.5
572.8364	7.00	-2.62	95493.660	1.5	112945.809	2.5
572.8487	7.00	-2.66	95475.280	.5	112927.055	1.5
572.8584	27.00	-3.25	29294.520	3.5	46746.000	2.5
572.8738	26.01	-8.31	25787.600	1.5	43238.610	2.5
572.8770	42.00	-.78	25649.091	0.0	43104.845	0.0
572.8807	28.02	-4.70	121802.800	3.0	139253.600	2.0
572.8890	39.01	-1.42	14760.326	0.0	32215.714	0.0
572.8919	28.01	-4.58	118877.090	1.5	136327.550	1.5
572.9178	24.00	-1.13	31009.000	3.0	48458.670	2.0
572.9190	41.00	-2.25	1532.493	0.0	18986.967	0.0
572.9243	17.00	-2.71	84688.637	.5	102138.110	.5
572.9319	28.00	-3.39	40361.254	3.0	57810.494	4.0
572.9415	25.00	-3.30	37737.220	3.5	55186.170	2.5
572.9450	42.00	-1.41	20003.065	0.0	37456.747	0.0
572.9661	22.00	-1.54	25699.950	2.0	43148.150	3.0
572.9770	18.01	-1.85	186470.280	1.5	203918.150	1.5
572.9835	26.01	-3.89	54904.500	3.5	72352.170	3.5
572.9870	42.00	-1.25	23390.681	0.0	40843.084	0.0
572.9874	23.00	-3.74	14514.750	1.5	31962.300	.5
572.9891	30.02	-1.72	282628.600	2.0	300076.100	2.0
573.0469	27.00	-3.12	28777.270	3.5	46223.010	4.5
573.0482	19.02	-.96	245382.300	.5	262828.000	1.5
573.0485	22.00	-3.38	22081.198	2.0	39526.890	2.0
573.0515	30.02	-.71	282680.400	4.0	300126.000	4.0
573.0605	22.00	-2.36	20209.444	2.0	37654.770	2.0
573.0649	7.00	-2.13	96750.810	1.5	114196.000	2.5
573.0653	22.00	-1.66	25635.740	1.0	43080.920	2.0
573.0656	7.01	-1.72	149076.520	2.0	166521.690	1.0
573.0744	12.02	-1.50	564289.800	1.0	581734.700	1.0
573.0744	12.02	-1.50	564289.800	1.0	581734.700	1.0
573.0791	24.00	-2.53	45201.840	1.0	62646.600	2.0
573.0810	19.02	-4.72	225082.000	1.5	242526.700	.5
573.0859	7.00	-4.51	96787.650	1.5	114232.200	1.5
573.0870	63.00	-.54	13389.148	0.0	30838.506	0.0
573.0883	25.00	-1.47	45060.810	3.5	62505.290	3.5
573.0916	26.01	-3.63	83305.370	3.5	100749.750	2.5
573.0945	24.00	-3.71	33113.270	4.0	50557.560	4.0
573.1070	29.01	-3.87	117231.690	1.0	134675.600	2.0
573.1142	24.00	-4.46	27223.050	2.0	44666.740	1.0
573.1212	22.00	-2.38	17995.750	0.0	35439.228	1.0
573.1247	23.00	-2.16	8578.520	2.5	26021.890	3.5
573.1267	28.01	-3.74	113321.950	4.5	130765.260	3.5
573.1303	28.01	-3.04	101366.140	2.5	118809.340	1.5
573.1369	30.02	-3.43	282680.400	4.0	300123.400	5.0
573.1402	29.01	-3.97	129116.900	3.0	146559.800	4.0
573.1434	14.00	-2.95	45276.188	1.0	62718.990	0.0
573.1658	23.00	-.85	25111.500	4.5	42553.620	4.5
573.1744	22.00	-3.93	18061.540	1.0	35503.400	0.0
573.1749	26.00	-1.52	34328.733	3.0	51770.577	3.0
573.1832	26.02	-.37	202030.380	3.0	219471.970	4.0
573.1914	24.00	-4.93	24833.860	3.0	42275.200	4.0
573.2090	39.00	-1.16	16696.107	0.0	34141.751	0.0
573.2125	24.00	-3.82	32097.360	6.0	49538.060	5.0
573.2207	18.01	-1.74	189654.780	2.5	207095.230	2.5
573.2259	26.00	-1.25	40257.300	5.0	57697.590	4.0
573.2325	29.00	-1.82	44926.239	0.0	62371.168	0.0
573.2335	28.01	-3.19	104646.520	3.5	122086.580	3.5
573.2355	28.02	-4.27	121412.200	2.0	138852.200	3.0
573.2444	18.01	-3.58	201720.670	1.5	219160.400	2.5
573.2453	29.01	-3.87	129116.900	3.0	146556.600	3.0
573.2720	26.01	-5.03	27314.930	3.5	44753.820	3.5
573.2779	24.00	-3.97	35572.940	2.0	53011.650	1.0
573.2844	26.00	-2.22	33095.922	4.0	50534.435	3.0
573.2877	25.02	-4.99	121197.050	2.5	138635.460	2.5
573.2914	23.00	-2.76	26480.280	3.5	43918.580	2.5
573.2947	29.01	-3.53	116388.000	2.0	133826.200	2.0
573.2950	62.00	-.78	3952.218	0.0	21395.245	0.0
573.3081	23.00	-1.30	19023.470	4.5	36461.260	3.5
573.3141	14.00	-4.95	62226.390	1.0	79664.000	1.0
573.3267	22.00	-2.92	25643.695	3.0	43080.920	2.0
573.3308	27.00	-2.58	29269.730	4.5	46706.830	3.5
573.3309	17.01	-2.40	140740.000	1.0	158177.100	1.0
573.3377	23.00	.06	24727.850	2.5	42164.740	3.5
573.3417	26.02	.45	181825.670	4.0	199262.440	3.0
573.3420	24.00	-.65	45225.200	2.0	62661.960	3.0
573.3539	17.01	-2.33	141350.000	3.0	158786.400	3.0
573.3585	9.02	-4.13	441158.600	1.5	458594.860	2.5
573.3657	26.00	-3.71	33765.291	2.0	51201.330	2.0
573.3736	26.01	-4.48	86547.550	2.5	103983.350	3.5
573.3815	28.01	-3.81	113321.950	4.5	130757.510	4.5
573.3860	64.01	-.93	10969.423	0.0	28409.681	0.0
573.3894	23.00	-1.11	21963.500	3.5	39398.820	3.5
573.4000	7.03	-.36	480880.000	0.0	498319.833	0.0
573.4025	23.00	-1.03	19026.340	2.5	36461.260	2.5
573.4025	23.00	-.39	19026.340	2.5	36461.260	3.5
573.4060	42.00	-2.57	12259.943	0.0	29699.593	0.0
573.4097	12.02	-.96	564300.000	0.0	581734.700	1.0
573.4097	12.02	-.96	564300.000	0.0	581734.700	1.0
573.4199	22.00	-1.16	25797.600	3.0	43231.990	4.0
573.4272	27.00	-2.71	28470.510	1.5	45904.680	1.5
573.4328	22.00	-1.66	18525.070	2.0	35959.070	1.0
573.4386	9.00	-1.87	116143.579	.5	133577.400	1.5
573.4394	7.00	-3.54	95475.280	.5	112909.076	1.5
573.4400	26.02	-1.78	181828.660	2.0	199262.440	3.0
573.4416	28.01	-4.38	104646.520	3.5	122080.250	2.5
573.4526	7.00	-2.13	95493.660	1.5	112927.055	1.5
573.4801	25.00	-.66	44993.920	3.5	62426.480	3.5
573.4847	26.02	-.34	181830.020	3.0	199262.440	3.0
573.4874	22.01	-6.95	15265.600	3.5	32697.940	2.5
573.4950	57.00	-.75	9840.217	0.0	27277.161	0.0
573.4959	23.01	-4.38	32299.240	1.0	49731.320	2.0
573.5009	23.00	-2.88	17054.870	2.5	34486.800	2.5
573.5071	22.00	-3.63	18145.400	2.0	35577.140	2.0
573.5090	74.00	-.09	27342.899	0.0	44779.417	0.0
573.5236	28.01	-3.59	118314.820	2.5	135746.060	3.5
573.5252	7.00	-3.86	96750.810	1.5	114182.000	2.5
573.5288	23.00	-2.43	15724.220	3.5	33155.300	4.5
573.5390	28.01	-2.21	115739.150	4.5	133169.920	3.5
573.5532	24.00	-1.87	31028.330	2.0	48458.670	2.0
573.5700	24.00	-3.74	28679.430	1.0	46109.260	2.0
573.5700	40.00	-2.24	0.000	0.0	17434.664	0.0
573.5884	22.00	-2.29	18911.399	2.0	36346.670	2.0
573.5946	28.01	-2.36	113321.950	4.5	130751.030	5.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
573.5956	22.00	-2.08	25605.030	0.0	43034.080	1.0
573.5980	64.00	-.97	7904.437	0.0	25338.250	0.0
573.6065	7.00	-1.84	95475.280	.5	112904.000	.5
573.6184	28.00	-3.20	40361.254	3.0	57789.611	4.0
573.6207	17.00	-1.12	82918.893	2.5	100347.182	2.5
573.6380	92.00	-1.30	6936.547	0.0	24369.144	0.0
573.6401	30.02	-2.06	282680.400	4.0	300108.100	3.0
573.6483	23.00	-4.21	13801.530	1.5	31228.980	2.5
573.6550	71.00	-2.35	0.000	0.0	17432.080	0.0
573.6562	28.01	-.71	103663.500	1.5	121090.710	.5
573.6575	27.00	-2.29	34133.590	3.5	51560.760	2.5
573.6605	24.00	-1.72	28682.180	2.0	46109.260	2.0
573.6610	46.00	-.20	37183.117	0.0	54615.015	0.0
573.6621	23.01	-3.86	44657.990	2.0	62085.020	2.0
573.6634	29.01	-2.60	118484.000	3.0	135910.990	2.0
573.6779	25.00	-2.91	45060.810	3.5	62487.360	2.5
573.6803	7.00	-2.61	96864.020	2.5	114290.500	2.5
573.6858	29.01	-4.50	118532.150	2.0	135958.460	1.0
573.7059	23.00	-.54	8578.520	2.5	26004.220	2.5
573.7154	18.00	-3.19	107289.747	2.0	124715.160	3.0
573.7201	25.02	-.82	177687.540	3.5	195112.810	3.5
573.7270	92.00	-1.46	5726.684	0.0	23156.577	0.0
573.7336	25.00	-1.60	44288.760	4.5	61713.620	5.5
573.7339	28.01	-4.18	112906.930	1.5	130331.780	1.5
573.7421	30.02	-.41	282628.600	2.0	300053.200	2.0
573.7520	30.02	-.47	282651.800	1.0	300076.100	2.0
573.7678	26.01	-5.85	27620.390	2.5	45044.210	1.5
573.7694	28.01	-4.98	116732.510	2.5	134156.280	1.5
573.7711	24.01	-4.05	67070.480	1.5	84494.200	2.5
573.7887	18.00	-3.92	107131.755	1.0	124554.939	1.0
573.7890	76.00	-1.98	17583.339	0.0	35011.348	0.0
573.7918	17.00	-2.43	84988.480	1.5	102411.570	.5
573.8010	62.01	-1.12	14437.696	0.0	31865.341	0.0
573.8100	25.01	-4.96	89096.560	4.0	106519.100	5.0
573.8103	23.00	-1.08	19189.280	1.5	36611.810	2.5
573.8208	26.00	-2.82	34039.495	4.0	51461.707	4.0
573.8261	25.00	-1.15	34138.880	6.5	51560.930	5.5
573.8290	90.01	-2.96	7904.437	0.0	25331.231	0.0
573.8294	23.00	-1.40	24648.100	1.5	42070.050	2.5
573.8391	18.00	-2.96	106087.305	1.0	123508.960	0.0
573.8462	25.01	-4.89	48333.060	5.0	65754.500	6.0
573.8475	24.00	-.83	45225.200	2.0	62646.600	2.0
573.8491	7.00	-4.25	96787.650	1.5	114209.000	.5
573.8541	24.00	-1.49	28637.000	3.0	46058.200	4.0
573.8607	21.00	-3.52	18855.760	1.5	36276.760	1.5
573.8626	9.00	-4.65	129484.660	1.5	146905.600	2.5
573.8804	29.01	-4.85	118532.150	2.0	135952.550	2.0
573.8869	17.00	-3.45	84688.637	.5	102108.840	1.5
573.8936	22.00	-3.26	25438.898	2.0	42858.900	3.0
573.9000	63.00	.19	19357.805	0.0	36782.443	0.0
573.9075	22.00	-1.66	18593.990	3.0	36013.570	2.0
573.9262	24.00	-2.81	35618.510	1.0	53037.520	2.0
573.9302	21.00	-2.10	11677.310	4.5	29096.200	3.5
573.9345	28.01	-4.91	101144.630	3.5	118563.390	3.5
573.9398	17.01	-.99	141350.000	3.0	158768.600	2.0
573.9407	28.01	-4.19	120144.170	2.5	137562.740	3.5
573.9407	23.00	-3.79	20687.750	1.5	38106.320	2.5
573.9464	22.00	-.69	18141.229	5.0	35559.627	5.0
573.9519	18.00	-4.05	106087.305	1.0	123505.536	2.0
573.9529	28.01	-4.29	110573.360	2.5	127991.560	3.5
573.9579	27.00	-4.00	16778.160	2.5	34196.210	1.5
573.9600	74.00	-.58	32101.693	0.0	49524.510	0.0
573.9645	22.01	-3.47	47466.800	3.5	64884.650	2.5
573.9655	28.01	-4.12	116512.060	3.5	133929.880	3.5
573.9660	42.00	-.89	27181.584	0.0	44604.219	0.0
573.9694	30.02	-1.27	282680.400	4.0	300098.100	4.0
573.9720	76.00	-1.00	25407.119	0.0	42829.572	0.0
573.9734	14.02	.05	159069.610	0.0	176487.190	1.0
573.9743	25.02	-1.00	177477.230	2.5	194894.780	1.5
573.9759	26.00	-3.60	33801.555	2.0	51219.059	3.0
573.9767	24.00	-7.54	7593.160	2.0	25010.640	1.0
573.9767	12.01	-4.19	92790.510	.5	110207.990	1.5
573.9915	25.00	-2.82	49591.510	1.5	67008.540	2.5
573.9925	25.00	-4.09	45156.110	2.5	62573.110	1.5
573.9935	7.00	-1.99	95493.660	1.5	112910.630	2.5
573.9951	23.00	-3.90	15571.900	2.5	32988.820	3.5
573.9982	22.00	-.90	18037.225	4.0	35454.051	4.0
574.0136	28.01	-4.88	116838.330	1.5	134254.690	1.5
574.0251	26.02	-3.78	205195.150	5.0	222611.160	5.0
574.0264	27.00	-4.27	29948.760	2.5	47364.730	1.5
574.0422	24.00	-.59	45255.510	3.0	62671.000	4.0
574.0447	7.00	-3.41	95493.660	1.5	112909.076	1.5
574.0485	30.02	-4.30	285411.700	3.0	302827.000	2.0
574.0660	57.00	-.97	2581.041	0.0	20000.641	0.0
574.0736	28.01	-4.03	99418.610	3.5	116833.150	4.5
574.0752	28.01	-4.81	118874.110	3.5	136288.600	2.5
574.0860	60.01	-1.27	9275.615	0.0	26694.608	0.0
574.0920	23.00	-4.00	20828.480	2.5	38242.460	3.5
574.0940	28.01	-4.56	118563.390	3.5	135977.310	4.5
574.0960	27.00	-4.15	23207.760	1.5	40621.620	1.5
574.0963	27.00	-3.50	35450.560	3.5	52864.410	4.5
574.1017	7.00	-1.83	95532.120	2.5	112945.809	2.5
574.1180	90.01	-2.66	6936.547	0.0	24354.569	0.0
574.1190	62.00	-1.87	806.575	0.0	18224.567	0.0
574.1201	22.00	-1.47	20209.444	2.0	37622.573	3.0
574.1220	12.01	-4.49	92790.510	.5	110203.580	.5
574.1240	25.01	-4.06	49882.150	4.0	67295.160	4.0
574.1280	23.00	-4.19	17116.920	3.5	34529.810	4.5
574.1286	24.01	-4.64	31219.490	4.5	48632.360	3.5
574.1326	22.00	-3.72	20126.055	3.0	37538.804	2.0
574.1342	23.00	-4.74	26505.880	2.5	43918.580	2.5
574.1365	21.00	-2.01	11610.240	3.5	29022.870	2.5
574.1471	27.00	-3.32	29294.520	3.5	46706.830	3.5
574.1510	7.00	-3.28	96750.810	1.5	114163.000	1.5
574.1519	22.00	-3.78	24694.895	4.0	42107.060	4.0
574.1540	28.02	-4.13	121566.700	1.0	138978.800	1.0
574.1550	25.00	-4.09	44978.980	1.5	62391.050	.5
574.1570	23.00	-.48	24992.880	3.5	42404.890	3.5
574.1573	30.02	-.05	218040.500	3.0	235452.500	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
574.1619	24.00	-4.73	25177.390	4.0	42589.250	5.0
574.1639	9.02	-3.36	427545.310	1.5	444957.110	1.5
574.1710	42.00	-.31	31375.775	0.0	48792.189	0.0
574.1827	26.00	-2.38	34328.733	3.0	51739.964	2.0
574.1830	25.00	-1.83	44978.980	1.5	62390.200	1.5
574.1909	7.00	-1.80	96864.020	2.5	114275.000	3.5
574.1952	28.01	-1.16	116512.060	3.5	133922.910	4.5
574.2018	25.01	-4.44	48435.960	6.0	65846.610	7.0
574.2120	7.00	-3.25	95493.660	1.5	112904.000	.5
574.2239	7.00	-2.92	96864.020	2.5	114274.000	2.5
574.2249	26.02	-.75	202156.130	2.0	219566.080	3.0
574.2292	24.00	-2.87	31048.850	1.0	48458.670	2.0
574.2298	12.02	-.84	564664.600	2.0	582074.400	2.0
574.2298	12.02	-.84	564664.600	2.0	582074.400	2.0
574.2500	7.00	-3.57	96750.810	1.5	114160.000	1.5
574.2500	7.00	-2.55	96750.810	1.5	114160.000	2.5
574.2559	24.00	-3.01	25106.340	3.0	42515.350	2.0
574.2694	30.02	-1.43	282640.200	5.0	300048.800	5.0
574.2750	24.00	-2.97	31377.960	4.0	48786.390	5.0
574.2777	7.00	-2.49	96787.650	1.5	114196.000	2.5
574.2859	18.02	-1.80	214346.700	1.0	231754.800	0.0
574.2939	26.00	-4.54	33695.378	5.0	51103.237	5.0
574.2940	57.00	-1.42	7178.519	0.0	24591.203	0.0
574.2961	22.00	-3.39	31628.668	5.0	49036.460	4.0
574.3024	27.00	-3.91	36875.130	1.5	54282.730	2.5
574.3090	24.00	-1.08	38537.680	5.0	55945.080	5.0
574.3107	26.02	-3.31	205195.150	5.0	222602.500	6.0
574.3200	60.01	-1.51	10243.505	0.0	27655.401	0.0
574.3221	26.00	-3.50	29320.050	1.0	46727.055	2.0
574.3269	18.01	-1.84	187589.230	2.5	204996.090	3.5
574.3288	30.02	.27	282640.200	5.0	300047.000	6.0
574.3350	62.01	-.92	14034.408	0.0	31445.849	0.0
574.3404	24.00	-1.69	45255.510	3.0	62661.960	3.0
574.3447	23.00	-.38	8715.720	3.5	26122.040	3.5
574.3454	22.00	-3.75	25317.813	1.0	42724.110	2.0
574.3513	27.00	-1.12	35450.560	3.5	52856.680	3.5
574.3740	23.00	-4.46	21603.170	4.5	39008.600	5.5
574.3767	7.00	-3.08	96787.650	1.5	114193.000	1.5
574.3783	25.01	-4.51	49889.860	3.0	67295.160	4.0
574.3850	39.00	-.49	17018.737	0.0	34428.662	0.0
574.3922	24.00	-.61	45286.080	4.0	62690.960	5.0
574.4140	60.01	-2.50	5968.656	0.0	23377.702	0.0
574.4206	26.02	.42	181808.700	5.0	199212.720	4.0
574.4345	17.01	-1.48	129065.400	2.0	146469.000	3.0
574.4410	57.00	-.43	7581.807	0.0	24990.035	0.0
574.4460	22.00	-.93	25926.820	4.0	43330.070	5.0
574.4660	64.00	-1.91	161.315	0.0	17568.786	0.0
574.4674	30.02	-1.88	282680.400	4.0	300083.000	3.0
574.4770	60.01	-1.64	7904.437	0.0	25311.574	0.0
574.4783	18.00	-3.81	107289.747	2.0	124692.020	2.0
574.4925	24.00	-3.16	28679.430	1.0	46081.270	0.0
574.5061	28.01	-4.60	102742.740	1.5	120144.170	2.5
574.5071	30.02	-2.00	282651.800	1.0	300053.200	2.0
574.5123	22.00	-1.97	18695.230	4.0	36096.470	3.0
574.5279	28.01	-3.16	104646.520	3.5	122047.290	3.5
574.5569	23.00	-1.22	21841.450	2.5	39241.340	2.5
574.5605	25.00	-4.68	30354.210	3.5	47753.990	2.5
574.5724	55.00	-2.29	11732.308	0.0	29136.555	0.0
574.5990	44.00	-1.86	13550.463	0.0	30953.904	0.0
574.5998	23.00	-5.42	13801.530	1.5	31200.120	1.5
574.6081	22.00	-1.84	25635.740	1.0	43034.080	1.0
574.6150	16.01	-1.80	115870.400	1.5	133268.530	.5
574.6306	24.00	-2.01	28679.430	1.0	46077.090	1.0
574.6358	23.00	-3.88	20606.430	.5	38003.930	1.5
574.6360	64.00	-1.57	483.945	0.0	17886.266	0.0
574.6408	24.00	-1.09	31048.000	7.0	48445.350	6.0
574.6623	30.02	.09	285411.700	3.0	302808.400	4.0
574.6710	73.00	-.48	26455.667	0.0	43856.928	0.0
574.6775	25.00	-4.12	37789.930	2.5	55186.170	2.5
574.6847	24.00	-3.93	31049.330	6.0	48445.350	6.0
574.6948	7.00	-2.28	96750.810	1.5	114146.525	2.5
574.7186	18.00	-3.98	107131.755	1.0	124526.750	0.0
574.7188	7.00	-4.30	95475.280	.5	112870.270	.5
574.7191	7.00	-3.72	96864.020	2.5	114259.000	1.5
574.7206	7.00	-2.74	95532.120	2.5	112927.055	1.5
574.7214	24.00	-2.43	28682.180	2.0	46077.090	1.0
574.7244	23.00	-.04	25111.500	4.5	42506.320	4.5
574.7257	18.01	-3.71	201608.820	3.5	219003.600	2.5
574.7260	74.00	-.64	30488.543	0.0	47888.139	0.0
574.7300	7.01	-1.02	149187.800	1.0	166582.450	2.0
574.7399	7.00	-2.44	96787.650	1.5	114182.000	2.5
574.7438	26.00	-3.47	36766.950	3.0	54161.182	3.0
574.7470	44.00	-.88	21535.558	0.0	38934.518	0.0
574.7521	7.01	-1.33	205350.180	2.0	222744.160	1.0
574.7667	14.00	-.78	45276.188	1.0	62669.727	2.0
574.7670	42.00	-.91	25729.749	0.0	43128.103	0.0
574.7696	23.00	-1.27	19145.130	5.5	36538.580	4.5
574.7799	24.00	-3.16	35618.510	1.0	53011.650	1.0
574.7848	24.00	-1.93	31393.400	5.0	48786.390	5.0
574.7850	26.00	-3.92	35767.546	4.0	53160.530	3.0
574.7875	26.01	-3.06	44929.590	2.5	62322.500	3.5
574.7918	9.02	-4.95	442748.850	2.5	460141.630	2.5
574.7937	26.00	-1.62	37162.729	3.0	54555.450	4.0
574.8149	26.00	-3.88	40421.890	4.0	57813.970	3.0
574.8150	60.01	-2.04	5968.656	0.0	23365.558	0.0
574.8245	28.01	-.96	120144.170	2.5	137535.960	3.5
574.8255	24.01	-2.74	67334.200	3.5	84725.960	3.5
574.8283	26.00	-3.97	34362.860	1.0	51754.534	1.0
574.8346	28.00	-3.51	13521.352	2.0	30912.836	1.0
574.8447	23.00	-.65	19189.280	1.5	36580.460	1.5
574.8474	17.01	-2.96	128621.900	1.0	146013.000	2.0
574.8476	24.00	-1.18	45255.510	3.0	62646.600	2.0
574.8530	18.02	-1.12	213950.870	2.0	231341.800	2.0
574.8619	28.01	-4.50	118897.940	2.5	136288.600	2.5
574.8711	18.01	-4.37	186340.480	1.5	203730.660	1.5
574.8720	72.00	-.83	24600.544	0.0	41995.721	0.0
574.8760	90.00	-2.18	6291.287	0.0	23686.343	0.0
574.8787	23.00	-1.92	19026.340	2.5	36416.490	1.5
574.8890	23.00	-.86	15270.420	1.5	32660.260	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
574.9095	23.00	-4.22	13810.900	.5	31200.120	1.5
574.9220	74.00	-.34	30407.885	0.0	47801.549	0.0
574.9299	28.00	-2.77	31786.210	3.0	49174.811	4.0
574.9379	18.01	-2.18	187589.230	2.5	204977.590	2.5
574.9400	90.01	-3.10	1774.465	0.0	19167.584	0.0
574.9410	64.01	-1.49	10485.478	0.0	27878.567	0.0
574.9434	26.00	-3.67	29356.780	2.0	46744.975	3.0
574.9636	26.00	-4.41	35767.546	4.0	53155.130	4.0
574.9677	24.00	-4.94	25177.390	4.0	42564.850	4.0
574.9756	28.01	-4.45	95332.530	2.5	112719.750	3.5
574.9776	28.01	-3.01	103663.500	1.5	121050.660	2.5
574.9812	26.02	.08	181825.670	4.0	199212.720	4.0
574.9818	22.00	-3.30	18911.399	2.0	36298.430	1.0
574.9920	70.01	-.67	48797.800	0.0	66189.346	0.0
575.0017	18.01	-1.78	190942.650	.5	208329.080	.5
575.0054	23.00	-2.69	24727.850	2.5	42114.170	3.5
575.0345	26.02	-4.96	114325.350	5.0	131710.790	5.0
575.0517	24.00	-1.69	45286.080	4.0	62671.000	4.0
575.0629	23.00	-1.37	15770.720	4.5	33155.300	4.5
575.0652	24.00	-1.94	45306.450	5.0	62690.960	5.0
575.0828	7.00	-2.79	96864.020	2.5	114248.000	3.5
575.0831	25.01	-3.59	54938.100	1.0	72322.070	0.0
575.0897	22.00	-7.18	14105.680	3.0	31489.451	4.0
575.0937	26.01	-3.53	62962.260	1.5	80345.910	.5
575.0940	24.00	-4.21	31987.060	4.0	49370.700	3.0
575.0947	27.00	-1.11	36875.130	1.5	54258.750	2.5
575.1020	9.02	-2.75	389525.550	1.5	406908.950	1.5
575.1115	23.00	-3.40	19078.150	3.5	36461.260	2.5
575.1115	23.00	-1.85	19078.150	3.5	36461.260	3.5
575.1251	26.02	-.45	181830.020	3.0	199212.720	4.0
575.1297	28.01	-.89	120144.170	2.5	137526.730	2.5
575.1311	25.01	-3.86	54938.100	1.0	72320.620	1.0
575.1364	22.00	-3.66	18145.400	2.0	35527.760	1.0
575.1369	28.00	-2.95	40361.254	3.0	57743.596	3.0
575.1400	42.00	-1.10	11372.710	0.0	28759.781	0.0
575.1423	28.01	-4.81	115827.120	3.5	133209.300	2.5
575.1440	41.00	-1.13	12017.970	0.0	29404.920	0.0
575.1519	23.00	-3.47	19026.340	2.5	36408.230	1.5
575.1539	28.01	-3.51	100490.950	1.5	117872.780	2.5
575.1635	24.01	-5.00	67344.420	2.5	84725.960	3.5
575.1731	22.00	-3.69	22404.690	3.0	39785.940	4.0
575.1810	28.01	-4.65	118563.390	3.5	135944.400	3.5
575.1823	22.00	-2.04	25699.950	2.0	43080.920	2.0
575.1880	64.00	-1.99	0.000	0.0	17385.620	0.0
575.1904	18.00	-3.43	106087.305	1.0	123468.034	1.0
575.2008	26.00	-1.14	36686.159	4.0	54066.570	4.0
575.2020	44.00	-2.71	7985.094	0.0	25370.291	0.0
575.2111	30.02	-.90	282628.600	2.0	300008.700	1.0
575.2188	24.00	-3.66	33906.650	1.0	51286.520	2.0
575.2313	28.01	-3.92	100592.980	3.5	117972.470	3.5
575.2317	25.01	-2.35	53698.700	2.0	71078.180	1.0
575.2344	26.00	-4.35	33095.922	4.0	50475.320	4.0
575.2363	28.01	-1.76	120144.170	2.5	137523.510	3.5
575.2376	29.01	-4.90	129116.900	3.0	146496.200	3.0
575.2412	7.00	-3.26	96750.810	1.5	114130.000	.5
575.2452	28.01	-2.54	103663.500	1.5	121042.570	1.5
575.2469	28.01	-.73	103663.500	1.5	121042.520	1.5
575.2489	7.00	-1.34	95532.120	2.5	112911.079	3.5
575.2528	29.01	-2.32	118532.150	2.0	135910.990	2.0
575.2531	9.02	-3.54	389525.550	1.5	406904.380	.5
575.2604	18.01	-3.50	201781.790	2.5	219160.400	2.5
575.2637	7.00	-1.98	95532.120	2.5	112910.630	2.5
575.2740	23.00	-1.25	15078.250	.5	32456.450	1.5
575.2866	24.00	-3.18	38537.680	5.0	55915.500	4.0
575.2876	27.00	-2.22	28845.220	5.5	46223.010	4.5
575.2910	22.00	-1.84	18061.540	1.0	35439.228	1.0
575.2930	75.00	-1.94	11534.025	0.0	28916.472	0.0
575.3040	90.00	-2.35	4920.109	0.0	22302.223	0.0
575.3103	26.00	-.89	34362.860	1.0	51739.964	2.0
575.3152	7.00	-4.41	95532.120	2.5	112909.076	1.5
575.3154	9.02	.35	440582.120	4.5	457959.070	3.5
575.3177	9.02	-.17	440069.510	1.5	457446.390	.5
575.3253	25.00	-2.66	45013.550	2.5	62390.200	1.5
575.3257	27.00	-3.95	15774.040	1.5	33150.680	1.5
575.3266	7.00	-2.04	95493.660	1.5	112870.270	.5
575.3363	26.00	-3.40	34328.733	3.0	51705.052	2.0
575.3392	16.01	-1.74	115892.300	.5	133268.530	.5
575.3436	14.00	-1.76	45293.629	2.0	62669.727	2.0
575.3508	24.00	-1.62	45286.080	4.0	62661.960	3.0
575.3515	23.01	-3.80	55304.340	4.0	72680.200	5.0
575.3622	14.00	-.83	45293.629	2.0	62669.164	3.0
575.3647	24.00	-2.20	36552.130	3.0	53927.590	4.0
575.3684	7.00	-2.84	96787.650	1.5	114163.000	1.5
575.3694	26.00	-4.73	34692.130	1.0	52067.450	2.0
575.3757	25.00	-3.88	45130.160	4.5	62505.290	3.5
575.3780	28.01	-1.68	120144.170	2.5	137519.230	2.5
575.3972	26.00	-4.96	19788.248	4.0	37162.729	3.0
575.4002	28.01	-2.93	100389.520	2.5	117763.910	1.5
575.4038	27.00	-1.73	36329.860	2.5	53704.140	2.5
575.4067	14.00	-1.92	45293.629	2.0	62667.823	3.0
575.4151	28.01	-4.94	101258.010	1.5	118631.950	.5
575.4167	23.00	-2.30	17054.870	2.5	34428.760	1.5
575.4170	64.00	-.73	7420.492	0.0	24799.193	0.0
575.4218	14.00	-1.40	39955.053	2.0	57328.789	1.0
575.4220	26.01	-3.69	62065.570	3.5	79439.300	3.5
575.4247	17.00	-2.60	84485.309	1.5	101858.960	2.5
575.4376	9.00	-1.86	119081.820	.5	136455.080	1.5
575.4424	26.00	-2.53	29371.860	3.0	46744.975	3.0
575.4512	28.01	-3.15	118828.610	2.5	136201.460	3.5
575.4554	17.00	-3.30	83364.927	.5	100737.650	.5
575.4575	26.02	-1.26	188955.560	3.0	206328.220	3.0
575.4655	28.00	-3.73	15609.861	2.0	32982.280	1.0
575.4674	24.01	-2.18	67353.600	4.5	84725.960	3.5
575.4678	7.00	-3.34	96787.650	1.5	114160.000	1.5
575.4678	7.00	-2.55	96787.650	1.5	114160.000	2.5
575.4704	27.00	-4.09	36329.860	2.5	53702.130	3.5
575.4803	17.00	-3.88	83130.900	1.5	100502.871	1.5
575.4817	25.01	-2.91	65567.070	2.0	82939.000	1.0
575.4837	25.02	-.77	177477.230	2.5	194849.100	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
575.5138	24.00	-3.11	35640.690	0.0	53011.650	1.0
575.5178	26.02	-2.98	114339.950	4.0	131710.790	5.0
575.5211	23.00	-.33	24992.880	3.5	42363.620	3.5
575.5310	24.00	-1.31	38537.680	5.0	55908.120	6.0
575.5357	25.00	-4.35	37737.220	3.5	55107.520	3.5
575.5365	26.00	-2.67	29356.780	2.0	46727.055	2.0
575.5466	28.01	-4.96	116838.330	1.5	134208.300	2.5
575.5496	23.00	-2.15	17116.920	3.5	34486.800	2.5
575.5555	28.01	-4.22	120203.490	2.5	137573.190	3.5
575.5659	22.00	-3.82	28788.372	4.0	46157.760	5.0
575.5678	26.02	.12	188955.560	3.0	206324.890	2.0
575.5711	22.00	-2.73	29818.310	3.0	47187.540	2.0
575.5751	20.02	-2.34	343784.960	1.0	361154.070	2.0
575.5807	25.01	-4.61	65567.070	2.0	82936.010	3.0
575.5844	22.01	-4.66	44902.420	2.5	62271.250	2.5
575.5884	25.01	-3.81	54938.100	1.0	72306.810	2.0
575.5986	30.02	.18	282680.400	4.0	300048.800	5.0
575.6060	7.00	-4.93	96864.020	2.5	114232.200	1.5
575.6090	74.00	-2.26	15324.929	0.0	32697.833	0.0
575.6116	26.01	-4.37	54870.620	2.5	72238.630	2.5
575.6159	27.00	-3.83	33674.380	2.5	51042.260	2.5
575.6295	24.00	-.81	45306.450	5.0	62673.920	6.0
575.6394	26.02	.69	181772.590	6.0	199139.760	5.0
575.6434	22.00	-2.07	18192.577	6.0	35559.627	5.0
575.6589	18.01	-4.02	172829.580	1.5	190196.160	.5
575.6699	17.00	-3.86	85735.091	1.5	103101.340	2.5
575.6830	44.00	-2.27	11695.340	0.0	29066.011	0.0
575.6981	24.01	-2.06	73485.600	3.5	90851.000	4.5
575.6981	28.01	-4.23	118923.200	3.5	136288.600	2.5
575.7054	22.00	-3.45	25493.722	2.0	42858.900	3.0
575.7209	27.00	-1.45	36329.860	2.5	53694.570	3.5
575.7262	27.00	-4.31	34196.210	1.5	51560.760	2.5
575.7262	24.00	-2.17	45306.450	5.0	62671.000	4.0
575.7380	28.00	-4.18	32982.280	1.0	50346.477	2.0
575.7713	23.00	-5.36	9824.580	2.5	27187.770	2.5
575.7810	30.02	.10	219684.900	3.0	237047.800	2.0
575.7863	7.00	-3.48	95475.280	.5	112838.020	1.5
575.7870	14.00	-4.25	47284.061	1.0	64646.780	2.0
575.7975	29.01	-3.65	128853.300	2.0	146215.700	1.0
575.8140	92.00	-2.16	0.000	0.0	17366.719	0.0
575.8155	18.01	-1.61	187589.230	2.5	204951.090	3.5
575.8286	22.00	-4.84	26892.926	3.0	44254.390	3.0
575.8300	24.00	-3.22	25177.390	4.0	42538.810	3.0
575.8350	92.00	-1.94	4194.191	0.0	21560.277	0.0
575.8572	25.02	-1.15	177185.180	.5	194545.780	.5
575.8579	6.00	-1.99	72610.720	2.0	89971.300	3.0
575.8662	17.00	-2.61	84485.309	1.5	101845.640	1.5
575.8788	25.02	-4.78	94697.850	3.5	112057.800	3.5
575.8837	18.00	-3.95	107289.747	2.0	124649.549	3.0
575.9183	26.01	-3.78	50157.610	4.5	67516.370	5.5
575.9244	26.00	-1.97	37521.144	2.0	54879.720	2.0
575.9276	25.00	-.87	45156.110	2.5	62514.590	2.5
575.9326	29.01	-1.10	121524.670	3.0	138883.000	4.0
575.9520	62.01	-1.13	12905.203	0.0	30267.761	0.0
575.9538	26.00	-2.56	34692.130	1.0	52049.820	2.0
575.9650	74.00	-.80	28956.050	0.0	46318.216	0.0
575.9684	28.01	-2.61	99154.810	4.5	116512.060	3.5
575.9800	30.02	-1.28	282651.800	1.0	300008.700	1.0
575.9827	23.01	-3.52	19902.600	0.0	37259.420	1.0
575.9883	23.01	-3.77	19132.690	2.0	36489.340	1.0
575.9949	22.01	-4.05	44914.800	1.5	62271.250	2.5
576.0056	26.01	-4.22	62083.170	4.5	79439.300	3.5
576.0072	6.00	-4.85	72610.720	2.0	89966.800	3.0
576.0151	9.02	.21	440359.260	3.5	457715.100	2.5
576.0210	69.00	-1.50	8711.012	0.0	26071.490	0.0
576.0262	22.00	-4.90	27025.652	4.0	44381.160	4.0
576.0275	27.00	-3.07	29735.180	3.5	47090.650	2.5
576.0340	41.00	-1.46	8630.355	0.0	25990.441	0.0
576.0366	26.00	-1.93	29371.860	3.0	46727.055	2.0
576.0550	90.00	-2.07	0.000	0.0	17359.454	0.0
576.0828	28.00	-.97	33112.368	3.0	50466.172	4.0
576.0839	28.01	-4.06	95332.530	2.5	112686.300	2.5
576.1025	28.01	-3.69	100619.260	4.5	117972.470	3.5
576.1061	26.00	-4.22	34017.084	1.0	51370.184	2.0
576.1158	28.01	-4.76	117763.910	1.5	135116.720	2.5
576.1178	26.00	-4.73	23051.744	0.0	40404.492	1.0
576.1197	9.02	.03	440202.480	2.5	457555.170	1.5
576.1269	26.00	-2.92	29320.050	1.0	46672.523	0.0
576.1294	22.01	-3.45	47625.170	2.5	64977.570	3.5
576.1294	29.01	-2.79	116375.470	3.0	133727.870	2.0
576.1310	24.00	-5.00	24940.610	2.0	42292.960	1.0
576.1340	17.00	-3.89	84648.100	2.5	102000.360	1.5
576.1430	23.00	-1.59	8578.520	2.5	25930.510	1.5
576.1546	24.00	-2.03	33934.880	3.0	51286.520	2.0
576.1610	73.00	-.95	24116.599	0.0	41472.859	0.0
576.1700	60.01	-1.74	8307.725	0.0	25663.714	0.0
576.1802	24.00	-3.08	33935.650	2.0	51286.520	2.0
576.1840	57.00	-1.04	2581.041	0.0	19936.608	0.0
576.1855	25.01	-4.13	65567.070	2.0	82917.780	2.0
576.1908	22.00	-1.71	25797.600	3.0	43148.150	3.0
576.1925	17.01	-2.74	128662.500	2.0	146013.000	2.0
576.1995	22.00	-4.04	31489.451	4.0	48839.740	3.0
576.2001	28.01	-2.42	114874.880	2.5	132225.150	1.5
576.2137	24.00	-3.56	36577.730	4.0	53927.590	4.0
576.2164	28.01	-3.64	120218.220	6.5	137568.000	7.5
576.2257	22.00	.30	26494.322	2.0	43843.820	3.0
576.2435	26.00	-2.53	29371.860	3.0	46720.824	4.0
576.2519	26.01	-3.33	62829.160	.5	80177.870	1.5
576.2572	28.01	-4.17	105499.050	3.5	122847.600	3.5
576.2728	23.00	-3.20	20767.570	3.5	38115.650	3.5
576.2755	28.01	-.95	91800.050	4.5	109148.050	4.5
576.2795	14.00	-3.51	45321.848	3.0	62669.727	2.0
576.2811	23.00	-2.73	17181.980	4.5	34529.810	4.5
576.2818	26.00	-2.47	34692.130	1.0	52039.939	1.0
576.2974	26.00	-.59	33946.920	2.0	51294.262	3.0
576.2975	26.00	-3.79	33801.555	2.0	51148.892	2.0
576.2978	14.00	-1.33	45321.848	3.0	62669.179	4.0
576.2983	14.00	-1.93	45321.848	3.0	62669.164	3.0
576.3428	14.00	-3.50	45321.848	3.0	62667.823	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
576.3540	90.00	-2.61	2823.013	0.0	20173.461	0.0
576.3560	22.00	-2.73	20209.444	2.0	37555.021	3.0
576.3570	78.00	-.11	35166.679	0.0	52517.037	0.0
576.3630	92.00	-1.57	7259.177	0.0	24609.354	0.0
576.3632	28.01	-4.58	113225.060	.5	130570.420	.5
576.3642	22.00	-7.71	14028.470	2.0	31373.801	3.0
576.3652	14.00	-4.06	62318.700	0.0	79664.000	1.0
576.3665	28.01	-4.79	101754.800	2.5	119100.060	1.5
576.3758	9.00	-4.84	119081.820	.5	136426.800	1.5
576.3964	7.00	-2.19	95493.660	1.5	112838.020	1.5
576.4230	60.00	-1.38	3629.588	0.0	20977.959	0.0
576.4300	69.00	-2.02	0.000	0.0	17348.160	0.0
576.4380	25.01	-4.67	53597.130	2.0	70940.240	2.0
576.4413	15.01	-1.00	106001.990	1.0	123345.000	0.0
576.4483	28.01	-3.39	115827.120	3.5	133169.920	3.5
576.4483	12.02	-3.47	564731.600	1.0	582074.400	2.0
576.4483	12.02	-3.47	564731.600	1.0	582074.400	2.0
576.4632	7.00	-2.18	96787.650	1.5	114130.000	.5
576.4672	24.00	-1.56	45348.730	6.0	62690.960	5.0
576.4682	23.00	-2.17	24727.850	2.5	42070.050	2.5
576.4685	26.00	-3.68	34362.860	1.0	51705.052	2.0
576.4990	41.00	-1.27	11937.313	0.0	29283.397	0.0
576.5011	25.00	-3.30	45013.550	2.5	62354.760	1.5
576.5050	76.00	-2.34	10969.423	0.0	28315.326	0.0
576.5200	63.00	-1.44	0.000	0.0	17345.452	0.0
576.5341	24.00	-2.70	33906.650	1.0	51246.870	1.0
576.5640	39.00	-.61	16696.107	0.0	34040.235	0.0
576.5646	17.00	-2.08	83364.927	.5	100704.230	1.5
576.5829	23.00	-4.57	24838.560	3.5	42177.310	4.5
576.5859	24.01	-4.21	67387.300	2.5	84725.960	3.5
576.5912	29.01	-4.41	129759.600	1.0	147098.100	0.0
576.5999	9.00	-2.96	119081.820	.5	136420.060	.5
576.6205	23.01	-4.58	55499.380	5.0	72837.000	6.0
576.6238	25.01	-3.73	85367.850	2.0	102705.370	3.0
576.6312	24.00	-2.73	38537.680	5.0	55874.980	5.0
576.6330	22.00	.41	26564.385	3.0	43901.630	4.0
576.6454	17.00	-2.26	83894.037	3.5	101230.909	3.5
576.6485	24.00	-1.32	45354.180	5.0	62690.960	5.0
576.6501	18.01	-1.92	194861.270	2.5	212198.000	3.5
576.6541	18.01	-2.03	185093.230	4.5	202429.840	3.5
576.6560	73.00	-2.56	9194.957	0.0	26536.318	0.0
576.6691	24.01	-4.26	66872.120	.5	84208.280	.5
576.7180	72.01	-2.51	12017.970	0.0	29357.467	0.0
576.7193	28.01	-2.81	99559.330	2.5	116893.980	2.5
576.7366	22.00	-3.12	25699.950	2.0	43034.080	1.0
576.7430	92.00	-1.73	5887.999	0.0	23226.744	0.0
576.7445	7.01	-1.17	149187.800	1.0	166521.690	1.0
576.7526	23.00	-3.90	20606.430	.5	37940.080	.5
576.7549	28.00	-3.04	33500.854	3.0	50834.435	2.0
576.7564	26.00	-4.45	37157.546	2.0	54491.080	3.0
576.7849	14.00	-2.55	47284.061	1.0	64616.740	2.0
576.7910	73.00	-2.47	9194.957	0.0	26532.259	0.0
576.7915	24.00	-4.77	25106.340	3.0	42438.820	2.0
576.7920	44.00	-2.26	11695.340	0.0	29032.612	0.0
576.7965	24.00	-1.55	45358.630	4.0	62690.960	5.0
576.7968	26.00	-2.92	34636.820	2.0	51969.140	3.0
576.7979	7.00	-2.59	95475.280	.5	112807.567	.5
576.8022	24.01	-3.58	67393.800	3.5	84725.960	3.5
576.8048	18.01	-2.15	201608.820	3.5	218940.900	4.5
576.8072	25.00	-2.71	45060.810	3.5	62392.820	4.5
576.8081	7.00	-3.36	96864.020	2.5	114196.000	2.5
576.8148	29.01	-2.92	118532.150	2.0	135863.930	1.0
576.8388	26.02	-.53	181808.700	5.0	199139.760	5.0
576.8394	26.02	-.34	185003.350	2.0	202334.390	1.0
576.8398	26.02	.01	184951.620	3.0	202282.650	2.0
576.8474	7.00	-1.73	95493.660	1.5	112824.459	2.5
576.8493	17.00	-1.99	82918.893	2.5	100249.636	2.5
576.8517	9.02	.35	466190.470	4.5	483521.140	3.5
576.8571	26.00	-4.02	36940.600	2.0	54271.110	1.0
576.8684	9.02	-1.06	466190.970	3.5	483521.140	3.5
576.8694	27.00	-3.04	28345.860	4.5	45676.000	5.5
576.8900	58.01	-.76	10566.135	0.0	27900.462	0.0
576.8924	24.00	-3.53	28637.000	3.0	45966.450	2.0
576.8976	17.00	-2.73	83894.037	3.5	101223.330	2.5
576.9070	57.01	-1.47	10001.532	0.0	27335.348	0.0
576.9117	6.00	-2.76	68856.330	1.0	86185.200	2.0
576.9173	13.01	-2.63	132819.700	3.0	150148.400	2.0
576.9173	13.01	-1.45	132819.700	3.0	150148.400	3.0
576.9173	13.01	-.02	132819.700	3.0	150148.400	4.0
576.9240	13.01	-1.08	132819.900	2.0	150148.400	2.0
576.9240	13.01	-.35	132819.900	1.0	150148.400	2.0
576.9240	13.01	-.55	132819.900	2.0	150148.400	3.0
576.9290	26.00	-1.78	37162.729	3.0	54491.080	3.0
576.9340	57.00	-.64	2984.328	0.0	20317.333	0.0
576.9383	23.01	-3.40	19161.270	0.0	36489.340	1.0
576.9419	17.00	-1.98	82918.893	2.5	100246.855	1.5
576.9440	17.00	-2.35	84132.262	2.5	101460.160	1.5
576.9493	23.00	-2.65	26738.310	4.5	44066.050	3.5
576.9548	26.00	-3.96	34692.130	1.0	52019.706	1.0
576.9590	80.00	.63	53798.566	0.0	71130.820	0.0
576.9623	28.01	-3.11	118874.110	3.5	136201.460	3.5
576.9652	26.00	-1.61	33095.922	4.0	50423.185	4.0
576.9750	42.00	-1.43	23390.681	0.0	40722.454	0.0
576.9899	23.00	-3.55	20789.130	2.5	38115.650	3.5
576.9990	57.00	-.69	7985.094	0.0	25316.147	0.0
577.0012	23.00	-.11	24838.560	3.5	42164.740	3.5
577.0122	25.01	-3.46	62587.500	3.0	79913.350	4.0
577.0156	7.00	-1.82	95475.280	.5	112801.031	1.5
577.0166	26.00	-3.13	36975.640	3.0	54301.360	4.0
577.0166	26.00	-3.90	36975.640	3.0	54301.360	4.0
577.0326	25.01	-4.59	48333.060	5.0	65658.300	5.0
577.0342	24.00	-1.53	45348.730	6.0	62673.920	6.0
577.0435	27.00	-.48	35450.560	3.5	52775.470	4.5
577.0500	60.01	-1.55	8630.355	0.0	25959.876	0.0
577.0589	23.00	.25	25253.530	5.5	42577.980	5.5
577.0805	24.00	-4.20	31987.060	4.0	49310.860	3.0
577.0972	30.02	-2.19	285503.700	1.0	302827.000	2.0
577.1022	23.01	-4.14	19166.190	1.0	36489.340	1.0
577.1033	22.00	-3.39	24694.895	4.0	42018.010	5.0

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
577.1050	42.01	-1.86	19841.750	0.0	37169.619	0.0
577.1050	92.00	-1.70	6210.629	0.0	23538.498	0.0
577.1065	28.01	-4.62	120250.170	3.5	137573.190	4.5
577.1065	28.01	-4.88	120250.170	3.5	137573.190	3.5
577.1080	41.00	-1.21	15163.614	0.0	32491.393	0.0
577.1435	25.00	-4.83	27201.540	2.5	44523.450	3.5
577.1491	27.00	-3.18	35450.560	3.5	52772.300	2.5
577.1670	70.01	-.87	31779.063	0.0	49105.071	0.0
577.1748	26.02	-2.18	182379.860	5.0	199700.830	4.0
577.1875	28.01	-3.23	112906.930	1.5	130227.520	2.5
577.1930	73.00	-1.01	25003.831	0.0	42329.058	0.0
577.1957	7.00	-2.52	96750.810	1.5	114071.153	1.5
577.1980	58.01	-1.59	10001.532	0.0	27326.609	0.0
577.2027	14.00	-4.69	45276.188	1.0	62596.320	2.0
577.2091	23.00	-4.11	17054.870	2.5	34374.810	3.5
577.2117	18.00	-2.42	106237.597	2.0	123557.459	3.0
577.2146	14.00	-1.40	40991.884	1.0	58311.659	0.0
577.2158	24.00	-.77	45354.180	5.0	62673.920	6.0
577.2318	18.01	-4.37	172335.520	2.5	189654.780	2.5
577.2338	9.02	.23	466190.970	3.5	483510.170	2.5
577.2351	23.00	-.60	15571.900	2.5	32891.060	3.5
577.2452	7.00	-1.89	95493.660	1.5	112812.518	2.5
577.2558	25.01	-4.58	48435.960	6.0	65754.500	6.0
577.2571	29.01	-4.03	131312.700	3.0	148631.200	3.0
577.2571	17.01	-3.24	153257.000	2.0	170575.500	3.0
577.2678	24.00	-1.73	28682.180	2.0	46000.360	3.0
577.2691	9.02	-2.03	441276.720	2.5	458594.860	2.5
577.2693	17.00	-1.80	84485.309	1.5	101803.442	2.5
577.2731	18.01	-1.65	186815.960	3.5	204133.980	2.5
577.2745	7.00	-2.94	96864.020	2.5	114182.000	2.5
577.2771	27.02	-4.97	156291.400	2.5	173609.300	1.5
577.2771	27.02	-4.97	156291.400	2.5	173609.300	1.5
577.3131	24.00	-1.36	45354.180	5.0	62671.000	4.0
577.3161	18.01	-1.32	191012.350	1.5	208329.080	.5
577.3278	26.02	.24	189011.840	4.0	206328.220	3.0
577.3345	23.00	-3.73	20687.750	1.5	38003.930	1.5
577.3398	28.01	-4.02	101247.370	2.5	118563.390	3.5
577.3420	26.00	-4.34	28819.966	5.0	46135.920	5.0
577.3448	24.00	-4.32	24093.160	2.0	41409.030	2.0
577.3471	29.01	-4.91	131206.000	0.0	148521.800	1.0
577.3641	28.01	-2.31	121180.550	5.5	138495.840	4.5
577.3688	6.00	-1.31	80562.850	1.0	97878.000	2.0
577.3738	18.01	-3.36	194883.000	3.5	212198.000	3.5
577.3745	26.01	-4.63	44929.590	2.5	62244.570	1.5
577.3775	18.01	-1.81	194883.000	3.5	212197.890	4.5
577.3860	39.00	-.94	16454.134	0.0	33773.570	0.0
577.3951	26.00	-2.64	36079.353	3.0	53393.715	4.0
577.4002	18.00	-3.08	107289.747	2.0	124603.957	2.0
577.4037	22.00	.52	26657.409	4.0	43971.513	5.0
577.4042	26.02	-2.13	181825.670	4.0	199139.760	5.0
577.4072	26.02	-.25	202429.040	1.0	219743.040	1.0
577.4092	25.00	-.72	45259.170	1.5	62573.110	1.5
577.4135	23.00	-3.78	26604.770	3.5	43918.580	2.5
577.4215	24.01	-4.26	53271.070	2.5	70584.640	2.5
577.4265	21.00	-4.63	20239.920	3.5	37553.340	2.5
577.4365	27.00	-.80	35450.560	3.5	52763.680	3.5
577.4464	22.00	-2.11	18141.229	5.0	35454.051	4.0
577.4549	25.02	-4.63	115774.000	3.5	133086.570	4.5
577.4550	42.00	-2.49	11775.998	0.0	29093.365	0.0
577.4560	64.01	-2.01	9033.642	0.0	26350.979	0.0
577.4615	24.00	-1.51	45358.630	4.0	62671.000	4.0
577.4692	18.01	-1.90	191169.520	1.5	208481.660	.5
577.4772	24.01	-4.30	34631.140	4.5	51943.040	4.5
577.4831	17.00	-1.55	84688.637	.5	102000.360	1.5
577.4833	7.00	-2.19	96864.020	2.5	114175.736	3.5
577.4999	24.00	-2.33	33935.650	2.0	51246.870	1.0
577.5069	26.00	-1.48	34039.495	4.0	51350.505	4.0
577.5139	17.01	-1.99	144344.000	2.0	161654.800	1.0
577.5179	26.01	-4.37	54902.420	1.5	72213.100	.5
577.5269	25.00	-2.85	34250.520	5.5	51560.930	5.5
577.5339	30.02	-1.84	217073.800	2.0	234384.000	3.0
577.5400	71.00	-.84	20325.695	0.0	37640.513	0.0
577.5422	15.00	-4.05	58174.450	1.5	75484.400	2.5
577.5456	24.00	-2.28	47630.430	6.0	64940.280	7.0
577.5569	24.00	-3.08	35862.820	4.0	53172.330	5.0
577.5920	59.01	-2.41	7339.834	0.0	24653.093	0.0
577.6020	64.00	-.17	12421.258	0.0	29734.217	0.0
577.6070	41.00	-1.44	11292.053	0.0	28604.863	0.0
577.6239	26.00	-4.02	29798.960	4.0	47106.463	4.0
577.6283	7.00	-2.35	95493.660	1.5	112801.031	1.5
577.6377	18.01	-2.36	190942.650	.5	208249.740	1.5
577.6504	25.00	-.52	44993.920	3.5	62300.630	4.5
577.6517	9.02	-2.67	440069.510	1.5	457376.180	.5
577.6574	29.01	-3.35	129116.900	3.0	146423.400	4.0
577.6654	24.01	-2.33	67012.280	2.5	84318.540	1.5
577.6684	23.00	-2.96	8715.720	3.5	26021.890	3.5
577.6701	28.01	-4.26	117074.700	3.5	134380.820	3.5
577.6770	73.00	-2.26	5968.656	0.0	23279.368	0.0
577.6774	7.00	-2.25	95532.120	2.5	112838.020	1.5
577.6830	75.00	-1.94	11534.025	0.0	28844.557	0.0
577.6908	28.01	-3.75	121190.340	4.5	138495.840	4.5
577.7018	22.00	-1.75	25926.820	4.0	43231.990	4.0
577.7124	22.00	-3.67	28702.768	3.0	46007.620	4.0
577.7175	28.01	-4.86	120270.440	5.5	137575.140	5.5
577.7472	24.00	-3.71	35813.730	3.0	53117.540	4.0
577.7620	56.00	.72	13514.000	0.0	30822.165	0.0
577.7632	24.00	-1.47	45358.630	4.0	62661.960	3.0
577.7752	24.00	-1.40	31028.330	2.0	48331.300	1.0
577.7846	14.00	-3.49	45293.629	2.0	62596.320	2.0
577.8160	28.01	-4.06	112686.300	2.5	129988.050	2.5
577.8190	42.00	-1.13	25810.406	0.0	43116.864	0.0
577.8210	25.01	-2.25	72648.800	4.0	89950.400	3.0
577.8427	26.00	-4.73	33507.102	3.0	50808.053	4.0
577.8460	26.00	-3.23	20874.482	3.0	38175.332	3.0
577.8497	25.00	.33	44993.920	3.5	62294.660	3.5
577.8714	23.00	-1.16	25253.530	5.5	42553.620	4.5
577.8738	23.00	-2.34	15688.800	2.5	32988.820	3.5
577.8787	26.00	-3.30	36766.950	3.0	54066.821	2.0
577.8801	9.00	-4.66	129607.070	.5	146906.900	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
577.8804	28.00	-4.51	31786.210	3.0	49086.030	4.0
577.8865	28.01	-3.21	115870.280	2.5	133169.920	3.5
577.9085	7.00	-1.88	96864.020	2.5	114163.000	1.5
577.9103	26.00	-4.73	26623.726	2.0	43922.652	3.0
577.9235	26.01	-4.88	54870.620	2.5	72169.150	1.5
577.9240	62.00	-1.16	1451.835	0.0	18755.148	0.0
577.9360	42.00	-1.21	20164.380	0.0	37467.334	0.0
577.9482	10.01	-4.71	290803.820	.5	308101.610	1.5
577.9646	26.01	-6.16	21812.040	1.5	39109.340	.5
577.9680	29.01	-2.37	119039.680	2.0	136336.880	1.0
577.9713	17.00	-2.40	84648.100	2.5	101945.200	1.5
578.0020	73.00	-1.17	20487.010	0.0	37787.988	0.0
578.0087	7.00	-4.02	96864.020	2.5	114160.000	2.5
578.0110	42.00	-1.41	23551.996	0.0	40852.705	0.0
578.0164	25.00	-1.21	34250.520	5.5	51546.270	4.5
578.0266	26.00	-4.65	34039.495	4.0	51334.940	4.0
578.0315	27.01	-8.76	27902.500	4.0	45197.800	5.0
578.0340	41.00	-1.77	12582.573	0.0	29882.593	0.0
578.0384	14.00	-2.30	39683.163	0.0	56978.256	1.0
578.0582	29.01	-2.82	121524.670	3.0	138819.170	3.0
578.0590	92.00	-.92	6210.629	0.0	23509.901	0.0
578.0608	26.00	-2.91	26140.164	3.0	43434.585	3.0
578.0652	7.00	-2.18	97805.810	1.5	115100.100	2.5
578.0710	73.00	-2.41	5968.656	0.0	23267.569	0.0
578.0719	6.00	-3.70	71352.510	0.0	88646.600	1.0
578.0724	28.00	-1.38	32982.280	1.0	50276.354	0.0
578.0739	28.01	-4.39	120281.110	4.5	137575.140	5.5
578.0769	17.00	-2.50	84132.262	2.5	101426.204	2.5
578.0807	22.00	-1.50	18145.400	2.0	35439.228	1.0
578.0813	26.00	-3.27	26339.682	2.0	43633.491	2.0
578.0820	76.00	-.93	15324.929	0.0	32623.513	0.0
578.0827	22.00	-3.41	25317.813	1.0	42611.580	1.0
578.0838	26.00	-3.98	35767.546	4.0	53061.280	5.0
578.0950	24.00	-.96	26787.500	3.0	44080.900	2.0
578.0953	23.00	-1.97	25111.500	4.5	42404.890	3.5
578.1164	24.00	-1.86	24282.340	4.0	41575.100	3.0
578.1204	24.00	-.61	26796.280	2.0	44088.920	1.0
578.1268	18.01	-3.18	155043.070	2.5	172335.520	2.5
578.1305	7.00	-3.81	95532.120	2.5	112824.459	2.5
578.1414	25.02	-3.58	176464.780	3.5	193756.790	4.5
578.1442	18.00	-4.44	107496.463	1.0	124788.390	1.0
578.1445	26.02	-1.55	182408.910	3.0	199700.830	4.0
578.1632	28.01	-4.26	105499.050	3.5	122790.410	4.5
578.1690	39.01	-1.28	14760.326	0.0	32056.307	0.0
578.1722	22.01	-6.20	12676.990	4.5	29968.080	4.5
578.1786	17.01	-4.10	144344.000	2.0	161634.900	2.0
578.1796	27.00	-9.76	7442.410	3.5	24733.280	2.5
578.1796	24.00	-.47	26801.930	1.0	44092.800	0.0
578.1986	28.01	-3.27	112906.930	1.5	130197.230	1.5
578.2087	13.01	-1.33	132819.700	3.0	150109.700	3.0
578.2132	29.00	-1.78	13227.833	0.0	30522.492	0.0
578.2154	13.01	-.42	132819.900	2.0	150109.700	3.0
578.2220	25.00	-3.49	41230.300	3.5	58519.900	3.5
578.2281	26.02	-4.27	117950.320	4.0	135239.740	4.0
578.2344	24.01	-2.33	73436.270	2.5	90725.500	3.5
578.2384	19.00	-1.96	12985.170	.5	30274.280	.5
578.2498	23.01	-8.97	20242.320	4.0	37531.090	4.0
578.2588	23.00	-1.37	8715.720	3.5	26004.220	2.5
578.2598	23.00	-1.61	19189.280	1.5	36477.750	.5
578.2695	26.02	-3.36	182412.650	4.0	199700.830	4.0
578.2779	24.00	-4.09	35884.400	5.0	53172.330	5.0
578.2836	23.00	-1.84	17242.050	5.5	34529.810	4.5
578.2859	26.01	-3.95	62151.610	2.5	79439.300	3.5
578.2973	7.00	-3.14	97770.150	.5	115057.500	1.5
578.3043	27.01	-3.87	69059.590	3.0	86346.730	3.0
578.3050	28.01	-4.12	118914.340	4.5	136201.460	3.5
578.3083	24.00	-1.87	28679.430	1.0	45966.450	2.0
578.3093	24.00	-.12	26801.930	1.0	44088.920	1.0
578.3254	6.00	-3.37	71352.510	0.0	88639.020	1.0
578.3257	30.02	-.89	282839.500	3.0	300126.000	4.0
578.3322	18.00	-3.98	107496.463	1.0	124782.770	1.0
578.3330	42.00	-.82	25326.461	0.0	42617.537	0.0
578.3478	25.02	-3.36	115774.000	3.5	133059.840	3.5
578.3498	23.00	-.42	21841.450	2.5	39127.230	1.5
578.3531	18.00	-2.19	106087.305	1.0	123372.987	2.0
578.3688	22.00	-1.82	25438.898	2.0	42724.110	2.0
578.3836	29.01	-.87	123304.630	1.0	140589.400	0.0
578.3864	7.00	-2.37	95475.280	.5	112759.966	1.5
578.3886	24.00	-.02	26796.280	2.0	44080.900	2.0
578.3902	26.00	-3.72	26479.366	1.0	43763.938	1.0
578.3926	26.00	-4.33	22946.810	1.0	40231.312	2.0
578.3990	58.01	-1.38	11695.340	0.0	28984.443	0.0
578.4003	24.00	-4.19	28682.180	2.0	45966.450	2.0
578.4027	6.00	-3.40	71364.900	1.0	88649.100	0.0
578.4177	56.01	-.40	49390.050	0.0	66678.594	0.0
578.4224	25.02	-1.15	177687.540	3.5	194971.150	2.5
578.4260	7.00	-3.48	96787.650	1.5	114071.153	1.5
578.4321	22.00	-2.79	25797.600	3.0	43080.920	2.0
578.4349	28.00	-4.94	40484.282	2.0	57767.520	1.0
578.4362	17.01	-3.80	128729.800	3.0	146013.000	2.0
578.4422	23.00	-.05	22313.990	5.5	39597.010	4.5
578.4452	18.01	-3.16	201720.670	1.5	219003.600	2.5
578.4519	28.01	-2.72	114942.420	1.5	132225.150	1.5
578.4536	22.00	-3.98	29661.232	1.0	46943.910	2.0
578.4613	24.00	-1.91	31048.850	1.0	48331.300	1.0
578.4623	22.00	-.68	29912.262	3.0	47194.680	4.0
578.4667	26.00	-2.77	27394.676	3.0	44676.963	4.0
578.4713	23.01	-7.32	17910.980	4.0	35193.130	5.0
578.4720	26.02	-1.84	182418.700	4.0	199700.830	4.0
578.4764	26.00	-4.27	33095.922	4.0	50377.920	5.0
578.4864	6.00	-4.06	71364.900	1.0	88646.600	1.0
578.4887	14.02	-2.73	240549.770	2.0	257831.400	3.0
578.4887	14.02	-3.63	240549.770	2.0	257831.400	2.0
578.4960	60.00	-.92	2339.068	0.0	19625.272	0.0
578.5024	24.00	-.11	26787.500	3.0	44068.720	3.0
578.5055	18.01	-3.49	201720.670	1.5	219001.800	1.5
578.5061	26.01	-3.57	62158.190	4.5	79439.300	3.5
578.5105	26.02	-2.25	182379.860	5.0	199660.840	5.0
578.5121	24.00	-4.42	31355.210	2.0	48636.140	3.0
578.5182	26.00	-3.07	29320.050	1.0	46600.800	1.0
578.5232	18.02	-2.01	214346.700	1.0	231627.300	1.0
578.5300	7.00	-4.09	95532.120	2.5	112812.518	2.5
578.5313	12.00	-2.11	41197.403	1.0	58477.760	2.0
578.5432	9.00	-2.65	118405.267	.5	135685.270	1.5
578.5446	22.00	-4.66	29914.720	3.0	47194.680	4.0
578.5500	28.01	-3.86	100592.980	3.5	117872.780	2.5
578.5544	22.00	-4.66	28788.372	4.0	46068.040	4.0
578.5561	12.00	-2.33	41197.403	1.0	58477.020	1.0
578.5563	25.02	-2.29	115780.230	2.5	133059.840	3.5
578.5617	23.01	-2.60	20089.560	1.0	37369.010	2.0
578.5622	22.00	-.57	26564.385	3.0	43843.820	3.0
578.5644	24.00	-4.58	31009.000	3.0	48288.370	4.0
578.5667	26.02	-1.05	185003.350	2.0	202282.650	2.0
578.5672	12.00	-2.81	41197.403	1.0	58476.689	0.0
578.5727	27.00	-8.85	8460.810	2.5	25739.930	2.5
578.5771	27.01	-2.78	68203.200	5.0	85482.190	4.0
578.5778	24.00	-.23	26801.930	1.0	44080.900	2.0
578.5822	18.01	-1.72	190732.970	.5	208011.810	1.5
578.5918	24.00	-3.93	7927.470	2.0	25206.020	3.0
578.5975	24.00	-4.10	7810.820	1.0	25089.200	2.0
578.5979	22.00	.63	26772.965	5.0	44051.333	6.0
578.6005	23.01	-6.54	20242.320	4.0	37520.610	3.0
578.6015	28.01	-4.92	118923.200	3.5	136201.460	3.5
578.6068	17.01	-2.74	153257.000	2.0	170535.100	2.0
578.6156	23.00	-3.56	20828.480	2.5	38106.320	2.5
578.6156	23.00	-.29	21963.500	3.5	39241.340	2.5
578.6186	26.02	-1.64	188955.560	3.0	206233.310	2.0
578.6202	12.02	-1.88	564289.800	1.0	581567.500	0.0
578.6202	12.02	-1.88	564289.800	1.0	581567.500	0.0
578.6203	30.02	-.14	285592.100	2.0	302869.800	3.0
578.6220	23.00	-.17	22121.170	4.5	39398.820	3.5
578.6283	28.01	-3.97	112906.930	1.5	130184.390	2.5
578.6305	28.00	-3.11	42585.296	4.0	59862.690	5.0
578.6390	24.01	-2.10	67448.820	4.5	84725.960	3.5
578.6554	18.01	-3.97	172829.580	1.5	190106.230	1.5
578.6625	25.02	-1.17	177269.340	1.5	194545.780	.5
578.6824	7.00	-2.98	96750.810	1.5	114026.654	.5
578.6873	26.00	-3.31	40421.890	4.0	57697.590	4.0
578.6903	23.00	-2.95	24838.560	3.5	42114.170	3.5
578.6969	26.00	-2.62	34328.733	3.0	51604.146	3.0
578.6980	62.01	-.84	13469.806	0.0	30749.976	0.0
578.7037	24.00	-1.80	24299.890	2.0	41575.100	3.0
578.7038	18.00	-3.25	107496.463	1.0	124771.670	2.0
578.7131	28.01	-4.08	115739.150	4.5	133014.080	5.5
578.7161	23.00	-2.76	15571.900	2.5	32846.740	2.5
578.7161	23.00	-4.65	15571.900	2.5	32846.740	2.5
578.7284	14.00	-2.52	45321.848	3.0	62596.320	2.0
578.7348	9.02	-3.73	427731.850	2.5	445006.130	2.5
578.7402	6.00	-4.38	71364.900	1.0	88639.020	1.0
578.7466	23.00	-1.76	25130.960	2.5	42404.890	3.5
578.7540	41.00	-2.36	2097.096	0.0	19375.594	0.0
578.7764	26.02	-.28	185061.350	1.0	202334.390	1.0
578.7791	28.01	-4.10	100490.950	1.5	117763.910	1.5
578.7915	28.01	-2.92	100389.520	2.5	117662.110	1.5
578.7947	26.00	-4.06	33695.378	5.0	50967.873	6.0
578.7965	24.00	.19	26796.280	2.0	44068.720	3.0
578.8090	22.00	-2.66	18287.560	4.0	35559.627	5.0
578.8119	23.00	-1.51	19189.280	1.5	36461.260	2.5
578.8146	6.00	-3.83	71364.900	1.0	88636.800	2.0
578.8176	24.00	-4.03	31364.330	3.0	48636.140	3.0
578.8300	23.00	-4.55	14514.750	1.5	31786.190	.5
578.8380	62.00	-.84	3064.986	0.0	20340.977	0.0
578.8394	24.00	-1.78	24303.940	3.0	41575.100	3.0
578.8471	10.01	-1.09	321422.850	4.5	338693.780	4.5
578.8481	10.01	-.31	321422.880	5.5	338693.780	4.5
578.8505	10.01	-.97	321422.850	4.5	338693.680	3.5
578.8568	23.00	-1.23	15078.250	.5	32348.890	.5
578.8572	18.01	-3.82	186074.350	2.5	203344.980	1.5
578.8590	92.01	-2.29	6210.629	0.0	23485.993	0.0
578.8599	10.01	-2.18	321423.230	4.5	338693.780	4.5
578.8602	10.01	-2.29	321423.240	3.5	338693.780	4.5
578.8632	10.01	-.52	321423.230	4.5	338693.680	3.5
578.8635	10.01	-1.39	321423.240	3.5	338693.680	3.5
578.8659	25.00	-.01	45156.110	2.5	62426.480	3.5
578.8706	24.00	-2.61	33906.650	1.0	51176.880	0.0
578.8756	10.01	-4.89	306243.420	2.5	323513.500	3.5
578.8789	26.02	.79	201892.440	5.0	219162.420	6.0
578.8934	18.01	-4.45	196621.880	3.5	213891.430	2.5
578.8949	22.00	-1.00	29768.655	2.0	47038.160	3.0
578.9148	7.00	-3.58	95532.120	2.5	112801.031	1.5
578.9148	14.00	-3.46	45276.188	1.0	62545.100	1.0
578.9240	57.00	-.65	3468.273	0.0	20741.697	0.0
578.9252	30.02	-1.00	282839.500	3.0	300108.100	3.0
578.9319	17.01	-4.34	129065.400	2.0	146333.800	2.0
578.9363	14.02	-1.08	227665.090	2.0	244933.360	1.0
578.9413	22.00	-7.42	14105.680	3.0	31373.801	3.0
578.9474	18.00	-2.57	106237.597	2.0	123505.536	2.0
578.9664	28.00	-1.25	44565.100	3.0	61832.470	4.0
578.9755	28.01	-4.28	112906.930	1.5	130174.030	1.5
578.9790	41.00	-1.73	12905.203	0.0	30176.987	0.0
578.9900	7.00	-2.93	95493.660	1.5	112760.325	2.5
578.9973	23.00	-4.88	28768.130	4.5	46034.580	5.5
579.0021	7.00	-2.61	95493.660	1.5	112759.966	1.5
579.0077	27.00	-3.20	35450.560	3.5	52716.700	3.5
579.0120	23.00	-3.42	24898.730	2.5	42164.740	3.5
579.0124	24.00	-3.89	35807.900	2.0	53073.900	3.0
579.0217	10.01	-3.08	321428.060	3.5	338693.780	4.5
579.0251	10.01	-1.64	321428.060	3.5	338693.680	3.5
579.0254	10.01	-4.05	321428.070	2.5	338693.680	3.5
579.0256	7.00	-1.60	95532.120	2.5	112797.725	3.5
579.0295	24.01	-2.99	53051.550	1.5	70317.040	2.5
579.0394	18.00	-3.65	107289.747	2.0	124554.939	1.0
579.0412	21.00	-4.39	24656.800	.5	41921.940	1.5
579.0520	28.01	-2.48	99559.330	2.5	116824.150	2.5
579.0593	23.00	-1.59	15724.220	3.5	32988.820	3.5
579.0593	17.01	-2.43	129065.400	2.0	146330.000	1.0
579.0650	80.00	.71	53798.566	0.0	71067.764	0.0
579.0657	24.00	-3.87	8095.210	3.0	25359.620	4.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
579.0664	28.01	-4.30	100309.290	5.5	117573.680	4.5
579.0788	18.01	-4.74	192333.430	.5	209597.450	1.5
579.1006	24.00	.47	26787.500	3.0	44050.870	4.0
579.1027	26.00	-2.70	25899.974	4.0	43163.282	4.0
579.1056	23.00	-4.41	24770.620	.5	42033.840	1.5
579.1217	10.01	-2.37	321431.040	5.5	338693.780	4.5
579.1244	25.00	-1.33	45130.160	4.5	62392.820	4.5
579.1298	6.00	-3.90	71352.510	0.0	88615.010	1.0
579.1322	22.00	-2.50	20062.980	1.0	37325.407	2.0
579.1340	57.00	-.42	4032.876	0.0	21300.037	0.0
579.1380	59.01	-1.57	9275.615	0.0	26542.657	0.0
579.1380	64.00	-1.14	483.945	0.0	17750.987	0.0
579.1526	26.00	-1.91	36975.640	3.0	54237.460	4.0
579.1543	27.00	-3.78	30102.960	2.5	47364.730	1.5
579.1567	22.00	-2.87	28896.062	5.0	46157.760	5.0
579.1573	7.00	-2.81	95475.280	.5	112736.961	1.5
579.1591	22.00	-4.10	29768.655	2.0	47030.280	3.0
579.1600	75.00	-2.15	16212.162	0.0	33478.548	0.0
579.1727	6.00	-3.61	71385.380	2.0	88646.600	1.0
579.1781	24.00	-1.14	31049.330	6.0	48310.390	5.0
579.1850	42.00	-1.18	11372.710	0.0	28638.351	0.0
579.1942	18.01	-4.21	186470.280	1.5	203730.860	1.5
579.2006	25.02	-2.44	115711.600	4.5	132971.990	3.5
579.2080	24.00	-4.63	35813.730	3.0	53073.900	3.0
579.2184	24.00	-4.45	7750.780	0.0	25010.640	1.0
579.2311	22.01	-2.18	47625.170	2.5	64884.650	2.5
579.2367	28.00	-3.95	40484.282	2.0	57743.596	3.0
579.2432	10.01	-2.51	321434.560	2.5	338693.680	3.5
579.2606	30.02	-.16	282839.500	3.0	300098.100	4.0
579.2671	18.01	-3.15	196633.020	2.5	213891.430	2.5
579.2720	63.00	-.39	19519.120	0.0	36782.167	0.0
579.2741	18.01	-4.50	196633.020	2.5	213891.220	1.5
579.2770	45.00	-1.54	14679.669	0.0	31942.567	0.0
579.2845	23.00	-2.64	17116.920	3.5	34374.810	3.5
579.2909	17.01	-3.86	153257.000	2.0	170514.700	1.0
579.2994	9.00	-2.37	118427.823	1.5	135685.270	1.5
579.3070	74.00	-.69	27504.214	0.0	44766.218	0.0
579.3073	14.00	-1.84	39760.285	1.0	57017.496	2.0
579.3120	6.00	-1.51	64086.920	3.0	81343.990	2.0
579.3157	26.01	-5.25	25981.650	3.5	43238.610	2.5
579.3291	17.00	-4.19	84688.637	.5	101945.200	.5
579.3415	24.00	-3.16	24897.550	4.0	42153.740	5.0
579.3436	26.02	-3.18	182444.700	3.0	199700.830	4.0
579.3573	10.01	-.59	321422.850	4.5	338678.570	3.5
579.3600	25.01	-4.19	85447.700	5.0	102703.340	4.0
579.3674	25.00	-.54	45259.170	1.5	62514.590	2.5
579.3700	10.01	-.92	321423.230	4.5	338678.570	3.5
579.3704	10.01	-1.22	321423.240	3.5	338678.570	3.5
579.3795	26.02	-1.47	182379.860	5.0	199634.920	6.0
579.3802	24.00	-3.56	31055.350	5.0	48310.390	5.0
579.3828	28.01	-3.53	114970.190	.5	132225.150	1.5
579.3835	28.01	-3.59	121240.900	3.5	138495.840	4.5
579.3893	26.00	-2.35	34039.495	4.0	51294.262	3.0
579.3909	24.00	-4.51	35862.820	4.0	53117.540	4.0
579.3916	27.00	-1.70	33945.900	2.5	51200.600	1.5
579.4007	22.00	-3.69	28638.832	2.0	45893.260	3.0
579.4103	6.00	-3.39	64089.850	1.0	81343.990	2.0
579.4240	41.00	-1.36	11937.313	0.0	29195.832	0.0
579.4258	27.00	-1.99	33945.900	2.5	51199.580	3.5
579.4271	6.00	-3.44	71385.380	2.0	88639.020	1.0
579.4319	27.00	-3.98	16195.680	.5	33449.180	.5
579.4392	28.00	-3.43	33500.854	3.0	50754.137	2.0
579.4473	6.00	-2.24	64090.950	2.0	81343.990	2.0
579.4557	23.00	-.40	25253.530	5.5	42506.320	4.5
579.4584	24.00	-3.26	36552.130	3.0	53804.840	3.0
579.4712	23.00	-4.27	20687.750	1.5	37940.080	.5
579.4782	23.00	-.32	25111.500	4.5	42363.620	3.5
579.4793	17.00	-3.12	82918.893	2.5	100170.980	1.5
579.4849	18.01	-4.34	196621.880	3.5	213873.800	2.5
579.4927	7.00	-3.13	97805.810	1.5	115057.500	1.5
579.4927	18.01	-2.49	196621.880	3.5	213873.570	3.5
579.5000	14.00	-2.73	45293.629	2.0	62545.100	1.0
579.5017	6.00	-2.72	71385.380	2.0	88636.800	2.0
579.5192	23.01	-6.52	20280.190	5.0	37531.090	4.0
579.5216	27.00	-.88	36092.440	2.5	53343.270	1.5
579.5323	10.01	-1.52	321428.060	3.5	338678.570	3.5
579.5326	10.01	-2.58	321428.070	2.5	338678.570	3.5
579.5414	24.00	-2.12	47586.060	5.0	64836.300	6.0
579.5457	6.00	-3.89	71364.900	1.0	88615.010	1.0
579.5629	29.01	-3.59	118484.000	3.0	135733.600	3.0
579.5666	26.02	-1.08	189011.840	4.0	206261.330	4.0
579.5770	42.00	.12	34521.419	0.0	51775.382	0.0
579.5867	26.02	-3.93	184951.620	3.0	202200.510	3.0
579.5881	26.01	-2.39	58666.360	3.5	75915.210	2.5
579.6019	28.01	-4.20	105588.890	4.5	122837.330	4.5
579.6078	28.00	-4.15	15734.018	1.0	32982.280	1.0
579.6103	26.02	-3.92	182412.650	4.0	199660.840	5.0
579.6146	24.01	-3.00	67070.480	1.5	84318.540	1.5
579.6224	25.01	-4.46	48317.850	4.0	65565.680	4.0
579.6284	24.00	-1.08	47692.630	7.0	64940.280	7.0
579.6305	17.00	-2.32	83894.037	3.5	101141.625	4.5
579.6334	22.01	-4.65	24961.340	1.5	42208.840	2.5
579.6420	90.01	-2.06	11453.368	0.0	28705.396	0.0
579.6451	17.00	-3.81	83894.037	3.5	101141.190	3.5
579.6499	24.00	-4.32	35870.530	4.0	53117.540	4.0
579.6510	74.00	-1.99	17018.737	0.0	34270.497	0.0
579.6553	7.00	-4.05	97770.150	.5	115017.000	.5
579.6553	7.00	-2.82	97770.150	.5	115017.000	1.5
579.6708	28.01	-.30	103025.580	2.5	120271.970	2.5
579.6714	23.01	-4.85	55304.340	4.0	72550.710	4.0
579.6741	24.00	-1.99	36558.550	2.0	53804.840	3.0
579.6805	9.00	-4.17	129659.500	3.5	146905.600	2.5
579.6855	24.00	-3.67	24833.860	3.0	42079.610	4.0
579.6953	25.02	-3.79	121117.140	3.5	138362.800	3.5
579.7350	23.00	.09	24789.360	.5	42033.840	1.5
579.7396	18.01	-3.54	173347.830	1.5	190592.170	1.5
579.7437	22.00	-.40	26657.409	4.0	43901.630	4.0
579.7504	26.00	-2.67	29356.780	2.0	46600.800	1.0
579.7507	10.01	-2.39	321434.560	2.5	338678.570	3.5
579.7580	57.01	-2.32	1935.780	0.0	19184.356	0.0
579.7585	26.02	-4.93	166187.500	6.0	183431.280	5.0
579.7642	28.01	-2.23	116824.150	2.5	134067.760	1.5
579.7679	30.02	-.44	282839.500	3.0	300083.000	3.0
579.7682	27.01	-4.04	69696.970	3.0	86940.460	2.0
579.7688	14.00	-2.77	45276.188	1.0	62519.660	2.0
579.7740	40.00	-2.07	564.603	0.0	17812.703	0.0
579.7746	7.00	-3.31	95493.660	1.5	112736.961	1.5
579.7770	28.01	-.12	103025.580	2.5	120268.810	3.5
579.7837	18.01	-3.49	186890.950	2.5	204133.980	2.5
579.7856	14.00	-1.12	39955.053	2.0	57198.027	3.0
579.7877	24.00	-3.04	31009.000	3.0	48251.910	3.0
579.8136	26.02	-1.46	182418.700	4.0	199660.840	5.0
579.8156	26.00	-2.03	31686.342	2.0	48928.423	2.0
579.8291	23.02	-2.13	145143.430	4.5	162385.110	3.5
579.8338	25.01	-3.20	53698.700	2.0	70940.240	2.0
579.8359	22.00	-4.70	30039.211	5.0	47280.690	5.0
579.8496	24.00	-3.98	8307.570	4.0	25548.640	5.0
579.8540	28.01	-4.79	112906.930	1.5	130147.870	.5
579.8671	18.01	-1.06	196633.020	2.5	213873.570	3.5
579.8822	10.01	-2.63	301855.710	2.5	319095.810	2.5
579.8836	17.00	-1.80	84485.309	1.5	101725.370	1.5
579.8890	24.01	-3.16	73485.600	3.5	90725.500	3.5
579.8900	23.00	.27	24830.180	1.5	42070.050	2.5
579.8907	6.00	-3.17	71364.900	1.0	88604.750	2.0
579.8920	10.01	-1.33	301855.710	2.5	319095.520	3.5
579.8984	6.00	-3.74	71385.380	2.0	88625.000	3.0
579.9186	18.01	-1.99	190507.360	1.5	207746.380	2.5
579.9191	7.00	-2.51	96787.650	1.5	114026.654	.5
579.9317	18.01	-3.02	196621.880	3.5	213860.510	3.5
579.9354	18.01	-.95	196621.880	3.5	213860.400	4.5
579.9425	24.00	-4.01	35934.020	6.0	53172.330	5.0
579.9530	74.00	-2.93	13227.833	0.0	30470.610	0.0
579.9734	18.01	-3.83	191012.350	1.5	208249.740	1.5
579.9914	17.00	-.78	83894.037	3.5	101130.892	4.5
579.9916	28.01	-2.26	104081.040	4.5	121317.890	3.5
579.9933	26.02	.35	189024.530	5.0	206261.330	4.0
580.0000	30.02	-2.04	282839.500	3.0	300076.100	2.0
580.0020	26.01	-4.02	44915.070	3.5	62151.610	2.5
580.0074	7.01	-4.06	203258.980	2.0	220495.360	2.0
580.0104	22.00	-4.43	22404.690	3.0	39640.980	3.0
580.0202	26.01	-4.78	60625.470	5.5	77861.470	4.5
580.0230	56.00	.08	13514.000	0.0	30754.696	0.0
580.0232	6.00	-2.27	64089.850	1.0	81325.760	1.0
580.0270	63.00	-.51	13711.778	0.0	30952.355	0.0
580.0460	42.00	-1.42	20003.065	0.0	37243.077	0.0
580.0475	18.01	-1.71	190511.190	2.5	207746.380	2.5
580.0572	30.02	-.73	285592.100	2.0	302827.000	2.0
580.0600	76.00	-1.59	15082.956	0.0	32322.552	0.0
580.0603	6.00	-1.82	64090.950	2.0	81325.760	1.0
580.0713	28.01	-4.11	101144.630	3.5	118379.110	2.5
580.0838	28.00	-4.36	33112.368	3.0	50346.477	2.0
580.0872	9.02	-2.87	441158.600	1.5	458392.610	1.5
580.1050	28.01	-4.71	115956.710	2.5	133190.190	1.5
580.1121	29.01	-4.54	108335.430	2.0	125568.700	1.0
580.1164	24.00	-3.67	35884.400	5.0	53117.540	4.0
580.1164	29.01	-3.61	108014.660	3.0	125247.800	2.0
580.1205	24.00	-1.22	31055.350	5.0	48288.370	4.0
580.1299	28.01	-4.10	105588.890	4.5	122821.630	5.5
580.1326	23.00	-1.21	25130.960	2.5	42363.620	3.5
580.1340	25.01	-4.22	48333.060	5.0	65565.680	4.0
580.1510	6.03	-.19	302848.000	0.0	320084.892	0.0
580.1622	25.01	-4.51	84268.060	1.0	101499.840	2.0
580.1660	62.01	-2.08	10888.765	0.0	28125.211	0.0
580.1720	23.00	-2.68	24838.560	3.5	42070.050	2.5
580.1750	19.00	-1.66	13042.880	1.5	30274.280	.5
580.1922	9.02	-2.54	413143.860	3.5	430374.750	2.5
580.2013	28.01	-2.16	115081.360	4.5	132311.980	4.5
580.2030	28.01	-2.93	99844.130	3.5	117074.700	3.5
580.2074	18.00	-2.60	106237.597	2.0	123468.034	1.0
580.2091	22.00	-2.92	25493.722	2.0	42724.110	2.0
580.2110	92.00	-.93	8065.752	0.0	25300.861	0.0
580.2289	21.00	-1.75	18515.770	1.5	35745.570	2.5
580.2346	6.00	-3.93	71385.380	2.0	88615.010	1.0
580.2350	24.00	-4.81	35807.900	2.0	53037.520	2.0
580.2592	28.01	-2.39	116824.150	2.5	134053.050	2.5
580.2647	22.00	-3.38	27025.652	4.0	44254.390	3.0
580.2670	42.00	-1.30	20245.038	0.0	37478.484	0.0
580.2688	26.00	-3.91	37157.546	2.0	54386.160	1.0
580.2826	7.00	-2.46	95532.120	2.5	112760.325	2.5
580.2840	62.00	-.89	2258.411	0.0	19491.352	0.0
580.2919	17.00	-2.03	82918.893	2.5	100146.822	3.5
580.2920	64.00	-1.78	483.945	0.0	17716.649	0.0
580.2929	15.00	-4.16	57876.700	.5	75104.600	.5
580.2969	27.01	-3.70	67939.600	2.0	85167.380	3.0
580.3031	22.00	-4.23	29912.262	3.0	47139.860	4.0
580.3067	18.01	-4.41	196633.020	2.5	213860.510	3.5
580.3161	23.00	-2.62	19189.280	1.5	36416.490	1.5
580.3360	28.01	-1.32	115085.360	3.5	132311.980	4.5
580.3397	26.02	-.73	202429.040	1.0	219655.550	2.0
580.3529	22.00	-4.64	27355.042	1.0	44581.160	2.0
580.3559	14.00	-1.83	45293.629	2.0	62519.660	2.0
580.3756	28.00	-2.94	40361.254	3.0	57586.700	2.0
580.3835	9.02	-3.54	441167.400	.5	458392.610	1.5
580.3956	26.02	-2.37	188955.560	3.0	206180.410	3.0
580.3980	42.00	-1.23	25649.091	0.0	42878.647	0.0
580.4020	26.00	-2.34	31307.235	4.0	48531.896	3.0
580.4020	60.01	-1.33	5968.656	0.0	23198.094	0.0
580.4030	41.00	-1.76	8630.355	0.0	25859.763	0.0
580.4044	28.01	-1.20	103025.580	2.5	120250.170	3.5
580.4115	24.00	-3.31	33040.100	2.0	50264.480	3.0
580.4140	90.00	-2.38	0.000	0.0	17229.081	0.0
580.4265	22.00	.71	26910.705	6.0	44134.639	7.0
580.4314	24.00	-4.97	35813.730	3.0	53037.520	2.0
580.4327	26.02	-1.11	182379.860	5.0	199603.610	4.0
580.4377	22.00	-3.52	29971.078	4.0	47194.680	4.0
580.4384	24.00	-3.44	31028.330	2.0	48251.910	3.0
580.4390	44.00	-.67	23229.366	0.0	40457.705	0.0
580.4405	28.00	-1.11	33610.916	2.0	50834.435	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
580.4418	25.02	-3.43	121117.140	3.5	138340.620	2.5
580.4450	26.00	-2.27	34547.192	2.0	51770.577	3.0
580.4513	28.01	-2.70	116512.060	3.5	133735.260	2.5
580.4607	28.01	-1.69	116512.060	3.5	133734.980	3.5
580.4661	18.01	-4.80	186890.950	2.5	204113.710	1.5
580.4865	22.00	-3.94	24694.895	4.0	41917.050	4.0
580.4870	74.00	-.35	26052.379	0.0	43279.294	0.0
580.4910	26.01	-4.05	44929.590	2.5	62151.610	2.5
580.4981	18.01	-2.38	201781.790	2.5	219003.600	2.5
580.5112	6.00	-2.93	71385.380	2.0	88606.800	3.0
580.5143	22.00	-3.08	25926.820	4.0	43148.150	3.0
580.5146	25.01	-4.73	49465.130	3.0	66686.450	3.0
580.5153	26.02	-.76	185061.350	1.0	202282.650	2.0
580.5200	6.00	-2.16	64089.850	1.0	81311.010	0.0
580.5213	28.00	-.62	33610.916	2.0	50832.039	3.0
580.5389	25.01	-1.96	99892.500	2.0	117113.100	3.0
580.5588	18.01	-3.59	201781.790	2.5	219001.800	1.5
580.5680	56.00	-.88	9517.587	0.0	26742.098	0.0
580.5690	56.00	-.85	9596.000	0.0	26820.482	0.0
580.5741	26.00	-1.48	40594.413	4.0	57813.970	3.0
580.5780	57.01	-2.59	967.890	0.0	18192.104	0.0
580.5807	6.00	-2.84	71364.900	1.0	88584.260	2.0
580.5845	22.00	-3.06	28788.372	4.0	46007.620	4.0
580.5945	23.00	-1.82	19189.280	1.5	36408.230	1.5
580.6070	29.01	-2.28	116375.470	3.0	133594.050	3.0
580.6070	74.00	-1.84	18147.942	0.0	35371.296	0.0
580.6100	22.00	-1.71	31805.940	2.0	49024.430	3.0
580.6164	25.01	-1.90	99894.800	3.0	117113.100	3.0
580.6164	25.01	-1.70	99894.800	3.0	117113.100	4.0
580.6190	42.00	-1.59	22100.161	0.0	39323.159	0.0
580.6205	8.01	-4.33	231296.050	1.5	248514.230	1.5
580.6207	26.00	-3.75	37157.546	2.0	54375.719	2.0
580.6232	23.00	-2.04	15770.720	4.5	32988.820	3.5
580.6275	14.00	-2.16	39760.285	1.0	56978.256	1.0
580.6316	7.00	-4.35	97770.150	.5	114988.000	.5
580.6316	7.00	-3.19	97770.150	.5	114988.000	1.5
580.6387	27.00	-2.31	28470.510	1.5	45688.150	2.5
580.6593	25.00	-3.95	34343.900	4.5	51560.930	5.5
580.6690	42.00	-.81	26616.982	0.0	43838.497	0.0
580.6698	22.00	-3.86	28596.293	1.0	45813.010	2.0
580.6700	26.00	-1.33	37162.729	3.0	54379.440	3.0
580.6711	7.00	-3.19	95475.280	.5	112691.960	.5
580.6765	21.01	-2.95	10944.510	2.0	28161.030	3.0
580.6845	17.00	-1.39	83130.900	1.5	100347.182	2.5
580.6910	45.00	-1.40	14679.669	0.0	31900.532	0.0
580.6933	24.00	-1.43	47586.060	5.0	64802.080	5.0
580.6960	29.01	-2.81	108014.660	3.0	125230.600	3.0
580.7045	25.01	-4.26	49427.320	4.0	66643.010	4.0
580.7050	64.01	-1.39	12582.573	0.0	29803.021	0.0
580.7072	26.01	-3.18	62962.260	1.5	80177.870	1.5
580.7129	23.00	.44	24898.730	2.5	42114.170	3.5
580.7208	22.00	-1.88	25643.695	3.0	42858.900	3.0
580.7446	25.01	-2.74	99898.600	4.0	117113.100	3.0
580.7446	25.01	-1.92	99898.600	4.0	117113.100	4.0
580.7476	9.00	-2.57	118936.797	1.5	136151.210	.5
580.7480	25.01	-1.49	99898.600	4.0	117113.000	5.0
580.7716	30.02	-1.04	282839.500	3.0	300053.200	2.0
580.7720	64.00	-1.02	6694.574	0.0	23913.035	0.0
580.7740	28.01	-2.22	104081.040	4.5	121294.670	4.5
580.7750	14.00	-4.97	62450.400	1.0	79664.000	1.0
580.7763	24.00	-2.66	25038.610	5.0	42252.170	6.0
580.7793	26.00	-3.82	26550.466	0.0	43763.938	1.0
580.7881	28.01	-2.94	115956.710	2.5	133169.920	3.5
580.7956	26.00	-2.39	37162.729	3.0	54375.719	2.0
580.8230	42.00	-2.91	11372.710	0.0	28589.659	0.0
580.8320	57.01	-3.18	0.000	0.0	17216.682	0.0
580.8562	7.00	-4.38	97805.810	1.5	115017.000	.5
580.8600	24.00	-4.69	35862.820	4.0	53073.900	3.0
580.8674	17.00	-2.11	84648.100	2.5	101858.960	2.5
580.8965	25.01	-3.14	99903.100	5.0	117113.100	4.0
580.8985	23.00	-3.56	21032.520	3.5	38242.460	3.5
580.8998	25.01	-2.10	99903.100	5.0	117113.000	5.0
580.9030	42.00	-.34	34279.446	0.0	51494.024	0.0
580.9032	25.01	-1.33	99903.100	5.0	117112.900	6.0
580.9170	26.00	-3.06	29798.960	4.0	47008.351	5.0
580.9203	26.00	-1.98	31322.603	3.0	48531.896	3.0
580.9220	64.00	.09	15728.216	0.0	32942.231	0.0
580.9275	26.02	-3.78	166222.200	4.0	183431.280	5.0
580.9309	9.02	-2.54	441385.880	1.5	458594.860	2.5
580.9342	22.00	-3.42	13981.750	1.0	31190.631	2.0
580.9360	24.00	-3.47	31009.000	3.0	48217.830	2.0
580.9473	22.00	-1.37	29986.185	3.0	47194.680	4.0
580.9500	72.01	-2.58	11856.655	0.0	29069.840	0.0
580.9525	27.00	-2.21	34352.420	1.5	51560.760	2.5
580.9626	24.01	-2.65	52298.120	3.5	69506.160	3.5
580.9755	25.01	-4.29	65567.070	2.0	82774.730	1.0
580.9799	22.00	-1.88	8492.421	1.0	25699.950	2.0
580.9862	26.00	-3.46	34547.192	2.0	51754.534	1.0
580.9932	7.00	-2.52	96864.020	2.5	114071.153	1.5
580.9937	29.01	-4.15	117928.480	1.0	135135.600	1.0
580.9973	26.00	-4.25	28819.966	5.0	46026.980	6.0
581.0187	14.02	-1.40	227665.090	2.0	244871.470	1.0
581.0251	28.01	-4.91	101357.200	4.5	118563.390	3.5
581.0271	15.01	-2.52	107923.570	2.0	125129.700	3.0
581.0285	25.02	-.80	178386.000	.5	195592.090	1.5
581.0285	6.00	-4.82	71352.510	0.0	88558.600	1.0
581.0359	24.00	-1.28	47630.430	6.0	64836.300	6.0
581.0499	28.00	-2.31	33500.854	3.0	50706.310	4.0
581.0620	59.01	-1.36	11534.025	0.0	28743.892	0.0
581.0707	7.00	-2.78	95532.120	2.5	112736.961	1.5
581.0714	25.01	-3.80	55115.800	2.0	72320.620	1.0
581.1031	28.01	-3.23	115827.120	3.5	133031.000	4.5
581.1078	24.00	-2.80	33060.740	3.0	50264.480	3.0
581.1100	73.00	-2.52	3871.561	0.0	21080.007	0.0
581.1105	23.00	-.27	24830.180	1.5	42033.840	1.5
581.1156	26.00	-3.30	38175.332	3.0	55378.842	2.0
581.1160	20.02	-3.46	344149.810	2.0	361353.310	1.0
581.1183	24.00	-1.64	38537.680	5.0	55741.110	6.0
581.1203	24.00	-4.15	35870.530	4.0	53073.900	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
581.1261	30.02	-1.22	217663.700	1.0	234866.900	1.0
581.1305	28.01	-4.84	116512.060	3.5	133715.130	4.5
581.1362	29.01	-3.41	131312.700	3.0	148515.600	4.0
581.1413	26.02	-2.10	182392.550	2.0	199595.300	3.0
581.1541	25.00	-2.68	34343.900	4.5	51546.270	4.5
581.1570	60.01	-1.52	6855.889	0.0	24062.943	0.0
581.1575	22.00	-4.01	13981.750	1.0	31184.021	1.0
581.1578	23.00	-4.09	15688.800	2.5	32891.060	3.5
581.1676	26.00	-3.77	33946.920	2.0	51148.892	2.0
581.1852	29.01	-4.66	118532.150	2.0	135733.600	3.0
581.1898	26.00	-2.25	33412.706	3.0	50614.020	4.0
581.1923	26.01	-6.38	21812.040	1.5	39013.280	1.5
581.1947	28.01	-2.73	121294.670	4.5	138495.840	4.5
581.1977	23.01	-4.03	55349.630	3.0	72550.710	4.0
581.2099	24.01	-3.86	50667.330	3.5	67868.050	2.5
581.2140	6.03	-.49	302848.000	0.0	320053.367	0.0
581.2150	19.00	-2.50	12985.170	.5	30185.740	1.5
581.2200	26.02	-.96	201892.440	5.0	219092.860	5.0
581.2291	24.01	-4.36	52298.120	3.5	69498.270	4.5
581.2403	24.00	-6.51	7810.820	1.0	25010.640	1.0
581.2420	26.00	-3.05	36766.950	3.0	53966.720	2.0
581.2639	22.00	-2.86	8436.618	0.0	25635.740	1.0
581.2669	17.00	-2.71	84988.480	1.5	102187.510	2.5
581.2697	26.00	-3.93	34555.586	0.0	51754.534	1.0
581.2720	6.00	-2.21	71385.380	2.0	88584.260	2.0
581.2751	18.01	-1.50	173393.380	2.5	190592.170	1.5
581.2833	22.00	-.39	26772.965	5.0	43971.513	5.0
581.2916	7.00	-2.50	95493.660	1.5	112691.960	.5
581.3021	25.02	-3.17	115774.000	3.5	132971.990	3.5
581.3075	24.00	-2.74	31364.330	3.0	48562.160	4.0
581.3081	14.00	-2.39	45321.848	3.0	62519.660	2.0
581.3099	26.01	-3.53	50076.100	1.5	67273.860	1.5
581.3173	17.00	-4.36	84648.100	2.5	101845.640	1.5
581.3251	28.01	-1.04	103025.580	2.5	120222.890	1.5
581.3302	26.02	.46	185003.350	2.0	202200.510	3.0
581.3474	28.01	-3.84	101246.160	.5	118442.810	1.5
581.3508	6.00	-2.84	71352.510	0.0	88549.060	1.0
581.3590	59.01	-1.83	10888.765	0.0	28089.840	0.0
581.3670	26.01	-2.89	44929.590	2.5	62125.660	1.5
581.3691	24.00	-4.12	24093.160	2.0	41289.170	1.0
581.3701	23.00	-3.12	15571.900	2.5	32767.880	1.5
581.3758	9.01	-3.34	253312.480	1.0	270508.290	2.0
581.3762	28.01	-1.27	104503.220	2.5	121699.020	1.5
581.3830	92.00	-1.74	5887.999	0.0	23088.364	0.0
581.3843	25.02	-3.45	121117.140	3.5	138312.700	4.5
581.3844	18.00	-3.97	107496.463	1.0	124692.020	2.0
581.3860	42.00	-.01	39280.212	0.0	56480.489	0.0
581.3883	28.01	-2.89	101247.370	2.5	118442.810	1.5
581.3910	26.01	-2.77	62689.960	2.5	79885.320	2.5
581.3944	22.00	-1.90	8602.340	2.0	25797.600	3.0
581.3995	28.01	-3.89	54262.630	3.5	71457.740	3.5
581.4134	26.02	-1.41	182408.910	3.0	199603.610	4.0
581.4309	25.02	-.84	178558.300	1.5	195752.480	2.5
581.4410	92.00	-2.10	3790.903	0.0	20989.553	0.0
581.4472	6.00	-4.21	71364.900	1.0	88558.600	1.0
581.4617	22.01	-4.40	12774.810	5.5	29968.080	4.5
581.4766	23.00	-1.94	17181.980	4.5	34374.810	3.5
581.4786	26.00	-2.34	34547.192	2.0	51739.964	2.0
581.4878	30.02	.01	221143.700	3.0	238336.200	2.0
581.4894	23.02	-3.15	145143.430	4.5	162335.880	3.5
581.4980	44.00	-1.80	9033.642	0.0	26230.606	0.0
581.5104	25.01	-4.02	84307.200	4.0	101499.030	4.0
581.5128	25.02	-4.38	115780.230	2.5	132971.990	3.5
581.5135	24.00	-4.41	24833.860	3.0	42025.600	3.0
581.5194	26.00	-2.00	33507.102	3.0	50698.666	2.0
581.5229	26.00	-2.95	37046.000	4.0	54237.460	4.0
581.5330	41.00	-1.61	11937.313	0.0	29133.242	0.0
581.5382	25.01	-4.49	55115.800	2.0	72306.810	2.0
581.5398	26.02	-.71	182412.650	4.0	199603.610	4.0
581.5430	90.01	-3.30	1774.465	0.0	18970.098	0.0
581.5487	17.01	-1.32	161348.400	1.0	178539.100	2.0
581.5557	22.00	-3.27	28702.768	3.0	45893.260	3.0
581.5740	42.00	-.64	29843.282	0.0	47037.998	0.0
581.5760	24.01	-4.61	69478.060	2.5	86667.950	1.5
581.5850	64.01	-1.08	12663.231	0.0	29857.622	0.0
581.5892	24.00	-3.26	31028.330	2.0	48217.830	2.0
581.5906	25.00	-4.78	33825.490	2.5	51014.950	3.5
581.5920	75.00	-2.29	17180.052	0.0	34374.236	0.0
581.5953	22.00	-2.23	31725.750	1.0	48915.070	2.0
581.6028	26.00	-4.20	34039.495	4.0	51228.595	5.0
581.6083	26.00	-2.91	34636.820	2.0	51825.758	3.0
581.6264	9.02	.11	441406.460	3.5	458594.860	2.5
581.6301	18.01	-2.26	170400.940	2.5	187589.230	2.5
581.6352	26.00	-1.14	36686.159	4.0	53874.300	5.0
581.6491	7.00	-2.00	95493.660	1.5	112681.389	2.5
581.6510	73.00	-.42	26616.982	0.0	43809.422	0.0
581.6568	9.00	-2.56	118936.797	1.5	136124.300	.5
581.6795	22.00	-3.75	25537.276	1.0	42724.110	2.0
581.6823	28.01	-2.17	101740.270	3.5	118927.020	4.5
581.6837	25.00	-1.28	34343.900	4.5	51530.610	3.5
581.6850	26.01	-4.88	83305.370	3.5	100492.040	3.5
581.6938	22.00	-2.00	26657.409	4.0	43843.820	3.0
581.6945	26.02	-.47	182408.910	3.0	199595.300	3.0
581.7067	23.00	-1.12	15270.420	1.5	32456.450	1.5
581.7209	25.00	-1.17	51530.610	3.5	68716.220	4.5
581.7287	27.00	-6.83	7442.410	3.5	24627.790	4.5
581.7314	23.03	-2.39	237638.800	2.0	254824.100	1.0
581.7361	26.02	-1.39	182392.550	2.0	199577.710	2.0
581.7415	30.02	.03	285723.500	3.0	302908.500	4.0
581.7446	26.02	-.34	182418.700	4.0	199603.610	4.0
581.7463	24.01	-4.68	52321.300	4.5	69506.160	3.5
581.7470	72.00	-1.93	14357.039	0.0	31546.642	0.0
581.7483	23.01	-4.42	101258.010	1.5	118442.810	1.5
581.7608	23.00	.57	24992.880	3.5	42177.310	4.5
581.7686	24.00	-2.20	31377.960	4.0	48562.160	4.0
581.7692	17.00	-3.02	85917.937	.5	103102.120	1.5
581.7700	6.00	-2.87	71364.900	1.0	88549.060	1.0
581.7780	58.01	-1.50	8065.752	0.0	25254.439	0.0
581.7991	28.01	-1.34	93390.060	2.5	110573.360	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
581.8015	18.01	-1.74	190511.190	2.5	207694.420	3.5
581.8021	26.01	-6.15	26055.400	2.5	43238.610	2.5
581.8116	28.01	-2.27	101740.270	3.5	118923.200	3.5
581.8136	24.01	-4.32	50687.630	2.5	67870.500	1.5
581.8150	27.00	-1.69	29563.170	1.5	46746.000	2.5
581.8211	26.02	-1.75	182412.650	4.0	199595.300	3.0
581.8307	9.00	-2.00	116040.883	1.5	133223.250	.5
581.8367	7.00	-4.68	97805.810	1.5	114988.000	.5
581.8367	7.00	-3.62	97805.810	1.5	114988.000	1.5
581.8367	7.00	-3.12	97805.810	1.5	114988.000	2.5
581.8434	23.00	-2.46	15664.750	1.5	32846.740	2.5
581.8516	26.02	.71	188013.400	4.0	205195.150	5.0
581.8529	24.00	-4.46	31028.330	2.0	48210.040	1.0
581.8740	63.01	-1.81	9840.217	0.0	27026.068	0.0
581.8770	8.01	-4.89	260959.000	1.5	278140.000	1.5
581.9010	92.00	-1.71	6936.547	0.0	24121.601	0.0
581.9129	24.01	-3.74	52298.120	3.5	69478.060	2.5
581.9160	7.00	-2.86	97770.150	.5	114950.000	.5
581.9160	7.00	-3.30	97770.150	.5	114950.000	1.5
581.9183	16.01	-.59	113461.220	1.5	130641.000	1.5
581.9193	9.02	-3.57	413195.000	2.5	430374.750	2.5
581.9379	38.01	-.86	56057.900	0.0	73241.864	0.0
581.9393	24.01	-2.52	73411.940	1.5	90591.100	2.5
581.9430	41.00	-.94	12905.203	0.0	30089.017	0.0
581.9430	70.01	-.69	46297.417	0.0	63481.231	0.0
581.9465	15.00	-4.52	58174.450	1.5	75353.400	1.5
581.9495	6.00	-2.72	71364.900	1.0	88543.760	0.0
581.9691	28.01	-2.69	114942.420	1.5	132120.700	.5
581.9775	10.01	-1.88	321422.850	4.5	338600.880	4.5
581.9782	10.01	-2.53	321422.850	4.5	338600.860	5.5
581.9785	10.01	-2.80	321422.880	5.5	338600.880	4.5
581.9792	10.01	-1.24	321422.880	5.5	338600.860	5.5
581.9803	28.01	-4.09	121317.890	3.5	138495.840	4.5
581.9816	28.01	-.59	103025.580	2.5	120203.490	2.5
581.9827	25.01	-4.86	49465.130	3.0	66643.010	4.0
581.9897	9.02	-2.34	441158.600	1.5	458336.270	.5
581.9904	10.01	-1.50	321423.230	4.5	338600.880	4.5
581.9907	10.01	-2.93	321423.240	3.5	338600.880	4.5
581.9918	23.01	-1.98	20343.000	2.0	37520.610	3.0
581.9950	22.00	-2.90	14028.470	2.0	31205.985	3.0
581.9952	24.00	-1.92	31048.850	1.0	48226.360	0.0
582.0120	9.00	-4.91	118936.797	1.5	136113.810	1.5
582.0135	24.01	-2.45	52321.300	4.5	69498.270	4.5
582.0211	28.00	-3.50	33500.854	3.0	50677.599	3.0
582.0260	26.02	-.67	182418.700	4.0	199595.300	3.0
582.0294	6.00	-2.87	71364.900	1.0	88541.400	2.0
582.0370	60.00	-1.30	1048.548	0.0	18229.586	0.0
582.0454	9.00	-2.15	118427.823	1.5	135603.850	2.5
582.0620	41.00	-.97	16696.107	0.0	33876.407	0.0
582.0650	23.00	-4.57	20828.480	2.5	38003.930	1.5
582.0690	42.00	-1.42	23551.996	0.0	40732.090	0.0
582.0716	22.00	-4.73	29768.655	2.0	46943.910	2.0
582.0990	64.01	-1.18	12582.573	0.0	29761.781	0.0
582.1069	14.00	-2.61	45276.188	1.0	62450.400	1.0
582.1081	22.00	-3.47	28638.832	2.0	45813.010	2.0
582.1084	21.00	-3.69	18571.400	2.5	35745.570	2.5
582.1090	26.00	-3.67	33412.706	3.0	50586.857	3.0
582.1118	28.01	-4.73	101740.270	3.5	118914.340	4.5
582.1209	27.00	-4.70	22475.360	4.5	39649.160	3.5
582.1216	28.01	-2.71	116893.980	2.5	134067.760	1.5
582.1236	18.01	-3.86	186171.260	.5	203344.980	1.5
582.1274	22.00	-2.30	31685.900	0.0	48859.510	1.0
582.1277	28.01	-.71	103025.580	2.5	120199.180	1.5
582.1369	26.02	.69	201919.530	4.0	219092.860	5.0
582.1406	6.00	-3.95	71385.380	2.0	88558.600	1.0
582.1541	10.01	-3.26	321428.060	3.5	338600.880	4.5
582.1588	22.00	-2.00	25438.898	2.0	42611.580	1.0
582.1605	9.00	-2.74	118936.797	1.5	136109.430	.5
582.1619	26.01	-4.80	54870.620	2.5	72043.210	1.5
582.1827	22.00	-4.68	28896.062	5.0	46068.040	4.0
582.1840	45.00	-2.35	13873.093	0.0	31049.793	0.0
582.1867	23.00	-1.45	24992.880	3.5	42164.740	3.5
582.1870	39.00	-1.11	15970.189	0.0	33146.801	0.0
582.1938	24.00	-1.88	47630.430	6.0	64802.080	5.0
582.1986	28.01	-4.99	99340.550	3.5	116512.060	3.5
582.1990	57.00	-.20	9840.217	0.0	27016.475	0.0
582.2050	23.00	-.15	24898.730	2.5	42070.050	2.5
582.2050	9.02	-3.75	389737.630	.5	406908.950	1.5
582.2104	28.01	-2.69	100490.950	1.5	117662.110	1.5
582.2118	18.01	-2.40	190106.230	1.5	207277.350	1.5
582.2156	22.00	-6.01	11531.760	2.0	28702.768	3.0
582.2318	23.00	-3.66	20789.130	2.5	37959.660	2.5
582.2318	28.01	-3.35	97799.660	1.5	114970.190	.5
582.2515	25.00	-.21	51546.270	4.5	68716.220	4.5
582.2545	23.01	-3.82	20089.560	1.0	37259.420	1.0
582.2552	10.01	-.27	321431.040	5.5	338600.880	4.5
582.2559	10.01	-2.32	321431.040	5.5	338600.860	5.5
582.2566	10.01	-.19	321431.060	6.5	338600.860	5.5
582.2586	25.00	-4.56	34845.260	.5	52015.000	1.5
582.2600	74.00	-1.63	22342.133	0.0	39516.591	0.0
582.2735	29.01	-4.80	131312.700	3.0	148482.000	3.0
582.2843	24.00	-3.73	31048.850	1.0	48217.830	2.0
582.2881	9.02	-2.12	441167.400	.5	458336.270	.5
582.2905	26.02	-.72	182408.910	3.0	199577.710	2.0
582.2911	22.00	-4.78	29971.078	4.0	47139.860	4.0
582.2918	24.00	-3.00	31393.400	5.0	48562.160	4.0
582.2983	26.02	-3.98	189011.840	4.0	206180.410	3.0
582.3034	22.00	-3.56	28596.293	1.0	45764.710	1.0
582.3115	6.00	-2.16	72610.720	2.0	89778.900	3.0
582.3142	26.01	-3.15	44915.070	3.5	62083.170	4.5
582.3149	28.01	-4.57	116275.810	3.5	133443.890	2.5
582.3433	17.00	-2.96	85244.330	.5	102411.570	.5
582.3481	17.01	-2.57	141010.000	2.0	158177.100	1.0
582.3522	28.01	-4.48	102742.740	1.5	119909.720	1.5
582.3532	21.00	-2.19	18504.050	.5	35671.000	1.5
582.3569	23.00	-3.22	15724.220	3.5	32891.060	3.5
582.3599	9.02	-3.44	389737.630	.5	406904.380	.5
582.3688	22.00	-1.38	18287.560	4.0	35454.051	4.0
582.3720	59.01	-1.38	8388.382	0.0	25559.537	0.0
582.3830	57.00	-.87	7985.094	0.0	25155.925	0.0
582.3939	25.02	-4.63	121197.050	2.5	138362.800	3.5
582.3970	64.00	-1.92	161.315	0.0	17331.733	0.0
582.4071	24.00	-2.00	47586.060	5.0	64751.420	4.0
582.4401	26.01	-7.77	27620.390	2.5	44784.780	2.5
582.4482	8.01	-3.64	231350.080	2.5	248514.230	1.5
582.4611	28.01	-1.11	119796.980	2.5	136960.750	2.5
582.4641	6.00	-2.68	71385.380	2.0	88549.060	1.0
582.4823	22.00	-3.40	27418.015	2.0	44581.160	2.0
582.4872	8.03	-1.93	615431.000	2.5	632594.000	1.5
582.5049	6.00	-4.97	72610.720	2.0	89773.200	3.0
582.5157	22.00	-3.90	14028.470	2.0	31190.631	2.0
582.5200	42.01	-1.48	20003.065	0.0	37169.858	0.0
582.5303	24.00	-6.02	7927.470	2.0	25089.200	2.0
582.5307	27.00	-3.29	23184.230	2.5	40345.950	2.5
582.5487	24.00	-3.12	31048.850	1.0	48210.040	1.0
582.5561	27.00	-4.32	27497.060	2.5	44658.030	1.5
582.5731	26.02	-4.66	205672.010	4.0	222832.480	5.0
582.5748	29.01	-.57	121981.680	2.0	139142.100	2.0
582.5758	24.00	-4.73	7810.820	1.0	24971.210	0.0
582.5870	60.01	-1.36	8630.355	0.0	25795.173	0.0
582.5891	24.01	-2.10	67334.200	3.5	84494.200	2.5
582.5935	24.00	-2.78	31355.210	2.0	48515.080	3.0
582.5938	28.01	-2.60	104081.040	4.5	121240.900	3.5
582.6040	18.01	-2.08	191169.520	1.5	208329.080	.5
582.6054	6.00	-3.38	71385.380	2.0	88544.900	3.0
582.6115	26.01	-3.29	47674.780	1.5	64834.120	1.5
582.6206	28.01	-2.36	116893.980	2.5	134053.050	2.5
582.6247	22.00	-2.91	25699.950	2.0	42858.900	3.0
582.6261	26.02	-2.23	182444.700	3.0	199603.610	4.0
582.6297	17.00	-3.85	83894.037	3.5	101052.840	2.5
582.6298	27.00	-.80	29216.370	2.5	46375.170	1.5
582.6300	56.00	.17	11395.000	0.0	28558.551	0.0
582.6386	25.01	-2.17	53781.700	3.0	70940.240	2.0
582.6590	23.00	-1.78	15688.800	2.5	32846.740	2.5
582.6617	26.00	-2.72	34547.192	2.0	51705.052	2.0
582.6682	28.01	-2.91	101740.270	3.5	118897.940	2.5
582.6740	60.00	-.92	3629.588	0.0	20791.843	0.0
582.6774	30.02	-.29	282950.700	2.0	300108.100	3.0
582.6777	26.01	-4.89	65696.110	4.5	82853.500	5.5
582.6909	17.00	-2.46	84688.637	.5	101845.640	1.5
582.6988	14.00	-2.92	45293.629	2.0	62450.400	1.0
582.7198	24.01	-2.91	53271.070	2.5	70427.220	3.5
582.7242	6.00	-4.02	71385.380	2.0	88541.400	2.0
582.7402	22.00	-5.39	14028.470	2.0	31184.021	1.0
582.7429	22.00	-2.05	30039.211	5.0	47194.680	4.0
582.7438	9.00	-1.99	118936.797	1.5	136092.240	2.5
582.7453	30.02	-.04	282970.600	3.0	300126.000	4.0
582.7472	17.00	-2.21	84648.100	2.5	101803.442	2.5
582.7490	25.00	-1.19	51560.930	5.5	68716.220	4.5
582.7511	21.00	-2.75	18515.770	1.5	35671.000	1.5
582.7560	57.00	-1.08	9114.300	0.0	26274.140	0.0
582.7626	23.00	-4.58	24915.160	1.5	42070.050	2.5
582.7646	24.01	-3.13	73436.270	2.5	90591.100	2.5
582.7813	28.01	-4.67	118877.090	1.5	136031.430	2.5
582.7886	26.00	-3.58	26479.366	1.0	43633.491	2.0
582.8039	22.00	-4.91	29986.185	3.0	47139.860	4.0
582.8060	44.00	-2.00	14921.641	0.0	32080.009	0.0
582.8064	18.01	-3.45	174820.930	.5	191974.530	1.5
582.8190	28.00	-.99	36600.805	2.0	53754.036	2.0
582.8253	9.00	-1.80	118936.797	1.5	136089.840	1.5
582.8328	26.00	-4.53	34039.495	4.0	51192.320	4.0
582.8550	77.00	.19	37989.692	0.0	55146.618	0.0
582.8557	25.01	-4.18	91018.300	3.0	108170.450	2.0
582.8764	25.00	-.65	45754.270	3.5	62905.810	2.5
582.8764	25.01	-3.47	72648.800	4.0	89800.340	4.0
582.8859	23.02	-2.02	144772.020	3.5	161923.280	2.5
582.8876	24.00	-2.78	33113.270	4.0	50264.480	3.0
582.8948	9.03	-.08	662843.000	3.0	679994.000	3.0
582.9033	24.00	-2.34	31364.330	3.0	48515.080	3.0
582.9084	26.02	-1.19	182444.700	3.0	199595.300	3.0
582.9114	28.01	-2.74	114970.190	.5	132120.700	.5
582.9118	26.01	-3.70	44915.070	3.5	62065.570	3.5
582.9244	24.00	-3.90	33060.740	3.0	50210.870	4.0
582.9362	24.01	-4.22	67344.420	2.5	84494.200	2.5
582.9386	24.00	-2.40	35813.730	3.0	52963.440	4.0
582.9414	17.00	-2.21	84988.480	1.5	102138.110	.5
582.9536	7.00	-1.63	95532.120	2.5	112681.389	2.5
582.9702	24.00	-1.95	38537.680	5.0	55686.460	5.0
582.9720	57.00	-.76	7420.492	0.0	24573.975	0.0
582.9774	22.00	-6.00	11639.804	3.0	28788.372	4.0
582.9832	30.02	-1.68	282977.600	4.0	300126.000	4.0
582.9985	25.01	-4.22	53597.130	2.0	70745.080	3.0
583.0032	10.01	-1.58	301948.000	1.5	319095.810	2.5
583.0066	27.00	-.51	28777.270	3.5	45924.980	3.5
583.0134	28.01	-2.73	53601.190	1.5	70748.700	.5
583.0178	28.01	-3.27	104147.290	5.5	121294.670	4.5
583.0284	26.01	-7.61	21711.890	3.5	38858.960	2.5
583.0393	25.00	-1.28	51546.270	4.5	68693.020	5.5
583.0420	23.00	-3.28	20812.990	1.5	37959.660	2.5
583.0471	26.02	-4.07	117950.320	4.0	135096.840	3.0
583.0525	28.01	-3.81	95573.390	3.5	112719.750	3.5
583.0546	30.02	-.62	285723.500	3.0	302869.800	3.0
583.0610	26.02	.62	196901.270	5.0	214047.380	4.0
583.0709	23.00	.70	25111.500	4.5	42257.320	5.5
583.0716	30.02	.10	282977.600	4.0	300123.400	5.0
583.0980	63.00	.49	13711.778	0.0	30861.554	0.0
583.1020	62.01	-1.17	12663.231	0.0	29812.889	0.0
583.1055	26.00	-1.54	36686.159	4.0	53830.960	3.0
583.1191	19.02	-2.04	246625.600	1.5	263770.000	.5
583.1263	7.00	-3.16	97805.810	1.5	114950.000	.5
583.1263	7.00	-2.60	97805.810	1.5	114950.000	1.5
583.1328	24.00	-4.26	33040.100	2.0	50184.100	2.0
583.1440	24.00	-1.93	47692.630	7.0	64836.300	6.0
583.1474	25.02	-3.91	121197.050	2.5	138340.620	2.5
583.1559	22.00	-2.71	8492.421	1.0	25635.740	1.0
583.1580	45.00	-1.72	12663.231	0.0	29811.242	0.0
583.1593	28.00	-2.29	33610.916	2.0	50754.137	2.0
583.1715	19.00	-3.16	13042.880	1.5	30185.740	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
583.1739	28.00	-1.60	34163.294	2.0	51306.085	3.0
583.1740	62.01	-1.26	14437.696	0.0	31585.237	0.0
583.1750	28.01	-3.16	97799.660	1.5	114942.420	1.5
583.1886	19.00	-2.20	13042.880	1.5	30185.240	2.5
583.1903	25.00	-2.14	45940.930	2.5	63083.240	1.5
583.2046	27.00	-3.56	29948.760	2.5	47090.650	2.5
583.2198	9.00	-3.00	118936.797	1.5	136078.240	2.5
583.2270	39.00	-1.14	17018.737	0.0	34164.720	0.0
583.2369	28.01	-3.45	103025.580	2.5	120166.520	1.5
583.2420	26.01	-3.36	54902.420	1.5	72043.210	1.5
583.2475	22.00	-.57	26910.705	6.0	44051.333	6.0
583.2689	24.00	-3.23	33113.270	4.0	50253.270	5.0
583.3182	25.00	-.31	45156.110	2.5	62294.660	3.5
583.3210	44.00	.17	30165.913	0.0	47309.133	0.0
583.3305	27.00	-3.76	23207.760	1.5	40345.950	2.5
583.3333	26.00	-4.33	33695.378	5.0	50833.485	5.0
583.3389	17.00	-2.67	83364.927	.5	100502.871	1.5
583.3431	29.01	-.82	121981.680	2.0	139119.500	3.0
583.3437	24.01	-2.73	67070.480	1.5	84208.280	.5
583.3540	30.02	-.70	282970.600	3.0	300108.100	3.0
583.3590	74.00	-1.33	22342.133	0.0	39484.236	0.0
583.3669	24.00	-2.86	31377.960	4.0	48515.080	3.0
583.3757	25.01	-2.49	85543.230	5.0	102680.090	5.0
583.3933	26.00	-3.95	21038.987	2.0	38175.332	3.0
583.3938	26.02	.63	149285.000	3.0	166421.330	4.0
583.4057	26.01	-4.04	44929.590	2.5	62065.570	3.5
583.4258	18.00	-3.87	106237.597	2.0	123372.987	2.0
583.4310	75.00	-1.23	11695.340	0.0	28835.327	0.0
583.4343	25.02	-2.41	115762.600	1.5	132897.740	2.5
583.4353	23.00	-1.30	24898.730	2.5	42033.840	1.5
583.4391	28.01	-4.94	116838.330	1.5	133973.330	2.5
583.4611	22.00	-3.43	30060.328	4.0	47194.680	4.0
583.4615	27.00	-1.59	34133.590	3.5	51267.930	4.5
583.4618	7.00	-2.09	95475.280	.5	112609.612	1.5
583.4731	8.03	-.98	615460.000	1.5	632594.000	1.5
583.4786	28.01	-3.91	101740.270	3.5	118874.110	3.5
583.4813	22.00	-2.47	31725.750	1.0	48859.510	1.0
583.4841	28.00	-3.32	33610.916	2.0	50744.593	1.0
583.4867	28.01	-4.61	117074.700	3.5	134208.300	2.5
583.4900	41.00	-1.08	13066.518	0.0	30204.772	0.0
583.4905	28.01	-4.33	118897.940	2.5	136031.430	2.5
583.4925	26.01	-5.64	27620.390	2.5	44758.820	3.5
583.5068	26.02	-1.93	182444.700	3.0	199577.710	2.0
583.5081	26.00	-2.54	34328.733	3.0	51461.707	4.0
583.5310	30.02	-.90	282950.700	2.0	300083.000	3.0
583.5382	25.00	-.08	51560.930	5.5	68693.020	5.5
583.5402	26.00	-1.70	40842.130	3.0	57974.160	2.0
583.5426	26.01	-5.14	27314.930	3.5	44446.890	3.5
583.5466	17.00	-2.77	82918.893	2.5	100050.736	1.5
583.5478	26.00	-4.38	34017.084	1.0	51148.892	2.0
583.5482	26.00	-4.82	34328.733	3.0	51460.530	3.0
583.5497	18.01	-3.80	143107.600	2.5	160239.350	1.5
583.5501	26.01	-2.85	47674.780	1.5	64806.520	.5
583.5501	28.01	-3.32	101247.370	2.5	118379.110	2.5
583.5555	25.01	-3.50	55115.800	2.0	72247.380	3.0
583.5579	26.00	-3.98	22838.320	2.0	39969.830	3.0
583.5590	25.02	-.87	178816.960	2.5	195948.440	3.5
583.5590	42.00	-2.59	11050.080	0.0	28186.308	0.0
583.5777	26.01	-3.91	50142.930	2.5	67273.860	1.5
583.5792	22.00	-1.20	29907.273	2.0	47038.160	3.0
583.5923	30.02	-2.14	282977.600	4.0	300108.100	3.0
583.6056	24.00	-1.85	47621.310	3.0	64751.420	4.0
583.6080	92.00	-.61	10243.505	0.0	27378.294	0.0
583.6101	24.01	-4.35	34813.060	5.5	51943.040	4.5
583.6332	8.01	-3.33	231296.050	1.5	248425.350	.5
583.6370	62.01	-1.75	7985.094	0.0	25119.032	0.0
583.6549	22.00	-1.92	26772.965	5.0	43901.630	4.0
583.6704	29.01	-4.03	117231.690	1.0	134359.900	1.0
583.6758	24.00	-4.02	24897.550	4.0	42025.600	3.0
583.6946	30.02	-1.05	282970.600	3.0	300098.100	4.0
583.6979	14.00	-3.83	45293.629	2.0	62421.030	3.0
583.7085	23.00	-3.11	15770.720	4.5	32897.810	5.5
583.7150	70.01	-.75	32182.351	0.0	49313.999	0.0
583.7191	25.01	-4.61	49882.150	4.0	67008.930	3.0
583.7215	29.01	-4.63	129759.600	1.0	146886.310	1.0
583.7317	28.01	-3.71	76402.030	2.5	93528.440	3.5
583.7400	79.00	-.29	37183.117	0.0	54314.031	0.0
583.7433	26.01	-3.64	86482.750	3.5	103608.820	4.5
583.7492	22.00	-1.55	29912.262	3.0	47038.160	3.0
583.7498	22.00	-3.86	28638.832	2.0	45764.710	1.0
583.7651	25.01	-4.59	49517.580	5.0	66643.010	4.0
583.7661	30.02	-.53	282950.700	2.0	300076.100	2.0
583.7695	26.00	-1.63	34636.820	2.0	51762.120	2.0
583.7710	92.01	-2.11	4516.821	0.0	21646.826	0.0
583.7753	28.01	-4.07	96052.480	2.5	113177.610	3.5
583.7828	24.00	-1.42	33934.880	3.0	51059.790	4.0
583.8033	26.02	.61	196886.010	6.0	214010.320	5.0
583.8150	41.00	-1.77	11211.395	0.0	28340.109	0.0
583.8330	22.00	-3.42	29914.720	3.0	47038.160	3.0
583.8355	26.00	-2.37	31805.059	3.0	48928.423	2.0
583.8357	24.00	-2.50	33060.740	3.0	50184.100	2.0
583.8477	22.00	-4.30	29907.273	2.0	47030.280	3.0
583.8480	25.00	-4.05	34423.270	3.5	51546.270	4.5
583.8539	22.00	-3.41	31205.985	3.0	48328.810	4.0
583.8640	41.00	-1.35	8952.985	0.0	26080.261	0.0
583.8643	23.00	-2.02	15724.220	3.5	32846.740	2.5
583.8653	24.00	-1.98	24286.540	1.0	41409.030	2.0
583.8752	22.00	-4.26	22404.690	3.0	39526.890	2.0
583.8835	55.00	-2.24	11178.270	0.0	28304.974	0.0
583.8940	90.01	-3.83	0.000	0.0	17126.396	0.0
583.8970	18.01	-4.05	155708.020	.5	172829.580	1.5
583.8990	74.00	-1.99	17018.737	0.0	34144.987	0.0
583.9063	23.00	-.10	24992.880	3.5	42114.170	3.5
583.9141	26.00	-4.78	27543.000	1.0	44664.061	2.0
583.9162	28.01	-4.09	99154.810	4.5	116275.810	3.5
583.9185	24.00	-4.01	39158.630	4.0	56279.560	4.0
583.9332	30.02	-.39	282977.600	4.0	300098.100	4.0
583.9380	17.00	-4.23	84988.480	1.5	102108.640	1.5
583.9387	23.00	-2.88	15770.720	4.5	32891.060	3.5

WAVELENGTH	ELEM	LOGCF	ELO	JLO	EUP	JUP
583.9554	7.00	-3.77	97770.150	.5	114890.000	1.5
583.9756	22.00	-7.22	11776.806	4.0	28896.062	5.0
583.9790	57.00	-2.25	1048.548	0.0	18172.451	0.0
583.9810	12.02	.08	545820.400	2.0	562939.500	2.0
583.9934	17.00	-1.45	83130.900	1.5	100249.636	2.5
583.9990	42.00	-.67	27181.584	0.0	44304.901	0.0
584.0069	18.01	-2.75	172816.210	.5	189934.550	.5
584.0076	28.01	-4.49	116732.510	2.5	133850.830	3.5
584.0120	78.00	-1.79	15405.586	0.0	32528.522	0.0
584.0179	22.00	-4.79	29912.262	3.0	47030.280	3.0
584.0205	28.01	-2.93	98969.440	5.5	116087.380	4.5
584.0233	22.00	-3.32	25493.722	2.0	42611.580	1.0
584.0352	25.02	-3.36	115780.230	2.5	132897.740	2.5
584.0470	64.01	-1.06	12824.546	0.0	29946.456	0.0
584.0594	26.01	-4.06	62322.500	3.5	79439.300	3.5
584.0765	30.02	-1.99	285753.500	2.0	302869.800	3.0
584.0816	28.00	-4.69	33590.159	4.0	50706.310	4.0
584.0880	22.00	-4.42	20209.444	2.0	37325.407	2.0
584.0884	7.00	-2.59	95493.660	1.5	112609.612	1.5
584.0905	9.02	-.09	441276.720	2.5	458392.610	1.5
584.0987	25.02	.30	176641.140	3.5	193756.790	4.5
584.1352	26.02	-1.23	182480.720	2.0	199595.300	3.0
584.1448	19.02	-3.17	225051.000	2.5	242165.300	1.5
584.1454	24.01	-4.45	67379.920	1.5	84494.200	2.5
584.1530	14.00	-3.30	47284.061	1.0	64398.120	2.0
584.1697	24.00	-1.69	47688.510	4.0	64802.080	5.0
584.1810	6.00	-4.49	71385.380	2.0	88498.620	2.0
584.1891	24.01	-2.90	53566.220	3.5	70679.220	4.5
584.1902	23.00	-3.41	17054.870	2.5	34167.840	2.5
584.1922	28.01	-4.96	95573.390	3.5	112686.300	2.5
584.2002	26.00	-4.73	33695.378	5.0	50808.053	4.0
584.2025	22.00	-2.92	8492.421	1.0	25605.030	0.0
584.2096	30.02	-.92	282970.600	3.0	300083.000	3.0
584.2154	28.01	-2.43	115870.280	2.5	132982.510	1.5
584.2202	26.02	-.08	201892.440	5.0	219004.530	4.0
584.2230	72.01	-1.57	17744.654	0.0	34861.406	0.0
584.2284	23.01	-5.95	20089.560	1.0	37201.410	0.0
584.2335	28.01	-3.98	120166.520	1.5	137278.220	1.5
584.2384	22.00	-3.82	28896.062	5.0	46007.620	4.0
584.2390	60.01	-1.11	10243.505	0.0	27359.788	0.0
584.2470	41.00	-2.49	2742.356	0.0	19858.405	0.0
584.2490	76.00	-1.39	22422.791	0.0	39538.781	0.0
584.2529	17.00	-3.81	84485.309	1.5	101596.440	.5
584.2530	24.00	-1.85	24282.340	4.0	41393.470	5.0
584.2600	62.01	-1.97	8630.355	0.0	25746.023	0.0
584.2639	24.00	-5.92	8095.210	3.0	25206.020	3.0
584.2833	22.00	-3.69	28702.768	3.0	45813.010	2.0
584.2892	23.01	-9.50	20242.320	4.0	37352.390	5.0
584.2926	9.02	-4.99	442694.580	1.5	459804.550	1.5
584.2927	22.00	-2.86	20062.980	1.0	37172.947	1.0
584.3129	26.00	-4.90	34039.495	4.0	51148.870	3.0
584.3.55	28.01	-2.41	104081.040	4.5	121190.340	4.5
584.3209	24.00	-2.41	24299.890	2.0	41409.030	2.0
584.3213	22.00	-2.84	31805.940	2.0	48915.070	2.0
584.3240	26.02	-1.73	196901.270	5.0	214010.320	5.0
584.3290	92.01	-2.28	6371.944	0.0	23485.591	0.0
584.3520	28.01	-4.41	118923.200	3.5	136031.430	2.5
584.3602	15.01	-1.82	88894.000	1.0	106001.990	1.0
584.3766	22.01	-5.51	24961.340	1.5	42068.850	1.5
584.3771	18.00	-2.98	107496.463	1.0	124603.957	2.0
584.3776	18.01	-3.94	138243.550	1.5	155351.030	1.5
584.3804	25.02	-1.29	176390.670	2.5	193498.070	3.5
584.3817	17.00	-2.47	84485.309	1.5	101592.670	.5
584.3824	25.00	-2.71	34423.270	3.5	51530.610	3.5
584.3913	27.00	-4.37	33945.900	2.5	51052.980	3.5
584.3916	22.00	-4.95	11531.760	2.0	28638.832	2.0
584.3940	73.00	-2.27	9678.902	0.0	26790.645	0.0
584.3974	24.01	-3.12	67387.300	2.5	84494.200	2.5
584.3981	26.00	-4.43	40534.180	3.0	57641.060	3.0
584.4211	17.00	-1.28	84648.100	2.5	101754.307	3.5
584.4278	28.00	-1.99	33610.916	2.0	50716.927	1.0
584.4343	24.01	-2.71	73406.680	.5	90512.500	1.5
584.4374	28.01	-1.31	116824.150	2.5	133929.880	3.5
584.4388	28.01	-4.05	117872.780	2.5	134978.470	2.5
584.4425	28.01	-3.16	53601.190	1.5	70706.770	1.5
584.4453	24.01	-3.96	73485.600	3.5	90591.100	2.5
584.4453	30.02	-1.41	282970.600	3.0	300076.100	2.0
584.4480	25.00	-2.98	38351.780	.5	55457.200	.5
584.4487	30.02	-1.26	282977.600	4.0	300083.000	3.0
584.4552	25.00	-4.03	41031.480	4.5	58136.690	3.5
584.4593	24.00	-1.93	24303.940	3.0	41409.030	2.0
584.4630	24.00	-1.76	45566.020	3.0	62671.000	4.0
584.4662	22.00	-3.67	28788.372	4.0	45893.260	3.0
584.4840	78.00	.18	38312.322	0.0	55421.430	0.0
584.4986	24.00	-2.71	29420.900	1.0	46524.840	2.0
584.5030	57.00	-2.08	1048.548	0.0	18157.100	0.0
584.5050	55.00	-1.10	11732.308	0.0	28840.802	0.0
584.5136	30.02	-1.82	285723.500	3.0	302827.000	2.0
584.5150	24.00	-3.77	31355.210	2.0	48458.670	2.0
584.5247	26.00	-1.94	40594.413	4.0	57697.590	4.0
584.5260	74.00	-.35	29198.022	0.0	46305.901	0.0
584.5275	28.00	-2.48	36600.805	2.0	53703.899	1.0
584.5325	6.00	-2.68	70743.950	1.0	87846.900	0.0
584.5382	23.01	-4.78	20156.640	0.0	37259.420	1.0
584.5478	30.02	-2.68	282950.700	2.0	300053.200	2.0
584.5506	28.00	-4.25	40484.282	2.0	57586.700	2.0
584.5529	28.01	-1.39	119796.980	2.5	136899.330	1.5
584.5710	64.01	-1.48	12663.231	0.0	29769.793	0.0
584.5770	63.00	-.17	19357.805	0.0	36464.191	0.0
584.5870	72.00	-1.86	13953.751	0.0	31059.845	0.0
584.5952	22.00	-3.47	27480.047	3.0	44581.160	2.0
584.6090	41.00	-1.94	11292.053	0.0	28397.503	0.0
584.6108	22.00	-3.76	8436.618	0.0	25537.276	1.0
584.6141	24.01	-3.23	73411.940	1.5	90512.500	1.5
584.6196	24.01	-2.98	67393.800	3.5	84494.200	2.5
584.6228	22.00	-4.60	14105.680	3.0	31205.985	3.0
584.6230	27.02	-4.58	155702.400	1.5	172804.700	2.5
584.6341	26.00	-3.55	37157.546	2.0	54257.520	2.0
584.6346	6.00	-2.49	70743.950	1.0	87843.910	1.0

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
584.6370	23.00	.81	25253.530	5.5	42353.420	6.5
584.6469	21.00	-4.88	18571.400	2.5	35671.000	1.5
584.6500	28.01	-3.23	104081.040	4.5	121180.550	5.5
584.6568	27.00	-.72	28777.270	3.5	45876.580	2.5
584.6612	14.00	-2.73	45321.848	3.0	62421.030	3.0
584.6795	17.00	-1.25	84132.262	2.5	101230.909	3.5
584.6986	28.00	-2.68	13521.352	2.0	30619.440	2.0
584.7016	8.01	-4.60	261042.000	2.5	278140.000	1.5
584.7016	8.01	-4.19	261042.000	2.5	278140.000	2.5
584.7150	22.00	-1.79	8602.340	2.0	25699.950	2.0
584.7153	24.00	-4.34	33113.270	4.0	50210.870	4.0
584.7222	26.02	-4.69	206233.310	2.0	223330.710	3.0
584.7237	9.00	-3.18	116987.394	3.5	134084.750	2.5
584.7249	24.00	-2.50	28637.000	3.0	45734.320	2.0
584.7268	14.00	-2.67	39683.163	0.0	56780.427	1.0
584.7320	40.00	-.76	17018.737	0.0	34120.589	0.0
584.7362	26.02	-.37	182480.720	2.0	199577.710	2.0
584.7498	55.00	-2.06	11732.308	0.0	28833.639	0.0
584.7577	27.00	-3.55	33945.900	2.5	51042.260	2.5
584.7687	25.00	-1.51	44978.980	1.5	62075.020	2.5
584.7717	17.00	-1.38	83894.037	3.5	100989.990	3.5
584.7721	24.00	-1.41	45566.020	3.0	62661.960	3.0
584.7770	72.00	-.95	22342.133	0.0	39442.669	0.0
584.7779	28.01	-4.61	112686.300	2.5	129782.070	3.5
584.7875	6.00	-2.99	80782.510	1.0	97878.000	2.0
584.7909	20.02	-2.40	344257.920	1.0	361353.310	1.0
584.8076	26.00	-3.63	26339.682	2.0	43434.585	3.0
584.8114	26.00	-1.75	37162.729	3.0	54257.520	2.0
584.8152	21.00	-1.80	24866.180	1.5	41960.860	2.5
584.8268	24.00	-3.33	31364.330	3.0	48458.670	2.0
584.8380	57.00	-.14	13147.176	0.0	30245.928	0.0
584.8398	26.02	-3.66	205672.010	4.0	222765.970	4.0
584.8501	20.02	-1.91	323655.060	2.0	340748.720	2.0
584.8556	13.01	-2.70	132819.700	3.0	149913.200	2.0
584.8556	13.01	-1.52	132819.700	3.0	149913.200	3.0
584.8556	13.01	-.09	132819.700	3.0	149913.200	4.0
584.8624	13.01	-1.15	132819.900	2.0	149913.200	2.0
584.8624	13.01	-.42	132819.900	1.0	149913.200	2.0
584.8624	13.01	-.62	132819.900	2.0	149913.200	3.0
584.8670	62.01	-1.46	12743.888	0.0	29841.792	0.0
584.8689	26.02	-3.12	114351.920	3.0	131445.030	2.0
584.8744	26.02	.77	196881.470	7.0	213974.420	6.0
584.8758	24.00	-3.05	35870.530	4.0	52963.440	4.0
584.8782	26.02	.68	183431.280	5.0	200524.120	5.0
584.8860	42.00	-.50	28552.762	0.0	45650.111	0.0
584.8946	25.00	-1.37	34423.270	3.5	51515.630	2.5
584.8950	57.01	-1.17	21293.585	0.0	38390.671	0.0
584.9007	24.00	-2.02	31048.000	7.0	48140.180	7.0
584.9254	26.02	-4.52	165719.200	4.0	182810.660	5.0
584.9388	17.00	-1.78	84132.262	2.5	101223.330	2.5
584.9463	24.00	-3.54	31049.330	6.0	48140.180	7.0
584.9504	24.00	-1.10	47621.310	3.0	64712.040	3.0
584.9645	26.00	-4.68	29320.050	1.0	46410.366	1.0
584.9680	73.00	-2.70	10566.135	0.0	27661.087	0.0
584.9688	7.00	-3.01	95475.280	.5	112565.470	.5
584.9697	26.00	-3.28	29798.960	4.0	46889.126	4.0
584.9730	42.00	-.04	28552.762	0.0	45647.568	0.0
584.9955	25.00	-4.11	34463.370	1.5	51552.780	.5
585.0209	28.01	-4.99	120189.550	.5	137278.220	1.5
585.0212	22.00	-4.36	29855.248	1.0	46943.910	2.0
585.0229	24.00	-4.95	36552.130	3.0	53640.740	3.0
585.0236	6.00	-2.29	70743.950	1.0	87832.540	2.0
585.0298	26.02	-1.23	196886.010	6.0	213974.420	6.0
585.0312	22.00	-2.50	25635.740	1.0	42724.110	2.0
585.0315	23.00	-1.20	15571.900	2.5	32660.260	2.5
585.0322	28.01	-3.66	101740.270	3.5	118828.610	2.5
585.0685	25.00	-4.14	35041.370	3.5	52128.650	2.5
585.1048	6.00	-2.74	70743.950	1.0	87830.170	1.0
585.1209	28.01	-2.96	51045.460	4.5	68131.210	3.5
585.1274	25.01	-4.81	89800.340	4.0	106885.900	4.0
585.1455	28.01	-3.69	115827.120	3.5	132912.150	2.5
585.1465	26.02	-.63	201919.530	4.0	219004.530	4.0
585.1469	24.00	-5.00	24940.610	2.0	42025.600	3.0
585.1482	22.00	-5.29	14105.680	3.0	31190.631	2.0
585.1500	30.02	-2.71	285723.500	3.0	302808.400	4.0
585.1520	42.00	-.10	28552.762	0.0	45642.339	0.0
585.1531	27.00	-4.07	30443.630	1.5	47528.440	.5
585.1560	74.00	-.52	26213.694	0.0	43303.154	0.0
585.1630	64.00	-1.14	967.890	0.0	18057.145	0.0
585.1743	7.00	-3.07	97805.810	1.5	114890.000	1.5
585.1825	25.01	-4.61	91018.300	3.0	108102.250	3.0
585.1839	29.01	-4.19	116643.960	3.0	133727.870	2.0
585.1945	30.02	-2.44	218540.300	2.0	235623.900	3.0
585.2048	19.02	-3.77	225082.000	1.5	242165.300	1.5
585.2089	26.02	-.59	183431.280	5.0	200514.460	4.0
585.2092	24.00	-4.69	7927.470	2.0	25010.640	1.0
585.2198	26.00	-1.92	36686.159	4.0	53769.020	4.0
585.2219	26.02	-4.02	205694.090	1.0	222776.890	1.0
585.2270	57.00	-1.12	7581.807	0.0	24669.194	0.0
585.2288	30.02	-2.91	282970.600	3.0	300053.200	2.0
585.2430	22.00	-4.25	27498.975	3.0	44581.160	2.0
585.2488	10.00	-.46	135888.717	1.0	152970.733	0.0
585.2771	18.01	-2.50	190196.160	.5	207277.350	1.5
585.2775	26.00	-4.65	36079.353	3.0	53160.530	3.0
585.2795	28.01	-4.74	112906.930	1.5	129988.050	2.5
585.2819	28.01	-4.45	112422.190	5.5	129503.240	4.5
585.2843	25.01	-4.34	49820.160	2.0	66901.140	2.0
585.2980	24.00	-1.13	45566.020	3.0	62646.600	2.0
585.3017	9.00	-2.36	115917.909	2.5	132998.380	1.5
585.3036	22.00	-1.83	25643.695	3.0	42724.110	2.0
585.3104	18.01	-3.21	191169.520	1.5	208249.740	1.5
585.3134	26.02	-4.32	205694.090	1.0	222774.220	2.0
585.3153	26.00	-4.88	11976.239	4.0	29056.312	3.0
585.3291	9.00	-2.66	116143.579	.5	133223.250	.5
585.3457	26.00	-3.98	40894.972	2.0	57974.160	2.0
585.3477	26.02	.01	188013.400	4.0	205092.530	4.0
585.3494	23.00	-4.37	15688.800	2.5	32767.880	1.5
585.3507	24.00	-3.44	35884.400	5.0	52963.440	4.0
585.3507	28.01	-4.09	120199.180	1.5	137278.220	1.5
585.3518	28.01	-4.55	115739.150	4.5	132818.160	4.5
585.3555	13.01	.03	121480.300	3.0	138559.200	4.0
585.3573	28.01	-1.98	116824.150	2.5	133903.000	1.5
585.3603	25.00	-4.30	41031.480	4.5	58110.240	4.5
585.3659	26.00	-2.01	33801.555	2.0	50880.152	1.0
585.3668	56.01	-1.16	4873.850	0.0	21957.156	0.0
585.3703	23.00	-1.97	15270.420	1.5	32348.890	.5
585.3727	26.01	-7.41	21581.640	4.5	38660.040	3.5
585.3789	26.02	-3.06	205672.010	4.0	222750.230	3.0
585.4038	7.00	-2.06	95532.120	2.5	112609.612	1.5
585.4066	28.01	-4.29	119315.440	2.5	136392.850	3.5
585.4114	17.00	-3.10	84648.100	2.5	101725.370	1.5
585.4148	23.00	-1.23	24992.880	3.5	42070.050	2.5
585.4258	18.01	-3.85	186074.350	2.5	203151.200	2.5
585.4272	9.02	-1.82	441315.800	.5	458392.610	1.5
585.4299	6.00	-4.16	80801.270	2.0	97878.000	2.0
585.4309	21.01	-5.46	10944.510	2.0	28021.210	2.0
585.4447	25.00	-3.95	34938.700	4.5	52015.000	3.5
585.4460	25.02	-.46	178386.000	.5	195462.260	.5
585.4471	24.01	-4.06	73436.270	2.5	90512.500	1.5
585.4522	24.00	-1.32	45614.880	4.0	62690.960	5.0
585.4622	26.02	.85	181772.590	6.0	198848.380	7.0
585.4626	26.00	-4.56	36079.353	3.0	53155.130	4.0
585.4817	28.01	-3.62	97799.660	1.5	114874.880	2.5
585.4824	28.02	-4.66	121412.200	2.0	138487.400	3.0
585.4985	28.01	-4.66	120203.490	2.5	137278.220	1.5
585.5074	26.00	-2.08	37162.729	3.0	54237.200	4.0
585.5131	22.00	-3.08	25537.276	1.0	42611.580	1.0
585.5240	64.01	-1.07	12824.546	0.0	29903.265	0.0
585.5407	30.02	-2.28	285753.500	2.0	302827.000	2.0
585.5445	23.00	-1.86	15664.750	1.5	32738.140	1.5
585.5580	57.00	-1.32	2984.328	0.0	20062.056	0.0
585.5654	26.02	-2.43	205672.010	4.0	222744.790	5.0
585.5853	23.01	-6.47	20280.190	5.0	37352.390	5.0
585.5987	7.00	-2.31	95493.660	1.5	112565.470	.5
585.6089	26.00	-2.64	34636.820	2.0	51708.330	2.0
585.6124	27.00	-2.80	27497.060	2.5	44568.470	2.5
585.6196	30.02	-2.32	282977.600	4.0	300048.800	5.0
585.6220	64.00	-1.02	967.890	0.0	18043.751	0.0
585.6573	12.02	-1.50	564664.600	2.0	581734.700	1.0
585.6573	12.02	-1.50	564664.600	2.0	581734.700	1.0
585.6620	74.00	-1.60	20890.298	0.0	37964.993	0.0
585.6635	20.02	-4.11	373401.870	3.0	390471.790	4.0
585.6742	17.00	-1.53	82918.893	2.5	99988.501	2.5
585.6817	9.00	-2.44	119081.820	.5	136151.210	.5
585.6882	28.01	-2.92	99442.860	4.5	116512.060	3.5
585.6896	18.01	-4.89	190942.650	.5	208011.810	1.5
585.6960	64.01	-1.62	9033.642	0.0	26107.346	0.0
585.7272	2.01	-1.73	421353.130	0.0	438425.924	0.0
585.7362	14.00	-3.02	47284.061	1.0	64351.860	1.0
585.7393	28.01	-4.06	118314.820	2.5	135382.530	1.5
585.7403	14.00	-4.57	62596.320	2.0	79664.000	1.0
585.7609	22.00	-2.22	29971.078	4.0	47038.160	3.0
585.7647	26.02	-.56	183457.150	4.0	200524.120	5.0
585.7746	28.00	-.85	33610.916	2.0	50677.599	3.0
585.7760	76.00	-1.12	15324.929	0.0	32396.301	0.0
585.7900	6.02	-2.19	323076.000	0.0	340146.964	0.0
585.7984	27.00	-1.80	34133.590	3.5	51199.580	3.5
585.8045	23.00	-.17	25111.500	4.5	42177.310	4.5
585.8172	24.00	-2.63	33040.100	2.0	50105.540	1.0
585.8270	26.00	-4.35	19621.004	5.0	36686.159	4.0
585.8270	42.00	-1.14	11775.998	0.0	28845.884	0.0
585.8484	22.00	-6.64	11531.760	2.0	28596.293	1.0
585.8537	22.00	-2.01	28896.062	5.0	45960.439	6.0
585.8560	58.01	-1.42	10243.505	0.0	27312.546	0.0
585.8601	26.02	-4.13	205694.090	1.0	222758.280	2.0
585.8663	26.00	-2.94	36766.950	3.0	53830.960	3.0
585.8667	23.00	-3.18	15724.220	3.5	32788.220	4.5
585.8755	26.00	-2.40	34039.495	4.0	51103.237	5.0
585.8976	28.01	-2.93	109675.720	.5	126738.820	1.5
585.9007	24.00	-4.20	36577.730	4.0	53640.740	3.0
585.9022	22.00	-4.52	11639.804	3.0	28702.768	3.0
585.9041	24.00	-1.04	47688.510	4.0	64751.420	4.0
585.9055	28.01	-4.82	113753.040	4.5	130815.910	3.5
585.9201	14.00	-1.73	39955.053	2.0	57017.496	2.0
585.9215	26.00	-3.02	34692.130	1.0	51754.534	1.0
585.9220	26.01	-4.38	54902.420	1.5	71964.810	2.5
585.9244	26.02	-2.25	205672.010	4.0	222734.330	4.0
585.9244	28.01	-3.53	112719.750	3.5	129782.070	3.5
585.9374	24.00	-3.97	33040.100	2.0	50102.040	3.0
585.9446	25.02	-2.47	176695.060	4.5	193756.790	4.5
585.9508	27.00	-4.94	36875.130	1.5	53936.680	2.5
585.9535	25.00	-2.43	45013.550	2.5	62075.020	2.5
585.9564	26.00	-1.08	36686.159	4.0	53747.547	3.0
585.9594	22.00	-1.80	25797.600	3.0	42858.900	3.0
585.9594	15.00	-3.54	64239.500	.5	81300.800	1.5
585.9663	25.01	-4.22	84428.210	5.0	101489.310	5.0
585.9763	22.00	-2.19	26910.705	6.0	43971.513	5.0
585.9934	26.01	-3.83	54904.500	3.5	71964.810	2.5
586.0311	18.00	-2.22	104102.144	1.0	121161.356	1.0
586.0412	18.01	-4.02	170530.310	3.5	187589.230	2.5
586.0420	62.01	-2.34	7097.862	0.0	24161.485	0.0
586.0450	18.02	-2.11	214568.490	0.0	231627.300	1.0
586.0504	27.00	-3.86	27497.060	2.5	44555.710	1.5
586.0564	18.00	-2.89	107496.463	1.0	124554.939	1.0
586.0565	9.00	-2.54	118936.797	1.5	135995.270	.5
586.0591	15.01	-4.78	112607.700	2.0	129666.100	2.0
586.0640	76.00	-2.01	12905.203	0.0	29968.186	0.0
586.0673	28.01	-3.44	121437.680	5.5	138495.840	4.5
586.0727	30.02	-1.85	282950.700	2.0	300008.700	1.0
586.0730	64.01	-1.60	8469.040	0.0	25531.761	0.0
586.0780	62.00	-1.05	3064.986	0.0	20127.561	0.0
586.0790	71.00	-.79	22100.161	0.0	39162.707	0.0
586.0807	26.02	-.71	183456.690	3.0	200514.460	4.0
586.0834	28.01	-3.27	115870.280	2.5	132927.970	1.5
586.0913	22.01	-4.83	12676.990	4.5	29734.450	3.5
586.0965	26.02	.57	183457.150	4.0	200514.460	4.0
586.0970	63.00	-.17	19357.805	0.0	36419.827	0.0
586.1087	26.00	-2.97	34547.192	2.0	51604.146	3.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
586.1128	22.00	-2.48	20795.599	5.0	37852.434	4.0
586.1373	24.00	-1.31	45614.880	4.0	62671.000	4.0
586.1380	13.01	-1.04	121480.300	3.0	138536.400	3.0
586.1380	42.00	-.81	26052.379	0.0	43113.208	0.0
586.1497	21.00	-4.72	24866.180	1.5	41921.940	1.5
586.1586	13.01	-.14	121480.900	2.0	138536.400	3.0
586.1645	28.01	-4.15	120222.890	1.5	137278.220	1.5
586.1796	24.00	-4.42	28679.430	1.0	45734.320	2.0
586.1917	28.01	-2.88	94729.250	2.5	111783.790	3.5
586.1968	24.00	-3.78	21856.940	3.0	38911.330	3.0
586.2171	25.01	-4.91	89465.300	4.0	106519.100	5.0
586.2244	26.00	-4.26	29356.780	2.0	46410.366	1.0
586.2250	22.00	-3.72	31805.940	2.0	48859.510	1.0
586.2308	28.01	-1.44	94067.140	1.5	111120.540	1.5
586.2333	26.00	-.60	36686.159	4.0	53739.488	5.0
586.2363	23.00	-2.10	25111.500	4.5	42164.740	3.5
586.2587	24.00	-2.72	29584.620	2.0	46637.210	3.0
586.2742	24.00	-2.74	28682.180	2.0	45734.320	2.0
586.2772	24.00	-6.17	8307.570	4.0	25359.620	4.0
586.2797	23.01	-2.57	19902.600	0.0	36954.580	1.0
586.2798	22.00	-2.11	29986.185	3.0	47038.160	3.0
586.2800	6.02	-2.31	323076.000	0.0	340132.696	0.0
586.2807	24.00	-4.39	31393.400	5.0	48445.350	6.0
586.3114	22.00	.01	28638.832	2.0	45689.890	3.0
586.3161	23.00	-2.70	17116.920	3.5	34167.840	2.5
586.3443	20.02	-3.94	373401.870	3.0	390451.970	3.0
586.3704	23.00	-2.23	15688.800	2.5	32738.140	1.5
586.3710	57.01	-2.10	7420.492	0.0	24474.541	0.0
586.3890	26.02	-.83	181772.590	6.0	198821.390	6.0
586.3921	28.00	-1.88	34408.574	1.0	51457.285	0.0
586.4062	26.02	.48	183456.690	3.0	200504.990	3.0
586.4066	28.01	-3.69	113753.040	4.5	130801.330	4.5
586.4152	26.02	-4.71	206261.330	4.0	223309.370	5.0
586.4220	26.02	-.60	183457.150	4.0	200504.990	3.0
586.4222	26.00	-2.72	34692.130	1.0	51739.964	2.0
586.4458	7.01	-1.33	209673.650	2.0	226720.800	2.0
586.4482	24.00	-1.26	45614.880	4.0	62661.960	3.0
586.4492	25.00	-4.55	30419.610	2.5	47466.660	1.5
586.4537	26.01	-5.32	21812.040	1.5	38858.960	2.5
586.4574	20.02	-4.01	373425.510	4.0	390472.320	5.0
586.4630	74.00	-1.44	19680.435	0.0	36731.809	0.0
586.4681	13.01	-1.40	132819.700	3.0	149866.200	3.0
586.4750	13.01	-.49	132819.900	2.0	149866.200	3.0
586.4770	63.00	-.44	19277.147	0.0	36328.114	0.0
586.4864	24.01	-3.47	53271.070	2.5	70317.040	2.5
586.4905	23.00	-4.00	20789.130	2.5	37834.980	1.5
586.4963	6.00	-3.55	70743.950	1.0	87789.630	1.0
586.5056	28.01	-4.03	120166.520	1.5	137211.930	.5
586.5060	60.01	-1.34	11292.053	0.0	28342.177	0.0
586.5225	28.01	-2.79	93528.440	3.5	110573.360	2.5
586.5247	22.00	-2.61	8492.421	1.0	25537.276	1.0
586.5497	22.00	-3.85	28788.372	4.0	45832.500	5.0
586.5545	25.01	-4.49	85636.100	6.0	102680.090	5.0
586.5686	25.00	-3.97	41031.480	4.5	58075.060	5.5
586.5831	24.00	-2.23	28679.430	1.0	45722.590	0.0
586.6044	28.01	-4.72	113172.960	4.5	130215.500	4.5
586.6054	14.00	-2.12	45276.188	1.0	62318.700	0.0
586.6065	24.00	-1.89	47793.820	5.0	64836.300	6.0
586.6065	9.00	-2.85	119081.820	.5	136124.300	.5
586.6216	28.01	-2.84	115827.120	3.5	132869.160	3.5
586.6275	28.01	-1.48	115870.280	2.5	132912.150	2.5
586.6282	26.02	-3.57	205732.370	3.0	222774.220	2.0
586.6300	71.00	-3.24	7420.492	0.0	24467.012	0.0
586.6419	26.00	-4.89	34328.733	3.0	51370.184	2.0
586.6452	22.00	-.80	8602.340	2.0	25643.695	3.0
586.6470	41.00	-2.03	5887.999	0.0	22934.025	0.0
586.6471	24.00	-3.23	33060.740	3.0	50102.040	3.0
586.6505	24.00	-3.85	25038.610	5.0	42079.810	4.0
586.6505	30.02	-1.55	220006.600	1.0	237047.800	2.0
586.6612	18.01	-2.84	179592.130	2.5	196633.020	2.5
586.6774	25.00	-4.96	30411.740	.5	47452.160	.5
586.6780	22.00	-.90	26803.417	2.0	43843.820	3.0
586.6818	17.00	-2.63	84132.262	2.5	101172.553	1.5
586.6891	17.00	-3.29	83130.900	1.5	100170.980	1.5
586.6987	26.00	-4.07	37409.530	1.0	54449.330	1.0
586.6998	24.00	-3.69	28679.430	1.0	45719.200	1.0
586.7132	26.02	-4.01	205737.510	2.0	222776.890	1.0
586.7135	25.01	-4.20	84428.210	5.0	101467.580	6.0
586.7259	23.01	-8.10	23391.090	5.0	40430.100	4.0
586.7287	22.00	-3.12	31685.900	0.0	48724.830	1.0
586.7315	7.00	-3.29	97770.150	.5	114809.000	.5
586.7470	13.01	-2.59	121480.300	3.0	138518.700	2.0
586.7562	20.00	-1.52	23652.304	1.0	40690.435	0.0
586.7586	28.01	-2.56	116824.150	2.5	133862.210	1.5
586.7676	13.01	-1.04	121480.900	2.0	138518.700	2.0
586.7697	25.02	-4.21	121197.050	2.5	138234.790	1.5
586.7780	13.01	-.31	121481.200	1.0	138518.700	2.0
586.7790	62.00	-.80	3064.986	0.0	20107.177	0.0
586.7945	24.00	-1.98	28682.180	2.0	45719.200	1.0
586.8044	17.00	-1.42	84688.637	.5	101725.370	1.5
586.8051	26.02	-3.37	205737.510	2.0	222774.220	2.0
586.8077	22.00	-4.99	29907.273	2.0	46943.910	2.0
586.8107	27.00	-3.38	34133.590	3.5	51170.140	4.5
586.8206	25.00	-.17	44993.920	3.5	62030.180	4.5
586.8270	40.00	-2.51	1209.863	0.0	18250.660	0.0
586.8358	26.02	-3.85	166421.330	4.0	183457.150	4.0
586.8444	23.01	-6.82	17910.980	4.0	34946.550	4.0
586.8503	22.01	-4.77	24961.340	1.5	41996.740	.5
586.8516	26.02	-2.56	166421.330	4.0	183456.690	3.0
586.8610	62.00	-.86	3952.218	0.0	20992.028	0.0
586.8760	42.00	-1.05	25568.434	0.0	42607.809	0.0
586.8882	28.02	-4.76	98238.200	4.0	115272.500	5.0
586.8892	28.01	-4.35	53601.190	1.5	70635.460	2.5
586.8967	10.01	-3.59	301801.090	3.5	318835.140	2.5
586.9036	2.01	-1.69	421353.130	0.0	438391.703	0.0
586.9054	22.00	-2.30	31805.940	2.0	48839.740	3.0
586.9057	25.02	-.27	178558.300	1.5	195592.090	1.5
586.9061	23.00	-3.28	25130.960	2.5	42164.740	3.5
586.9092	10.01	-2.20	301801.090	3.5	318834.780	3.5
586.9099	26.02	-4.33	205732.370	3.0	222766.040	3.0
586.9123	26.02	-2.94	205732.370	3.0	222765.970	4.0
586.9192	22.00	-2.79	8602.340	2.0	25635.740	1.0
586.9230	25.02	-4.61	176464.780	3.5	193498.070	3.5
586.9240	28.01	-2.67	104147.290	5.5	121180.550	5.5
586.9330	42.00	-.23	27584.872	0.0	44622.592	0.0
586.9447	28.01	-4.32	113172.960	4.5	130205.620	5.5
586.9500	40.00	-.46	15002.299	0.0	32039.525	0.0
586.9654	26.02	-4.69	206295.810	1.0	223327.870	2.0
586.9678	9.00	-1.93	119081.820	.5	136113.810	1.5
586.9795	25.01	-4.24	85673.720	4.0	102705.370	3.0
586.9950	57.00	-1.40	7985.094	0.0	25021.014	0.0
587.0002	23.00	-5.40	13801.530	1.5	30832.580	2.5
587.0177	24.00	-2.33	35884.400	5.0	52914.940	6.0
587.0260	25.00	-3.33	34138.880	6.5	51169.180	5.5
587.0265	18.00	-3.25	107496.463	1.0	124526.750	0.0
587.0436	25.02	-3.60	175918.500	.5	192948.290	1.5
587.0450	18.01	-2.08	179592.130	2.5	196621.880	3.5
587.0495	25.01	-2.74	85673.720	4.0	102703.340	4.0
587.0504	9.00	-1.92	118936.797	1.5	135966.390	1.5
587.0643	22.00	-4.07	29914.720	3.0	46943.910	2.0
587.0660	6.00	-3.54	70743.950	1.0	87773.090	2.0
587.0846	26.01	-6.76	21430.390	5.5	38458.990	4.5
587.0870	26.02	-3.41	205737.510	2.0	222766.040	3.0
587.0950	92.01	-2.23	5323.396	0.0	22356.415	0.0
587.1060	62.00	-1.05	3064.986	0.0	20097.685	0.0
587.1077	25.01	-3.95	56883.380	1.0	73911.310	1.0
587.1156	24.00	-3.01	29420.900	1.0	46448.600	1.0
587.1163	24.00	-1.11	45663.280	5.0	62690.960	5.0
587.1167	22.00	-4.85	20062.980	1.0	37090.650	0.0
587.1188	9.00	-3.01	119081.820	.5	136109.430	.5
587.1283	26.00	-1.78	33507.102	3.0	50534.435	3.0
587.1329	18.01	-1.75	186890.950	2.5	203916.150	1.5
587.1370	26.02	-3.04	205672.010	4.0	222699.090	5.0
587.1588	25.00	-4.70	30425.710	1.5	47452.160	.5
587.1600	6.02	-1.84	323101.000	0.0	340132.133	0.0
587.1646	25.02	-.77	176209.150	1.5	193235.430	2.5
587.1716	7.01	-4.07	186511.580	2.0	203537.660	1.0
587.1736	26.02	-3.92	105895.350	1.0	122921.370	1.0
587.1739	23.01	-3.55	20343.000	2.0	37369.010	2.0
587.1777	26.02	-4.30	117950.320	4.0	134976.220	3.0
587.1800	6.02	-3.49	323076.000	0.0	340106.553	0.0
587.1812	28.01	-2.03	115956.710	2.5	132982.510	1.5
587.1830	39.00	-1.33	16696.107	0.0	33726.573	0.0
587.2198	25.01	-4.33	49517.580	5.0	66542.260	5.0
587.2353	28.01	-4.91	116145.690	3.5	133169.920	3.5
587.2377	22.00	-2.25	25699.950	2.0	42724.110	2.0
587.2422	15.01	-1.34	107923.570	2.0	124947.600	2.0
587.2519	28.01	-4.97	117573.680	4.5	134597.430	5.5
587.2595	24.00	-1.95	47688.510	4.0	64712.040	3.0
587.2707	14.00	-2.29	39955.053	2.0	56978.256	1.0
587.2737	26.00	-4.57	26140.164	3.0	43163.282	4.0
587.2926	24.00	-2.65	35862.820	4.0	52885.390	5.0
587.2980	63.01	-2.06	10001.532	0.0	27028.663	0.0
587.2991	28.01	-3.79	120189.550	.5	137211.930	.5
587.3126	23.00	-3.15	20812.990	1.5	37834.980	1.5
587.3201	26.00	-2.31	34328.733	3.0	51350.505	4.0
587.3547	26.02	-4.70	205737.510	2.0	222758.280	2.0
587.3644	25.00	-1.33	45013.550	2.5	62034.040	3.5
587.3650	9.02	-.50	441315.800	.5	458336.270	.5
587.3764	14.00	-2.61	39760.285	1.0	56780.427	1.0
587.3778	30.02	-1.30	217846.800	2.0	234866.900	1.0
587.3930	28.01	-2.44	104298.230	4.5	121317.890	3.5
587.4000	57.01	-2.83	6129.972	0.0	23154.146	0.0
587.4016	28.01	-3.00	115827.120	3.5	132846.530	3.5
587.4120	22.00	-3.30	28702.768	3.0	45721.878	4.0
587.4210	62.00	-1.18	806.575	0.0	17830.141	0.0
587.4230	74.00	-1.81	19115.832	0.0	36139.340	0.0
587.4400	15.01	-2.98	112607.700	2.0	129626.000	1.0
587.4420	22.00	-3.69	31190.631	2.0	48208.870	3.0
587.4551	26.02	-2.85	205732.370	3.0	222750.230	3.0
587.4672	24.00	-4.22	33040.100	2.0	50057.610	2.0
587.4676	23.00	-3.97	15770.720	4.5	32788.220	4.5
587.4700	41.00	-1.93	8952.985	0.0	25975.131	0.0
587.4714	28.01	-3.90	119656.250	3.5	136673.640	4.5
587.4730	57.00	-1.00	7420.492	0.0	24442.551	0.0
587.4890	25.00	-3.12	38351.780	.5	55368.660	1.5
587.5263	22.01	-3.66	25193.040	2.5	42208.840	2.5
587.5352	24.00	-3.57	33934.880	3.0	50950.420	3.0
587.5425	26.01	-4.63	49506.990	1.5	66522.320	2.5
587.5477	6.00	-3.93	64089.850	1.0	81105.030	1.0
587.5490	26.02	-3.86	105906.230	2.0	122921.370	1.0
587.5542	26.02	-4.62	105929.160	3.0	122944.150	4.0
587.5587	24.00	-2.52	35870.530	4.0	52885.390	5.0
587.5618	24.00	-1.56	33935.650	2.0	50950.420	3.0
587.5660	74.00	-2.17	17018.737	0.0	34038.102	0.0
587.5700	2.00	.74	169087.000	0.0	186106.249	0.0
587.5812	25.00	-3.01	45060.810	3.5	62075.020	2.5
587.5856	6.00	-3.49	64090.950	2.0	81105.030	1.0
587.5920	62.00	-1.70	1451.835	0.0	18470.447	0.0
587.6088	27.00	-.82	36329.860	2.5	53343.270	1.5
587.6135	26.00	-4.32	28819.966	5.0	45833.240	4.0
587.6171	28.01	-4.63	95893.760	1.5	112906.930	1.5
587.6240	28.01	-4.50	101366.140	2.5	118379.110	2.5
587.6256	26.00	-3.83	34692.130	1.0	51705.052	2.0
587.6326	26.02	-3.63	205737.510	2.0	222750.230	3.0
587.6337	26.02	.77	181808.700	5.0	198821.390	6.0
587.6499	28.01	-4.25	113753.040	4.5	130765.260	3.5
587.6537	24.00	-2.32	24277.060	0.0	41289.170	1.0
587.6590	42.00	-1.41	20164.380	0.0	37181.051	0.0
587.6616	17.00	-2.32	84988.480	1.5	102000.360	1.5
587.6685	10.01	-2.34	301801.090	3.5	318812.770	3.5
587.6725	22.00	-4.35	11776.806	4.0	28788.372	4.0
587.6910	10.01	-1.02	301801.090	3.5	318812.120	4.5
587.6983	27.00	-2.35	29735.180	3.5	46746.000	2.5
587.7045	24.00	-.68	45663.280	5.0	62673.920	6.0
587.7197	17.01	-3.97	165362.100	0.0	182372.300	1.0
587.7260	64.01	-1.16	11372.710	0.0	28387.441	0.0
587.7342	6.00	-2.21	70743.950	1.0	87753.730	2.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
587.7360	73.00	-1.10	13227.833	0.0	30242.275	0.0
587.7425	27.00	-.66	35450.560	3.5	52460.100	2.5
587.7425	28.01	-4.75	105838.060	3.5	122847.600	3.5
587.7604	28.01	-2.94	116893.980	2.5	133903.000	1.5
587.7630	57.00	-1.89	2984.328	0.0	19997.988	0.0
587.7636	17.00	-2.71	84132.262	2.5	101141.190	3.5
587.7714	22.00	-.91	26892.926	3.0	43901.630	4.0
587.7726	22.00	.43	28896.062	5.0	45904.730	6.0
587.7780	22.00	.16	28702.768	3.0	45711.280	4.0
587.7790	41.00	-2.72	4920.109	0.0	21933.306	0.0
587.7867	24.00	-1.12	47793.820	5.0	64802.080	5.0
587.7950	9.00	-3.96	119081.820	.5	136089.840	1.5
587.8036	23.00	-4.78	21603.170	4.5	38610.940	3.5
587.8054	24.00	-1.17	45663.280	5.0	62671.000	4.0
587.8071	27.00	-4.31	15774.040	1.5	32781.710	2.5
587.8110	62.01	-2.01	10082.190	0.0	27094.461	0.0
587.8396	9.02	-.77	441385.880	1.5	458392.610	1.5
587.8458	22.00	-2.48	25605.030	0.0	42611.580	1.0
587.8520	25.01	-2.99	85673.720	4.0	102680.090	5.0
587.8562	28.01	-4.82	120271.970	2.5	137278.220	1.5
587.8577	26.00	-4.49	34328.733	3.0	51334.940	4.0
587.8856	24.00	-3.96	31009.000	3.0	48014.400	4.0
587.9070	23.00	-3.38	20830.200	.5	37834.980	1.5
587.9077	28.01	-4.97	98561.220	2.5	115565.980	2.5
587.9081	7.01	-1.43	209673.650	2.0	226678.400	2.0
587.9153	18.01	-2.42	202155.860	2.5	219160.400	2.5
587.9167	18.01	-4.28	186340.480	1.5	203344.980	1.5
587.9177	28.01	-4.61	113753.040	4.5	130757.510	4.5
587.9202	17.01	-2.66	144344.000	2.0	161348.400	1.0
587.9205	27.00	-4.25	34196.210	1.5	51200.600	1.5
587.9250	20.02	-1.60	344149.810	2.0	361154.070	2.0
587.9250	59.01	-1.14	10888.765	0.0	27897.737	0.0
587.9337	10.01	-3.55	301801.090	3.5	318805.100	2.5
587.9412	23.00	-.39	25253.530	5.5	42257.320	5.5
587.9466	26.00	-3.13	37157.546	2.0	54161.182	3.0
587.9495	26.02	-2.84	201919.530	4.0	218923.080	3.0
587.9585	23.00	-3.46	15688.800	2.5	32692.090	3.5
587.9619	7.00	-3.60	97805.810	1.5	114809.000	.5
587.9650	12.02	-1.00	564731.600	1.0	581734.700	1.0
587.9650	12.02	-1.00	564731.600	1.0	581734.700	1.0
587.9656	16.00	-2.05	63445.115	1.0	80448.200	2.0
587.9692	26.02	-4.51	206324.890	2.0	223327.870	2.0
587.9725	22.00	-3.91	31205.985	3.0	48208.870	3.0
587.9800	23.00	-1.41	25111.500	4.5	42114.170	3.5
587.9800	40.00	-1.67	1209.863	0.0	18217.244	0.0
587.9813	24.00	-3.24	24286.540	1.0	41289.170	1.0
587.9862	26.02	-4.83	206328.220	3.0	223330.710	3.0
587.9913	7.01	-1.04	209673.650	2.0	226675.990	3.0
587.9960	39.00	-1.20	16050.847	0.0	33057.765	0.0
588.0007	26.00	-2.94	36766.950	3.0	53769.020	4.0
588.0045	26.02	-3.30	205732.370	3.0	222734.330	4.0
588.0087	28.01	-3.44	112422.190	5.5	129424.030	5.5
588.0173	24.01	-4.23	32836.840	3.5	49838.430	4.5
588.0220	74.00	-.05	33956.816	0.0	50962.982	0.0
588.0232	21.00	-1.76	25014.150	2.5	42015.570	3.5
588.0253	26.02	-2.60	181772.590	6.0	198773.950	5.0
588.0273	22.00	-1.37	8492.421	1.0	25493.722	2.0
588.0381	24.00	-3.40	35884.400	5.0	52885.390	5.0
588.0400	6.02	-2.32	323101.000	0.0	340106.646	0.0
588.0640	57.01	-2.87	1855.123	0.0	18860.075	0.0
588.0841	17.00	-1.60	84988.480	1.5	101988.140	2.5
588.0855	29.01	-1.93	121981.680	2.0	138981.300	2.0
588.0910	18.01	-2.06	191012.350	1.5	208011.810	1.5
588.0948	25.00	-1.38	46083.890	1.5	63083.240	1.5
588.1034	25.00	-2.39	45754.270	3.5	62753.370	2.5
588.1041	22.00	-3.23	31725.750	1.0	48724.830	1.0
588.1059	22.00	-5.73	11639.804	3.0	28638.832	2.0
588.1079	27.00	-2.76	16467.900	4.5	33466.870	3.5
588.1111	28.01	-.98	115870.280	2.5	132869.160	3.5
588.1166	28.01	-4.43	116191.470	2.5	133190.190	1.5
588.1211	22.00	-2.40	31725.750	1.0	48724.340	2.0
588.1228	26.02	-4.79	206328.220	3.0	223326.760	4.0
588.1258	26.00	-3.56	37162.729	3.0	54161.182	3.0
588.1308	28.01	-2.06	114836.630	3.5	131834.940	2.5
588.1418	24.00	-2.07	47942.290	6.0	64940.280	7.0
588.1418	28.01	-3.13	113753.040	4.5	130751.030	5.5
588.1530	42.00	-1.86	20003.065	0.0	37005.444	0.0
588.1626	28.01	-3.37	112422.190	5.5	129419.580	4.5
588.1806	24.00	-4.43	33060.740	3.0	50057.610	2.0
588.1895	10.00	-.67	134041.840	2.0	151038.452	1.0
588.1955	28.01	-4.46	104298.230	4.5	121294.670	4.5
588.2128	10.02	-2.26	374434.000	2.0	391429.940	3.0
588.2138	2.01	-1.64	421353.130	0.0	438353.751	0.0
588.2277	23.00	-4.22	15664.750	1.5	32660.260	2.5
588.2300	73.00	-.13	23390.681	0.0	40390.834	0.0
588.2300	77.00	-.03	33956.816	0.0	50956.969	0.0
588.2419	18.02	-2.71	214346.700	1.0	231341.800	2.0
588.2454	8.03	-.79	615431.000	2.5	632426.000	2.5
588.2618	18.00	-2.49	104102.144	1.0	121096.670	0.0
588.2705	14.00	-3.69	62669.727	2.0	79664.000	1.0
588.2720	42.00	-.92	27584.872	0.0	44583.811	0.0
588.2803	24.00	-4.89	8095.210	3.0	25089.200	2.0
588.2879	28.01	-3.34	53365.170	4.5	70358.940	4.5
588.2920	76.00	-2.61	11292.053	0.0	28290.414	0.0
588.3111	24.00	-3.90	24093.160	2.0	41086.260	3.0
588.3281	26.02	-3.62	105906.230	2.0	122898.840	2.0
588.3284	30.02	-.48	221343.600	2.0	238336.200	2.0
588.3371	23.00	-5.18	14548.830	2.5	31541.180	3.5
588.3412	27.00	-3.00	16470.600	1.5	33462.830	2.5
588.3489	16.00	-1.83	63456.192	2.0	80448.200	2.0
588.3660	72.00	-.74	23471.338	0.0	40467.561	0.0
588.3717	6.00	-3.32	70743.950	1.0	87735.300	1.0
588.3798	26.00	-1.39	31937.308	1.0	48928.423	2.0
588.3824	28.01	-2.82	115827.120	3.5	132818.160	4.5
588.4434	24.00	-2.11	24299.890	2.0	41289.170	1.0
588.4472	23.01	-4.30	20363.220	6.0	37352.390	5.0
588.4489	24.00	-4.40	36552.130	3.0	53541.250	2.0
588.4507	26.02	-3.31	188013.400	4.0	205002.470	3.0
588.4517	28.01	-4.02	120222.890	1.5	137211.930	.5
588.4524	28.01	-4.71	99844.130	3.5	116833.150	4.5
588.4531	18.01	-2.47	190106.230	1.5	207095.230	2.5
588.4610	24.00	-3.83	33113.270	4.0	50102.040	3.0
588.4867	28.01	-3.42	76402.030	2.5	93390.060	2.5
588.4919	23.00	-5.01	14949.300	4.5	31937.180	5.5
588.5181	22.00	-.44	28702.768	3.0	45689.890	3.0
588.5428	16.01	-2.75	114200.450	1.5	131186.860	2.5
588.5620	40.00	-2.34	564.603	0.0	17555.166	0.0
588.5700	90.00	-1.60	9759.560	0.0	26749.893	0.0
588.5927	23.00	-4.07	20767.570	3.5	37752.540	2.5
588.6094	18.01	-3.57	155351.030	1.5	172335.520	2.5
588.6274	24.01	-3.22	32854.460	4.5	49838.430	4.5
588.6402	24.00	-.94	45707.360	6.0	62690.960	5.0
588.6436	24.00	-1.70	33906.650	1.0	50890.150	2.0
588.6582	27.00	-2.51	27497.060	2.5	44480.140	2.5
588.6627	26.02	.47	188109.580	3.0	205092.530	4.0
588.6669	7.01	-2.97	209737.970	3.0	226720.800	2.0
588.6859	25.00	-4.32	34463.370	1.5	51445.650	1.5
588.7112	29.01	-2.45	120092.200	2.0	137073.750	2.0
588.7331	24.00	-4.73	35934.020	6.0	52914.940	6.0
588.7360	77.00	-1.34	23148.708	0.0	40134.250	0.0
588.7443	26.00	-3.20	36766.950	3.0	53747.547	3.0
588.7563	22.00	-4.79	24921.110	1.0	41901.360	1.0
588.7643	10.02	-2.84	374434.000	2.0	391414.020	2.0
588.7660	28.01	-3.61	114052.040	3.5	131032.010	2.5
588.7847	10.01	-4.87	301855.710	2.5	318835.140	2.5
588.7972	10.01	-2.45	301855.710	2.5	318834.780	3.5
588.7993	24.00	-1.08	38537.680	5.0	55516.690	6.0
588.8038	24.00	-3.93	31352.420	1.0	48331.300	1.0
588.8101	24.00	-4.24	33040.100	2.0	50018.800	1.0
588.8244	9.00	-3.44	116987.394	3.5	133965.680	2.5
588.8330	42.00	-.95	11775.998	0.0	28758.742	0.0
588.8402	22.00	-4.42	30060.328	4.0	47038.160	3.0
588.8584	18.00	-1.40	105462.804	3.0	122440.109	2.0
588.8695	26.00	-4.05	32873.623	4.0	49850.610	3.0
588.8916	24.00	-3.53	25177.390	4.0	42153.740	5.0
588.8933	22.01	-3.87	12758.150	2.5	29734.450	3.5
588.8950	28.01	-3.01	115870.280	2.5	132846.530	3.5
588.9006	24.00	-3.30	31355.210	2.0	48331.300	1.0
588.9093	22.00	-1.85	25635.740	1.0	42611.580	1.0
588.9280	6.01	-1.17	145549.270	1.5	162524.570	1.5
588.9325	23.00	-2.71	17054.870	2.5	34030.040	1.5
588.9407	26.00	-3.69	37157.546	2.0	54132.480	1.0
588.9436	17.00	-2.68	84485.309	1.5	101460.160	1.5
588.9520	6.00	-2.71	70743.950	1.0	87718.560	1.0
588.9592	30.02	-2.00	220668.300	2.0	237642.700	3.0
588.9679	26.02	.24	202030.380	3.0	219004.530	4.0
588.9689	24.01	-3.77	67344.420	2.5	84318.540	1.5
588.9697	16.00	-1.69	63474.101	3.0	80448.200	2.0
588.9776	6.01	-.22	145550.700	2.5	162524.570	1.5
588.9783	28.01	-2.77	112422.190	5.5	129396.040	5.5
588.9867	22.00	-4.66	18061.540	1.0	35035.147	2.0
588.9915	24.00	-3.79	25106.340	3.0	42079.810	4.0
588.9951	11.00	.11	0.000	.5	16973.368	1.5
588.9998	25.00	-1.98	45060.810	3.5	62034.040	3.5
589.0016	21.01	-3.22	10944.510	2.0	27917.690	1.0
589.0196	22.00	-4.05	31489.451	4.0	48462.110	5.0
589.0390	29.01	-2.77	118163.500	2.0	135135.600	1.0
589.0481	26.00	-1.87	40842.130	3.0	57813.970	3.0
589.0488	27.00	-2.20	16467.900	4.5	33439.720	4.5
589.0612	23.00	-3.28	15688.800	2.5	32660.260	2.5
589.0682	28.01	-2.33	115956.710	2.5	132927.970	1.5
589.0859	25.01	-2.85	85734.620	3.0	102705.370	3.0
589.1095	26.00	-4.69	26351.049	5.0	43321.120	6.0
589.1141	26.00	-1.16	37521.144	2.0	54491.080	3.0
589.1230	26.02	-3.81	105929.160	3.0	122898.840	2.0
589.1241	25.02	-4.03	176265.780	1.5	193235.430	2.5
589.1289	28.01	-2.21	119796.980	2.5	136766.490	2.5
589.1369	26.01	-2.26	58631.650	4.5	75600.930	3.5
589.1418	17.00	-4.05	85442.430	1.5	102411.570	.5
589.1530	60.01	-1.70	8307.725	0.0	25281.245	0.0
589.1560	42.00	-.73	28714.077	0.0	45687.510	0.0
589.1564	25.01	-3.09	85734.620	3.0	102703.340	4.0
589.1598	6.01	-.47	145549.270	1.5	162517.890	.5
589.1610	74.00	-1.77	18873.860	0.0	35847.149	0.0
589.1728	9.00	-2.22	116040.883	1.5	133009.130	.5
589.1734	28.01	-3.01	116893.980	2.5	133862.210	1.5
589.1787	22.00	.30	28788.372	4.0	45756.450	5.0
589.1807	14.00	-3.03	47284.061	1.0	64252.080	2.0
589.1859	23.00	-4.45	15724.220	3.5	32692.090	3.5
589.1876	28.01	-2.88	118294.170	3.5	135261.990	4.5
589.1890	26.00	-3.77	37046.000	4.0	54013.780	5.0
589.1890	26.00	-3.87	37046.000	4.0	54013.780	5.0
589.1904	26.02	.51	149285.000	3.0	166252.740	3.0
589.2015	6.00	-3.29	70743.950	1.0	87711.370	0.0
589.2230	59.01	-1.21	11534.025	0.0	28505.528	0.0
589.2290	42.01	-.84	25326.461	0.0	42297.791	0.0
589.2310	7.01	-.64	209673.650	2.0	226640.220	3.0
589.2314	24.00	-.84	45707.360	6.0	62673.920	6.0
589.2443	26.00	-3.58	37409.530	1.0	54375.719	2.0
589.2508	8.03	-1.94	615460.000	1.5	632426.000	2.5
589.2671	24.00	-2.02	31009.000	3.0	47974.530	3.0
589.2672	26.00	-2.46	34328.733	3.0	51294.262	3.0
589.2745	28.00	-1.36	33500.854	3.0	50466.172	4.0
589.2769	26.02	-.52	181808.700	5.0	198773.950	5.0
589.2868	28.00	-2.53	16017.317	0.0	32982.280	1.0
589.2897	25.00	-.40	45940.930	2.5	62905.810	2.5
589.3012	23.00	-3.08	21646.390	3.5	38610.940	3.5
589.3113	6.00	-3.04	70743.950	1.0	87708.210	2.0
589.3116	23.00	-3.60	17054.870	2.5	34019.120	1.5
589.3148	7.01	.31	211827.670	2.0	228791.830	3.0
589.3225	26.00	-2.21	34017.084	1.0	50981.020	0.0
589.3248	28.01	-4.72	121050.660	2.5	138014.530	2.5
589.3376	22.00	-3.13	20209.444	2.0	37172.947	1.0
589.3380	42.00	-.09	28714.077	0.0	45682.268	0.0
589.3408	23.00	-4.55	20789.130	2.5	37752.540	2.5
589.3418	25.01	-3.08	53781.700	3.0	70745.080	3.0
589.3440	41.00	-1.20	14115.066	0.0	31083.085	0.0
589.3655	15.01	-1.75	112607.700	2.0	129570.400	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
589.3658	23.01	-8.01	20242.320	4.0	37205.010	3.0
589.3828	28.01	-1.45	120316.020	.5	137278.220	1.5
589.4060	77.00	-1.53	15970.189	0.0	32936.423	0.0
589.4099	22.00	-4.64	0.000	2.0	16961.420	3.0
589.4100	6.02	-1.57	323140.000	0.0	340106.119	0.0
589.4169	18.01	-3.11	194800.180	4.5	211761.400	3.5
589.4176	18.01	-1.46	194800.180	4.5	211761.380	4.5
589.4572	28.01	-2.82	114874.880	2.5	131834.940	2.5
589.4592	8.01	-3.55	261180.000	3.5	278140.000	2.5
589.4603	21.00	-1.08	18711.030	.5	35671.000	1.5
589.4850	57.00	-.83	7581.807	0.0	24545.767	0.0
589.4888	26.02	-4.09	166498.000	3.0	183457.150	4.0
589.4923	24.00	-4.64	31055.350	5.0	48014.400	4.0
589.5167	26.00	-4.41	28604.610	2.0	45562.959	3.0
589.5180	24.00	-3.06	29824.750	3.0	46783.060	4.0
589.5208	7.01	-.38	209737.970	3.0	226696.200	4.0
589.5310	63.00	-.42	19438.462	0.0	36401.098	0.0
589.5427	24.00	-2.09	47793.820	5.0	64751.420	4.0
589.5463	9.00	-2.66	116040.883	1.5	132998.380	1.5
589.5482	22.00	-2.06	25227.217	3.0	42184.660	4.0
589.5615	10.01	-1.37	301855.710	2.5	318812.770	3.5
589.5650	69.00	-1.94	0.000	0.0	16961.658	0.0
589.5733	17.00	-2.64	84988.480	1.5	101945.200	.5
589.5733	17.00	-2.97	84988.480	1.5	101945.200	1.5
589.5844	29.01	-4.71	133826.200	2.0	150782.600	2.0
589.5851	24.01	-2.81	53923.570	4.5	70879.950	5.5
589.5924	11.00	-.19	0.000	.5	16956.172	.5
589.5938	26.00	-1.95	41018.029	2.0	57974.160	2.0
589.5945	16.01	-1.64	114230.750	2.5	131186.860	2.5
589.6052	14.00	-2.70	45276.188	1.0	62231.990	2.0
589.6173	28.01	-1.05	115956.710	2.5	132912.150	2.5
589.6237	24.00	-4.59	33934.880	3.0	50890.150	2.0
589.6328	22.00	-4.43	31373.801	3.0	48328.810	4.0
589.6331	27.00	-4.64	16195.680	.5	33150.680	1.5
589.6331	9.03	-.98	662843.000	3.0	679798.000	2.0
589.6470	28.01	-3.74	99132.780	5.5	116087.380	4.5
589.6505	24.00	-2.91	33935.650	2.0	50890.150	2.0
589.6791	2.01	-1.59	421353.130	0.0	438311.506	0.0
589.6874	24.01	-6.17	29952.080	.5	46905.520	1.5
589.6929	27.00	-3.79	29269.730	4.5	46223.010	4.5
589.6933	10.02	-2.46	374460.750	1.0	391414.020	2.0
589.7121	28.01	-3.97	99559.330	2.5	116512.060	3.5
589.7230	70.01	-.72	48636.485	0.0	65593.599	0.0
589.7244	14.00	-2.73	47351.554	2.0	64303.930	3.0
589.7250	7.01	.04	211779.450	1.0	228731.810	2.0
589.7253	28.01	-4.81	105838.060	3.5	122790.410	4.5
589.7390	62.01	-1.27	11937.313	0.0	28893.967	0.0
589.7531	23.01	-2.11	20089.560	1.0	37041.110	2.0
589.7594	24.00	-3.44	35934.020	6.0	52885.390	5.0
589.7594	22.00	-3.81	17995.750	0.0	34947.120	1.0
589.7620	64.01	-1.15	12985.861	0.0	29941.853	0.0
589.7743	26.00	-3.63	36940.600	2.0	53891.540	3.0
589.7759	22.00	-1.89	26892.926	3.0	43843.820	3.0
589.7935	9.02	-.34	441385.880	1.5	458336.270	.5
589.8001	14.00	-2.97	45276.188	1.0	62226.390	1.0
589.8004	24.00	-3.48	24093.160	2.0	41043.350	3.0
589.8039	29.01	-2.43	116643.960	3.0	133594.050	3.0
589.8126	22.00	-4.60	25102.880	2.0	42052.720	3.0
589.8195	26.00	-1.98	38175.332	3.0	55124.974	3.0
589.8282	10.01	-2.45	301855.710	2.5	318805.100	2.5
589.8526	23.00	-3.61	17116.920	3.5	34065.610	2.5
589.8575	10.01	-4.04	301855.710	2.5	318804.260	1.5
589.8652	24.00	-4.96	24833.860	3.0	41782.190	4.0
589.8669	26.02	.68	181825.670	4.0	198773.950	5.0
589.8714	26.01	-8.42	21711.890	3.5	38660.040	3.5
589.8780	92.00	-1.46	6210.629	0.0	23163.287	0.0
589.8787	14.02	.49	225526.330	3.0	242474.270	4.0
589.8878	26.02	-3.75	105895.350	1.0	122843.030	1.0
589.8930	14.02	-.54	225526.330	3.0	242473.860	4.0
589.8999	14.02	-1.41	225526.330	3.0	242473.660	3.0
589.9003	28.01	-4.52	113623.100	.5	130570.420	.5
589.9067	26.00	-3.66	28604.610	2.0	45551.748	1.0
589.9216	21.00	-3.09	25014.150	2.5	41960.860	2.5
589.9297	22.00	-1.38	8492.421	1.0	25438.898	2.0
589.9393	24.00	-2.81	31028.330	2.0	47974.530	3.0
589.9442	23.00	-3.84	17181.980	4.5	34128.040	3.5
589.9458	26.00	-4.46	29798.960	4.0	46744.975	3.0
589.9480	69.00	-1.72	8711.012	0.0	25661.658	0.0
589.9511	22.00	-1.21	27025.652	4.0	43971.513	5.0
589.9560	28.01	-2.23	112422.190	5.5	129367.910	6.5
589.9705	22.00	-2.13	25107.417	2.0	42052.720	3.0
589.9807	14.00	-3.18	62718.990	0.0	79664.000	1.0
589.9828	7.01	-.31	211749.350	0.0	228694.300	1.0
590.0014	9.00	-3.63	116987.394	3.5	133931.810	2.5
590.0072	23.00	-3.64	20812.990	1.5	37757.240	.5
590.0145	25.01	-3.00	85759.300	4.0	102703.340	4.0
590.0430	60.01	-2.02	7420.492	0.0	24368.409	0.0
590.0587	29.01	-4.01	120092.200	2.0	137034.970	3.0
590.0620	41.00	-1.12	9436.930	0.0	26384.302	0.0
590.0622	28.01	-2.67	104298.230	4.5	121240.900	3.5
590.0695	26.02	-.45	151534.900	2.0	168477.360	1.0
590.0702	24.00	-2.95	24282.340	4.0	41224.780	4.0
590.0750	57.00	-1.68	7178.519	0.0	24125.517	0.0
590.0943	26.00	-4.38	29371.860	3.0	46313.610	2.0
590.1090	40.00	-2.59	564.603	0.0	17510.625	0.0
590.1208	20.02	-1.57	324660.470	3.0	341601.460	2.0
590.1241	17.00	-3.74	84485.309	1.5	101426.204	2.5
590.1315	26.02	-.34	151536.680	1.0	168477.360	1.0
590.1368	25.01	-3.43	62572.200	2.0	79512.730	3.0
590.1403	7.01	-2.26	209737.970	3.0	226678.400	2.0
590.1470	42.00	-1.47	18147.942	0.0	35092.873	0.0
590.1483	26.01	-2.83	62945.120	3.5	79885.320	2.5
590.1506	26.00	-3.88	34039.495	4.0	50979.627	4.0
590.1709	23.00	-3.92	20812.990	1.5	37752.540	2.5
590.1744	26.02	-.69	151537.910	0.0	168477.360	1.0
590.1797	18.01	-1.56	194822.100	3.5	211761.400	3.5
590.1803	25.01	-1.98	53805.800	4.0	70745.080	3.0
590.1804	18.01	-3.07	194822.100	3.5	211761.380	4.5
590.1848	26.02	-4.08	205672.010	4.0	222611.160	5.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
590.1869	23.00	-3.87	25130.960	2.5	42070.050	2.5
590.1910	73.00	-1.79	11130.738	0.0	28074.405	0.0
590.1960	57.01	-.99	22180.818	0.0	39124.342	0.0
590.2033	24.01	-3.22	67379.920	1.5	84318.540	1.5
590.2085	25.01	-3.95	86897.700	3.0	103836.170	2.0
590.2123	14.00	-2.59	45293.629	2.0	62231.990	2.0
590.2159	24.00	-2.40	24286.540	1.0	41224.800	0.0
590.2242	7.01	-2.05	209737.970	3.0	226675.990	3.0
590.2493	26.00	-1.76	37046.000	4.0	53983.300	5.0
590.2514	24.00	-4.38	27597.220	3.0	44534.460	4.0
590.2591	24.00	-4.56	47814.400	3.0	64751.420	4.0
590.2600	62.00	-1.26	2258.411	0.0	19200.098	0.0
590.2660	74.00	-1.27	19115.832	0.0	36057.347	0.0
590.2793	22.00	-2.44	28896.062	5.0	45832.500	5.0
590.2796	24.00	-2.88	31049.330	6.0	47985.760	5.0
590.2828	23.00	-4.50	15000.840	5.5	31937.180	5.5
590.2932	23.00	-3.18	15724.220	3.5	32660.460	2.5
590.2960	39.00	-.93	16696.107	0.0	33636.761	0.0
590.2970	63.00	-.14	19680.435	0.0	36621.060	0.0
590.3030	28.01	-1.70	119796.980	2.5	136734.740	1.5
590.3059	9.00	-2.28	116987.394	3.5	133923.070	3.5
590.3086	24.00	-4.56	47866.480	4.0	64802.080	5.0
590.3113	25.02	.02	178816.960	2.5	195752.480	2.5
590.3117	25.01	-3.23	55371.300	3.0	72306.810	2.0
590.3155	26.02	-2.60	182392.550	2.0	199327.950	1.0
590.3204	28.01	-4.88	99340.550	3.5	116275.810	3.5
590.3317	22.00	-1.90	8602.340	2.0	25537.276	1.0
590.3336	18.01	-4.82	192333.430	.5	209268.310	1.5
590.3445	26.01	-3.69	58666.360	3.5	75600.930	3.5
590.3710	26.02	-4.42	205672.010	4.0	222605.820	4.0
590.3800	41.00	-1.55	11292.053	0.0	28230.296	0.0
590.3816	22.00	-4.46	28788.372	4.0	45721.678	4.0
590.3873	18.01	-4.24	186074.350	2.5	203007.690	1.5
590.3911	26.00	-3.47	33946.920	2.0	50880.152	1.0
590.3980	76.00	-1.57	19761.092	0.0	36698.819	0.0
590.4070	64.01	-1.05	12985.861	0.0	29923.330	0.0
590.4075	14.00	-2.39	45293.629	2.0	62226.390	1.0
590.4142	28.01	-3.96	99154.810	4.5	116087.380	4.5
590.4191	24.00	-.75	45741.490	7.0	62673.920	6.0
590.4275	18.01	-2.36	194800.180	4.5	211732.370	4.5
590.4300	57.00	-1.40	7985.094	0.0	24921.903	0.0
590.4313	22.00	-1.39	25926.820	4.0	42858.900	3.0
590.4400	28.01	-1.63	116512.060	3.5	133443.890	2.5
590.4428	25.02	-3.12	121197.050	2.5	138126.800	1.5
590.4501	28.01	-4.36	121190.340	4.5	138121.880	4.5
590.4560	64.00	-1.44	967.890	0.0	17903.953	0.0
590.4606	24.01	-2.93	67387.300	2.5	84318.540	1.5
590.4986	15.00	-3.27	58174.450	1.5	75104.600	.5
590.5237	25.00	-3.51	41230.300	3.5	58159.730	2.5
590.5254	24.00	-3.34	27816.880	5.0	44746.260	6.0
590.5565	27.00	-2.13	29294.520	3.5	46223.010	4.5
590.5603	28.01	-4.72	116261.810	.5	133190.190	1.5
590.5671	26.00	-2.25	37521.144	2.0	54449.330	1.0
590.5690	25.00	-3.13	38351.780	.5	55279.910	1.5
590.5861	24.00	-4.97	45734.320	2.0	62661.960	3.0
590.5989	9.00	-3.44	117164.006	2.5	134091.280	1.5
590.6050	62.00	-1.56	1451.835	0.0	18383.625	0.0
590.6071	23.00	-3.33	20830.200	.5	37757.240	.5
590.6116	28.01	-4.10	114869.350	1.5	131796.260	2.5
590.6221	23.00	-2.62	21603.170	4.5	38529.780	4.5
590.6256	22.00	-1.58	25797.600	3.0	42724.110	2.0
590.6447	22.00	-5.38	11776.806	4.0	28702.768	3.0
590.6494	28.00	-2.46	33610.916	2.0	50536.742	1.0
590.6604	18.01	-2.98	194800.180	4.5	211725.690	3.5
590.6650	60.01	-2.01	6855.889	0.0	23785.959	0.0
590.6751	20.02	-1.20	323655.060	2.0	340580.150	3.0
590.6797	24.01	-4.54	34659.480	.5	51584.440	1.5
590.6840	76.00	-1.57	19761.092	0.0	36690.618	0.0
590.6947	26.01	-4.39	50078.100	1.5	67000.630	2.5
590.6968	28.01	-3.65	113407.310	2.5	130331.780	1.5
590.7208	23.00	-1.81	25253.530	5.5	42177.310	4.5
590.7310	45.00	-2.02	16050.847	0.0	32979.026	0.0
590.7324	25.01	-4.15	91178.800	4.0	108102.250	3.0
590.7341	22.00	-4.25	31184.021	1.0	48107.420	2.0
590.7456	28.01	-4.18	113408.710	1.5	130331.780	1.5
590.7460	26.01	-3.26	62962.260	1.5	79885.320	2.5
590.7513	22.00	-.40	28788.272	4.0	45711.280	4.0
590.7640	56.00	-1.03	9033.000	0.0	25960.233	0.0
590.7750	25.01	-3.29	72648.800	4.0	89571.030	3.0
590.7877	26.00	-3.11	29798.960	4.0	46720.824	4.0
590.8127	23.00	-3.38	17054.870	2.5	33976.020	1.5
590.8144	27.00	-4.51	30443.630	1.5	47364.730	1.5
590.8235	24.00	-2.05	24303.940	3.0	41224.780	4.0
590.8252	25.01	-2.40	85759.300	4.0	102680.090	5.0
590.8269	9.00	-3.72	117164.006	2.5	134084.750	2.5
590.8270	16.01	-4.53	112937.330	.5	129858.070	1.5
590.8327	17.00	-1.96	84132.262	2.5	101052.840	2.5
590.8380	70.01	-1.00	31779.063	0.0	48704.176	0.0
590.8458	30.02	-.96	217655.800	3.0	234576.000	4.0
590.8586	17.00	-3.02	83130.900	1.5	100050.736	1.5
590.8672	18.01	-2.48	185624.730	3.5	202544.320	2.5
590.8741	27.00	-2.80	34133.590	3.5	51052.980	3.5
590.8776	7.01	.32	170572.610	2.0	187491.900	3.0
590.8787	24.00	-4.19	25106.340	3.0	42025.600	3.0
590.8878	26.00	-3.35	40894.972	2.0	57813.970	3.0
590.8916	22.00	-4.35	31805.940	2.0	48724.830	1.0
590.8950	76.00	-.52	30085.255	0.0	47006.735	0.0
590.9052	28.01	-3.78	100845.410	.5	117763.910	1.5
590.9087	22.00	-2.94	31805.940	2.0	48724.340	2.0
590.9373	26.01	-5.03	27314.930	3.5	44232.510	4.5
590.9579	24.00	-3.90	31393.400	5.0	48310.390	5.0
590.9650	22.00	-4.03	31190.631	2.0	48107.420	2.0
590.9663	29.01	-1.28	121981.680	2.0	138898.430	1.0
590.9681	29.01	-2.63	133826.200	2.0	150742.900	3.0
590.9779	23.01	-5.22	20343.000	2.0	37259.420	1.0
590.9896	26.00	-2.51	33507.102	3.0	50423.185	4.0
590.9940	63.00	-.99	15566.901	0.0	32487.547	0.0
590.9981	26.00	-3.26	25899.974	4.0	42815.814	5.0
591.0065	22.01	-3.67	12628.770	1.5	29544.370	2.5

ORIGINAL PAGE IS
OF POOR QUALITY

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
591.0069	22.00	-4.01	27665.570	1.0	44581.160	2.0
591.0327	7.01	-.44	211779.450	1.0	228694.300	1.0
591.0337	6.00	-4.35	72610.720	2.0	89525.540	1.0
591.0816	9.00	-2.22	119081.820	.5	135995.270	.5
591.0856	26.00	-4.92	34547.192	2.0	51460.530	3.0
591.0865	25.00	-2.37	46169.930	.5	63083.240	1.5
591.0930	17.00	-2.34	84132.262	2.5	101045.386	1.5
591.1078	25.00	-3.80	49591.510	1.5	66504.210	1.5
591.1166	28.01	-.69	115956.710	2.5	132869.160	3.5
591.1194	29.01	-4.38	108335.430	2.0	125247.800	2.0
591.1253	30.02	-.31	218540.300	2.0	235452.500	2.0
591.1435	6.00	-3.93	72610.720	2.0	89522.400	2.0
591.1452	22.00	-2.31	25699.950	2.0	42611.580	1.0
591.1634	28.01	-1.30	116824.150	2.5	133735.260	2.5
591.1732	28.01	-1.27	116824.150	2.5	133734.980	3.5
591.1928	18.01	-.72	194822.100	3.5	211732.370	4.5
591.1973	14.00	-2.04	45321.848	3.0	62231.990	2.0
591.2080	18.00	-3.80	104102.144	1.0	121011.979	1.0
591.2120	42.00	-1.18	26713.694	0.0	43128.100	0.0
591.2276	26.00	-4.19	37157.546	2.0	54066.821	2.0
591.2396	24.00	-3.52	31009.000	3.0	47917.930	2.0
591.2407	26.02	-.18	181808.700	5.0	198717.600	4.0
591.2487	27.00	-4.02	34133.590	3.5	51042.260	2.5
591.2579	6.00	-2.62	72610.720	2.0	89519.130	3.0
591.2634	23.01	-6.83	20242.320	4.0	37150.570	4.0
591.2687	23.01	-4.51	20622.990	3.0	37531.090	4.0
591.2695	26.00	-6.96	12560.933	3.0	29469.010	2.0
591.2791	17.00	-3.91	84688.637	.5	101596.440	.5
591.2810	16.01	-1.22	114279.110	3.5	131186.860	2.5
591.2862	26.02	-1.99	182392.550	2.0	199300.150	2.0
591.3033	22.00	-3.50	29818.310	3.0	46725.420	3.0
591.3255	2.01	-1.54	421353.130	0.0	438264.290	0.0
591.3302	24.00	-2.96	35813.730	3.0	52720.070	4.0
591.3673	7.01	-.60	209737.970	3.0	226643.250	4.0
591.3709	22.00	-4.05	170.132	3.0	17075.310	4.0
591.3827	26.01	-2.73	63273.030	2.5	80177.870	1.5
591.4002	24.01	-4.61	72716.910	4.5	89621.250	3.5
591.4016	9.02	-4.58	425390.010	.5	442294.310	1.5
591.4051	17.01	-3.18	161634.900	2.0	178539.100	2.0
591.4072	7.01	-.44	211827.670	2.0	228731.810	2.0
591.4089	26.00	-.86	37162.729	3.0	54066.821	2.0
591.4109	17.00	-2.60	84688.637	.5	101592.670	.5
591.4135	25.02	-.21	178558.300	1.5	195462.260	.5
591.4163	25.00	-3.23	45130.160	4.5	62034.040	3.5
591.4176	26.00	-.68	37162.729	3.0	54066.570	4.0
591.4264	18.01	-4.46	194822.100	3.5	211725.690	3.5
591.4275	23.01	-4.56	20617.050	2.0	37520.610	3.0
591.4296	27.02	-2.73	156291.400	2.5	173194.900	2.5
591.4296	27.02	-2.73	156291.400	2.5	173194.900	2.5
591.4296	18.01	-3.09	194822.100	3.5	211725.600	2.5
591.4390	90.01	-2.03	9517.587	0.0	26425.501	0.0
591.4513	23.00	-4.68	25130.960	2.5	42033.840	1.5
591.4593	24.01	-3.55	53051.550	1.5	69954.200	2.5
591.4674	24.00	-4.71	25177.390	4.0	42079.810	4.0
591.4680	90.00	-1.84	7178.519	0.0	24085.604	0.0
591.4695	28.01	-3.83	115827.120	3.5	132729.480	2.5
591.4733	7.01	-.99	209737.970	3.0	226640.220	3.0
591.4989	22.00	-1.61	28788.372	4.0	45689.890	3.0
591.5018	22.00	-4.89	31205.985	3.0	48107.420	2.0
591.5131	22.00	-3.70	27480.047	3.0	44381.160	4.0
591.5241	13.01	-3.33	125706.200	1.0	142607.000	2.0
591.5384	26.02	-3.40	105929.160	3.0	122829.550	3.0
591.5400	92.00	-1.19	0.000	0.0	16905.028	0.0
591.5458	6.00	-4.48	72610.720	2.0	89510.900	3.0
591.5475	18.01	-.66	194861.270	2.5	211761.400	3.5
591.5552	27.00	-2.03	17933.680	3.5	34133.590	3.5
591.5622	6.00	-3.10	72610.720	2.0	89510.430	2.0
591.5740	63.00	-.21	15486.244	0.0	32390.300	0.0
591.5741	25.01	-4.10	86936.800	2.0	103836.170	2.0
591.5766	9.02	-2.51	453369.770	1.5	470269.070	.5
591.6000	28.01	-3.45	117074.700	3.5	133973.330	2.5
591.6063	24.00	-5.38	8307.570	4.0	25206.020	3.0
591.6252	26.00	-2.76	19788.248	4.0	36686.159	4.0
591.6354	23.01	-2.56	20622.990	3.0	37520.610	3.0
591.6360	62.00	-1.80	241.973	0.0	17144.258	0.0
591.6427	27.00	-4.06	27497.060	2.5	44394.470	3.5
591.6431	12.01	-1.84	93310.590	2.5	110207.990	1.5
591.6510	73.00	-2.18	11695.340	0.0	28597.196	0.0
591.6532	26.00	-2.14	33801.555	2.0	50698.666	2.0
591.6580	18.00	-2.95	105617.315	2.0	122514.290	1.0
591.6613	12.01	-2.80	93311.110	1.5	110207.990	1.5
591.6676	24.00	-4.65	31355.210	2.0	48251.910	3.0
591.6770	64.00	-1.00	7017.204	0.0	23918.317	0.0
591.6798	27.00	-.91	39649.160	3.5	56545.510	2.5
591.6844	27.00	-4.00	16778.160	2.5	33674.380	2.5
591.6868	20.02	-1.25	344257.920	1.0	361154.070	2.0
591.6953	28.01	-1.74	120316.020	.5	137211.930	.5
591.7212	29.01	-4.00	108335.430	2.0	125230.600	3.0
591.7282	24.00	-4.10	31393.400	5.0	48288.370	4.0
591.7369	22.00	-3.53	20795.599	5.0	37690.320	5.0
591.7439	23.01	-3.49	34228.790	3.0	51123.310	2.0
591.7520	24.00	-3.08	31048.000	7.0	47942.290	6.0
591.7618	24.00	-1.03	47942.290	6.0	64836.300	6.0
591.7630	57.00	-1.80	1048.548	0.0	17947.205	0.0
591.7698	17.00	-3.02	85244.330	.5	102138.110	.5
591.7734	25.01	-3.59	62564.700	1.0	79458.380	2.0
591.7923	23.00	-3.21	9544.540	.5	26437.680	1.5
591.7986	24.00	-2.09	31049.330	6.0	47942.290	6.0
591.8010	26.02	-.32	188109.580	3.0	205002.470	3.0
591.8077	26.02	-.22	202030.380	3.0	218923.080	3.0
591.8140	28.01	-3.94	114942.420	1.5	131834.940	2.5
591.8157	12.01	-2.10	93311.110	1.5	110203.580	.5
591.8284	28.01	-2.24	104298.230	4.5	121190.340	4.5
591.8347	26.02	-1.34	181825.670	4.0	198717.600	4.0
591.8539	22.00	-3.87	8602.340	2.0	25493.722	2.0
591.8540	45.00	-2.40	11856.655	0.0	28752.714	0.0
591.8588	26.02	-3.52	182408.910	3.0	199300.150	2.0
591.8715	28.01	-4.24	119656.250	3.5	136547.130	3.5
591.8743	9.00	-4.05	130016.100	2.5	146906.900	1.5
591.8909	26.00	-3.55	34328.733	3.0	51219.059	3.0
591.8935	28.01	-3.31	119656.250	3.5	136546.500	4.5
591.8950	73.00	-1.95	9920.875	0.0	26815.763	0.0
591.8963	26.02	.32	182810.660	5.0	199700.830	4.0
591.9086	28.01	-2.90	115956.710	2.5	132846.530	3.5
591.9090	24.00	-3.78	24093.160	2.0	40982.970	2.0
591.9090	21.00	-.85	18855.760	1.5	35745.570	2.5
591.9093	6.00	-4.09	70743.950	1.0	87633.750	2.0
591.9112	22.00	-4.27	18145.400	2.0	35035.147	2.0
591.9163	24.00	-2.15	31028.330	2.0	47917.930	2.0
591.9286	8.01	-4.90	231296.050	1.5	248185.300	2.5
591.9340	44.00	-1.98	8469.040	0.0	25362.815	0.0
591.9391	7.01	-.52	170572.610	2.0	187461.560	2.0
591.9857	24.00	-3.89	27703.840	4.0	44591.460	5.0
591.9860	75.00	-1.43	24277.914	0.0	41170.205	0.0
591.9871	24.00	-2.59	31364.330	3.0	48251.910	3.0
591.9871	26.02	.54	181830.020	3.0	198717.600	4.0
591.9882	25.00	-3.24	30411.740	.5	47299.290	.5
592.0026	10.01	-1.83	301948.000	1.5	318835.140	2.5
592.0096	24.00	-3.59	31055.350	5.0	47942.290	6.0
592.0124	26.02	-.02	151534.130	3.0	168420.990	2.0
592.0394	26.02	-.23	151534.900	2.0	168420.990	2.0
592.0415	28.01	-4.16	119656.250	3.5	136542.280	3.5
592.0505	26.00	-4.78	26105.908	6.0	42991.680	5.0
592.0597	22.00	-4.38	25102.880	2.0	41988.390	3.0
592.0667	28.01	-1.96	116145.690	3.5	133031.000	4.5
592.0902	24.00	-3.82	24897.550	4.0	41782.190	4.0
592.0926	9.00	-3.04	119081.820	.5	135966.390	1.5
592.0934	23.00	-2.16	15571.900	2.5	32456.450	1.5
592.1018	26.02	-.82	151536.680	1.0	168420.990	2.0
592.1021	17.01	-4.12	161654.800	1.0	178539.100	2.0
592.1109	23.00	-3.07	15078.250	.5	31962.300	.5
592.1232	27.00	-6.16	7442.410	3.5	24326.110	3.5
592.1340	23.00	-3.73	21646.390	3.5	38529.780	4.5
592.1358	23.00	-4.82	14514.750	1.5	31398.090	2.5
592.1386	28.01	-4.00	119665.290	2.5	136548.550	2.5
592.1450	44.00	-1.55	10566.135	0.0	27453.891	0.0
592.1551	24.00	-4.73	21847.880	2.0	38730.670	2.0
592.1716	28.01	-2.29	104298.230	4.5	121180.550	5.5
592.1763	22.00	-4.66	27498.975	3.0	44381.160	4.0
592.1779	25.00	-4.70	34423.270	3.5	51305.410	2.5
592.1853	17.00	-1.47	83364.927	.5	100246.855	1.5
592.1884	28.01	-4.27	119665.290	2.5	136547.130	3.5
592.1950	18.00	-2.72	107054.319	0.0	123935.970	1.0
592.1966	22.00	-1.65	29768.655	2.0	46650.260	3.0
592.2110	22.00	-1.40	8436.618	0.0	25317.813	1.0
592.2186	28.01	-3.99	121240.900	3.5	138121.880	4.5
592.2188	22.00	-2.53	25107.417	2.0	41988.390	3.0
592.2277	26.01	-2.85	63465.190	1.5	80345.910	.5
592.2368	27.00	-4.56	15774.040	1.5	32654.500	2.5
592.2585	22.00	-2.43	25227.217	3.0	42107.060	4.0
592.2705	20.01	-3.12	68056.910	2.5	84936.410	2.5
592.2705	20.01	-1.82	68056.910	3.5	84936.410	2.5
592.2775	28.01	-4.62	120903.200	3.5	137782.500	4.5
592.3056	25.00	-1.32	45754.270	3.5	62632.770	3.5
592.3091	18.01	-2.09	194883.000	3.5	211761.400	3.5
592.3098	18.01	-.55	194883.000	3.5	211761.380	4.5
592.3126	8.01	-4.20	261261.700	1.5	278140.000	2.5
592.3133	23.00	-1.48	27187.770	2.5	44066.050	3.5
592.3168	27.00	-1.68	36092.440	2.5	52970.620	2.5
592.3186	24.00	-4.34	24093.160	2.0	40971.290	2.0
592.3365	12.01	-1.58	97455.120	.5	114332.740	1.5
592.3460	26.01	-6.87	21581.640	4.5	38458.990	4.5
592.3586	28.01	-3.08	119665.290	2.5	136542.280	3.5
592.3674	20.01	-1.97	68056.910	2.5	84933.650	1.5
592.3790	42.00	-.79	28794.735	0.0	45675.820	0.0
592.3905	25.01	-3.42	55371.300	3.0	72247.380	3.0
592.3929	28.00	-1.58	33590.159	4.0	50466.172	4.0
592.3941	22.00	-2.13	27025.652	4.0	43901.630	4.0
592.4000	22.01	-3.96	25193.040	2.5	42068.850	1.5
592.4218	22.00	-7.50	0.000	2.0	16875.190	2.0
592.4225	25.01	-4.32	86961.000	1.0	103836.170	2.0
592.4344	22.00	-4.63	31184.021	1.0	48058.850	1.0
592.4389	18.01	-3.56	186470.280	1.5	203344.980	1.5
592.4478	28.01	-3.04	75917.630	3.5	92792.080	3.5
592.4551	23.00	-2.94	15062.940	6.5	31937.180	5.5
592.4653	24.00	-3.40	31377.960	4.0	48251.910	3.0
592.4657	24.00	-3.47	31352.420	1.0	48226.360	0.0
592.4730	24.00	-4.58	21856.940	3.0	38730.670	2.0
592.4783	25.00	-2.74	30425.710	1.5	47299.290	.5
592.4829	26.02	-4.14	205732.370	3.0	222605.820	4.0
592.5032	26.02	-4.93	205732.370	3.0	222605.240	3.0
592.5130	40.00	-1.61	5000.766	0.0	21878.033	0.0
592.5236	7.01	-1.62	209823.910	4.0	226696.200	4.0
592.5300	63.00	-.50	19599.777	0.0	36476.560	0.0
592.5470	92.00	-1.25	7581.807	0.0	24458.105	0.0
592.5492	24.01	-6.31	29952.080	.5	46823.640	.5
592.5534	28.01	-3.69	96535.870	3.5	113407.310	2.5
592.5794	28.00	-4.73	13521.352	2.0	30392.052	1.0
592.5872	17.00	-3.36	84988.480	1.5	101858.960	2.5
592.5900	73.00	-1.83	17099.394	0.0	33974.468	0.0
592.5907	23.01	-4.82	20280.190	5.0	37150.570	4.0
592.6079	26.02	-3.48	182392.550	2.0	199262.440	3.0
592.6170	24.01	-4.12	32836.840	3.5	49706.470	2.5
592.6360	42.00	-.17	28794.735	0.0	45668.499	0.0
592.6363	24.00	-2.76	31048.850	1.0	47917.930	2.0
592.6420	23.00	-3.57	9636.960	1.5	26505.880	2.5
592.6470	72.00	-.89	23471.338	0.0	40344.789	0.0
592.6520	63.00	-.59	15970.189	0.0	32843.497	0.0
592.6743	18.01	-4.58	143371.350	1.5	160239.350	1.5
592.6824	26.00	-2.66	36940.600	2.0	53808.370	1.0
592.6838	26.02	-4.74	205737.510	2.0	222605.240	3.0
592.6870	44.00	-1.38	16615.449	0.0	33487.761	0.0
592.7124	18.00	-2.17	105462.804	3.0	122329.720	3.0
592.7225	7.01	-1.61	211827.670	2.0	228694.300	1.0
592.7249	16.01	-2.06	114162.200	.5	131028.760	1.5
592.7410	41.00	-1.20	15324.929	0.0	32195.704	0.0
592.7456	28.01	-4.51	119665.290	2.5	136531.260	1.5
592.7583	14.00	-2.22	45276.188	1.0	62141.800	1.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
592.7604	9.00	-2.89	116143.579	.5	133009.130	.5
592.7618	7.00	-2.06	93581.520	.5	110447.032	1.5
592.7653	24.00	-4.14	31352.420	1.0	48217.830	2.0
592.7710	57.01	-.97	22422.791	0.0	39292.712	0.0
592.7790	23.01	-2.93	20089.560	1.0	36954.580	1.0
592.7792	26.00	-.96	37521.144	2.0	54386.160	1.0
592.7801	7.01	.16	209823.910	4.0	226688.900	5.0
592.7815	7.01	-1.76	170572.610	2.0	187437.560	1.0
592.7860	28.01	-4.71	118828.610	2.5	135693.430	3.5
592.7860	28.01	-4.92	118828.610	2.5	135693.430	2.5
592.7969	17.00	-3.08	85244.330	.5	102108.840	1.5
592.8001	18.01	-2.87	194861.270	2.5	211725.690	3.5
592.8032	18.01	-1.60	194861.270	2.5	211725.600	2.5
592.8156	24.00	-3.01	29584.620	2.0	46448.600	1.0
592.8212	12.01	-2.27	97468.920	1.5	114332.740	1.5
592.8233	12.01	-1.32	97468.920	1.5	114332.680	2.5
592.8476	26.00	-2.77	34017.084	1.0	50880.152	1.0
592.8490	57.00	-1.41	6936.547	0.0	23804.249	0.0
592.8596	14.00	-2.82	48020.074	1.0	64882.800	2.0
592.8634	24.00	-2.84	31355.210	2.0	48217.830	2.0
592.8662	23.01	-4.93	30318.630	4.0	47181.170	3.0
592.8801	18.00	-1.71	105617.315	2.0	122479.459	1.0
592.8848	23.01	-1.75	20343.000	2.0	37205.010	3.0
592.8880	42.00	.43	28794.735	0.0	45661.327	0.0
592.8887	30.02	-.38	221343.600	2.0	238205.500	1.0
592.9203	24.01	-3.38	53566.220	3.5	70427.220	3.5
592.9330	92.00	-1.77	3710.246	0.0	20575.558	0.0
592.9419	22.00	-.52	28896.062	5.0	45756.450	5.0
592.9604	29.01	-4.71	117883.140	4.0	134743.000	4.0
592.9615	26.02	.42	188142.640	2.0	205002.470	3.0
592.9629	24.00	-2.17	47942.290	6.0	64802.080	5.0
592.9653	26.00	-.95	36686.159	4.0	53545.882	3.0
592.9685	26.02	.36	149285.000	3.0	166144.630	2.0
592.9837	28.01	-3.51	115870.280	2.5	132729.480	2.5
593.0155	26.00	-.63	37521.144	2.0	54379.440	3.0
593.0290	24.01	-4.08	67868.050	2.5	84725.960	3.5
593.0290	64.00	-.84	6694.574	0.0	23557.156	0.0
593.0354	17.00	-3.73	84132.262	2.5	100989.990	3.5
593.0364	26.01	-3.62	50142.930	2.5	67000.630	2.5
593.0392	24.00	-2.98	31352.420	1.0	48210.040	1.0
593.0399	17.00	-1.88	83130.900	1.5	99988.501	2.5
593.0417	23.02	-1.30	145902.730	4.5	162760.280	4.5
593.0522	24.00	-2.21	35862.820	4.0	52720.070	4.0
593.0554	17.00	-2.38	84988.480	1.5	101845.640	1.5
593.0575	10.01	-1.10	301948.000	1.5	318805.100	2.5
593.0620	73.00	-2.36	12743.888	0.0	29605.531	0.0
593.0620	57.00	-.96	1048.548	0.0	17910.191	0.0
593.0635	25.02	-.40	176641.140	3.5	193498.070	3.5
593.0822	25.01	-4.23	49820.160	2.0	66676.560	2.0
593.0871	10.01	-1.68	301948.000	1.5	318804.260	1.5
593.1050	73.00	-.73	24600.544	0.0	41460.965	0.0
593.1092	22.00	-4.99	25102.880	2.0	41958.510	2.0
593.1152	26.00	-2.99	40842.130	3.0	57697.590	4.0
593.1156	26.02	-2.72	182444.700	3.0	199300.150	2.0
593.1374	24.00	-3.25	31355.210	2.0	48210.040	1.0
593.1385	9.00	-2.21	116143.579	.5	132998.380	1.5
593.1464	26.00	-4.84	37521.144	2.0	54375.719	2.0
593.1680	73.00	-1.71	17099.394	0.0	33958.024	0.0
593.1782	7.01	.07	170607.890	1.0	187461.560	2.0
593.1832	26.02	-2.36	182408.910	3.0	199262.440	3.0
593.1842	24.00	-3.81	31364.330	3.0	48217.830	2.0
593.1843	2.01	-1.48	421353.130	0.0	438211.297	0.0
593.1898	26.00	-3.77	32873.623	4.0	49726.964	4.0
593.2050	26.01	-4.81	25805.320	4.5	42658.230	3.5
593.2081	23.00	-3.83	9544.540	.5	26397.360	.5
593.2226	25.01	-4.79	65567.070	2.0	82419.480	3.0
593.2234	28.00	-3.47	25753.578	4.0	42605.964	3.0
593.2342	7.01	-2.10	209823.910	4.0	226675.990	3.0
593.2380	44.00	-2.21	9114.300	0.0	25970.941	0.0
593.2440	92.01	-2.52	5726.684	0.0	22583.155	0.0
593.2588	25.01	-3.66	53805.800	4.0	70657.180	5.0
593.2689	22.00	-1.63	25107.417	2.0	41958.510	2.0
593.2838	28.01	-4.50	120903.200	3.5	137753.870	4.5
593.2884	24.00	-3.37	47985.760	5.0	64836.300	6.0
593.2900	62.01	-1.41	12663.231	0.0	29518.395	0.0
593.2976	24.01	-3.61	67875.680	3.5	84725.960	3.5
593.3011	26.02	-1.12	182810.660	5.0	199660.840	5.0
593.3085	25.00	-3.70	34250.520	5.5	51100.490	4.5
593.3148	26.02	-2.88	182412.650	4.0	199262.440	3.0
593.3236	24.00	-2.41	35870.530	4.0	52720.070	4.0
593.3321	24.01	-3.52	52321.300	4.5	69170.600	5.5
593.3335	23.00	-6.70	14548.830	2.5	31398.090	2.5
593.3349	24.00	-3.19	31028.330	2.0	47877.550	1.0
593.3479	21.00	-4.90	24656.800	1.5	41505.650	2.5
593.3564	28.01	-3.67	114052.040	3.5	130900.650	2.5
593.3690	72.00	-.97	17986.627	0.0	34839.547	0.0
593.3705	24.00	-4.23	25177.390	4.0	42025.600	3.0
593.3715	27.00	-2.33	34352.420	1.5	51200.600	1.5
593.3718	14.00	-3.13	45293.629	2.0	62141.800	1.0
593.3850	92.00	-2.26	564.603	0.0	17417.068	0.0
593.3870	18.01	-2.36	202155.860	2.5	219003.600	2.5
593.3875	28.00	-2.90	27414.893	2.0	44262.619	2.0
593.3926	25.02	-.40	176100.710	.5	192948.290	1.5
593.3934	28.01	-3.33	98122.630	.5	114970.190	.5
593.3983	27.00	-2.84	31871.150	3.5	48718.570	2.5
593.4050	26.02	-4.13	182480.720	2.0	199327.950	1.0
593.4126	17.00	-2.01	82918.893	2.5	99765.906	2.5
593.4160	41.00	-.80	17341.367	0.0	34192.952	0.0
593.4177	23.01	-6.03	20522.140	1.0	37369.010	2.0
593.4465	27.00	-4.50	34196.210	1.5	51042.260	2.5
593.4504	18.01	-4.06	202155.860	2.5	219001.800	1.5
593.4638	24.00	-5.00	47866.480	4.0	64712.040	3.0
593.4640	26.00	-1.23	31686.342	2.0	48531.896	3.0
593.4645	26.00	-4.84	37046.000	4.0	53891.540	3.0
593.4750	60.01	-2.13	5968.656	0.0	22818.565	0.0
593.4920	25.02	-.19	176390.670	2.5	193235.430	2.5
593.4966	24.00	-1.54	37233.500	5.0	54078.130	5.0
593.5200	40.00	-2.38	0.000	0.0	16848.632	0.0
593.5240	57.00	-1.35	3468.273	0.0	20316.791	0.0
593.5279	26.02	-3.40	182418.700	4.0	199262.440	3.0
593.5315	25.02	-.83	215917.520	4.5	232761.160	5.5
593.5350	26.00	-2.88	41130.620	1.0	57974.160	2.0
593.5378	27.00	-3.28	15184.040	2.5	32027.500	3.5
593.5540	73.00	-.94	23793.968	0.0	40641.635	0.0
593.5649	18.01	-1.47	194883.000	3.5	211725.690	3.5
593.5681	18.01	-2.90	194883.000	3.5	211725.600	2.5
593.5790	18.01	-3.23	191169.520	1.5	208011.810	1.5
593.5878	25.00	-3.62	34463.370	1.5	51305.410	2.5
593.6051	26.02	-2.09	182486.400	1.0	199327.950	1.0
593.6146	28.01	-2.31	116895.980	2.5	133735.260	2.5
593.6159	17.00	-1.76	83130.900	1.5	99972.144	.5
593.6220	57.01	-3.03	1371.178	0.0	18216.915	0.0
593.6245	28.01	-1.93	116893.980	2.5	133734.980	3.5
593.6256	22.00	-3.74	27740.190	2.0	44581.160	2.0
593.6361	26.01	-4.88	66012.830	4.5	82853.500	5.5
593.6372	28.01	-3.70	119833.000	5.5	136673.640	4.5
593.6629	18.01	-3.48	186890.950	2.5	203730.860	1.5
593.6650	44.00	-.13	30165.913	0.0	47010.430	0.0
593.6823	22.00	-3.24	31489.451	4.0	48328.810	4.0
593.6840	64.00	-.87	6452.602	0.0	23296.580	0.0
593.7126	30.02	-.31	220668.300	2.0	237506.800	1.0
593.7415	6.00	-2.86	72610.720	2.0	89448.400	3.0
593.7482	29.01	-.38	121981.680	2.0	138819.170	3.0
593.7557	9.00	-.41	137590.090	2.5	154427.370	3.5
593.7710	64.00	-1.01	6291.287	0.0	23132.797	0.0
593.7768	6.00	-4.91	72610.720	2.0	89447.400	2.0
593.7811	22.00	-1.61	8602.340	2.0	25438.898	2.0
593.7856	18.01	-4.00	186171.260	.5	203007.690	1.5
593.7910	42.00	-.94	25729.749	0.0	42570.691	0.0
593.8043	12.02	-1.10	564731.600	1.0	581567.500	0.0
593.8043	12.02	-1.10	564731.600	1.0	581567.500	0.0
593.8124	24.00	-2.10	35884.400	5.0	52720.070	4.0
593.8283	8.01	-3.37	231350.080	2.5	248185.300	2.5
593.8336	22.00	-3.92	31373.801	3.0	48208.870	3.0
593.8452	23.01	-8.18	17910.980	4.0	34745.720	3.0
593.8629	12.01	-1.85	97455.120	.5	114289.360	.5
593.8689	23.00	-9.21	13801.530	1.5	30635.600	2.5
593.8728	24.00	-2.16	37244.170	4.0	54078.130	5.0
593.8816	28.01	-4.80	116167.760	1.5	133001.470	.5
593.8826	26.02	-1.82	188109.580	3.0	204943.260	2.0
593.8827	6.00	-3.43	69689.480	1.0	86523.160	0.0
593.8830	90.00	-2.06	5484.711	0.0	22323.044	0.0
593.8900	62.01	-1.90	7420.492	0.0	24258.627	0.0
593.8910	22.00	-2.75	31628.668	5.0	48462.110	5.0
593.9020	26.02	-2.11	181825.670	4.0	198658.800	3.0
593.9084	28.01	-4.43	99442.860	4.5	116275.810	3.5
593.9116	26.02	-2.66	182379.860	5.0	199212.720	4.0
593.9317	10.00	-2.14	149824.221	2.0	166656.508	1.0
593.9719	9.02	-4.64	390077.800	2.5	406908.950	1.5
593.9760	73.00	-1.83	9678.902	0.0	26514.599	0.0
593.9850	27.00	-2.85	28845.220	5.5	45676.000	5.5
593.9906	24.00	-4.10	27703.840	4.0	44534.460	4.0
593.9948	15.00	-3.18	64239.500	.5	81070.000	1.5
594.0075	26.02	.47	181828.660	2.0	198658.800	3.0
594.0097	26.02	.41	182830.760	6.0	199660.840	5.0
594.0107	26.02	-1.57	202030.380	3.0	218860.430	2.0
594.0125	23.03	.19	237638.800	2.0	254468.800	2.0
594.0128	6.00	-3.23	69689.480	1.0	86519.470	1.0
594.0241	7.01	-.46	170607.890	1.0	187437.560	1.0
594.0474	27.00	-1.02	36875.130	1.5	53704.140	2.5
594.0556	26.02	-.53	181830.020	3.0	198658.800	3.0
594.0584	24.00	-2.24	31048.850	1.0	47877.550	1.0
594.0601	9.02	-3.53	390080.300	1.5	406908.950	1.5
594.0631	22.00	-3.74	386.874	4.0	17215.440	5.0
594.0693	9.00	-.30	137598.990	3.5	154427.380	4.5
594.0697	9.00	-1.85	137598.990	3.5	154427.370	3.5
594.0704	24.01	-2.86	67379.920	1.5	84208.280	.5
594.0721	16.01	-1.80	114200.450	1.5	131028.760	1.5
594.0746	24.01	-3.39	53566.220	3.5	70394.460	4.5
594.0830	57.00	-1.53	7581.807	0.0	24414.472	0.0
594.0838	18.00	-2.89	107054.319	0.0	123882.300	1.0
594.0986	26.00	-3.96	33695.378	5.0	50522.940	6.0
594.1131	29.01	.11	120092.200	2.0	136919.350	3.0
594.1162	9.00	-1.88	115917.909	2.5	132744.970	1.5
594.1360	26.01	-8.69	27620.390	2.5	44446.890	3.5
594.1460	45.00	-.20	30891.830	0.0	47722.710	0.0
594.1470	18.02	-5.00	187823.050	2.0	204649.240	2.0
594.1713	22.00	-1.79	25227.217	3.0	42052.720	3.0
594.1752	22.00	-1.58	8492.421	1.0	25317.813	1.0
594.1758	14.00	-3.34	39955.053	2.0	56780.427	1.0
594.1848	20.02	-3.27	373626.850	2.0	390451.970	3.0
594.2152	26.02	-3.35	182810.660	5.0	199634.920	6.0
594.2215	9.02	-4.03	390080.300	1.5	406904.380	.5
594.2537	25.02	-4.08	175918.500	.5	192741.670	.5
594.2554	28.01	-3.88	101740.270	3.5	118563.390	3.5
594.2599	26.00	-3.55	34547.192	2.0	51370.184	2.0
594.2670	18.00	-2.10	105617.315	2.0	122440.109	2.0
594.2695	21.00	-2.73	21032.780	2.5	37855.500	2.5
594.2710	26.00	-2.47	36940.600	2.0	53763.280	3.0
594.2720	63.00	.04	19357.805	0.0	36185.116	0.0
594.2770	92.00	-1.83	5726.684	0.0	22553.894	0.0
594.2824	26.00	-4.99	34039.495	4.0	50861.850	3.0
594.2834	15.00	-4.86	65373.470	.5	82195.800	1.5
594.2855	22.00	-2.57	20795.599	5.0	37617.868	4.0
594.2879	28.01	-1.87	92325.850	3.5	109148.050	4.5
594.2922	14.00	-2.20	48102.323	2.0	64924.400	3.0
594.2978	25.00	-2.56	46083.890	1.5	62905.810	2.5
594.3103	26.00	-3.53	33765.291	2.0	50586.857	3.0
594.3105	28.01	-4.21	118874.110	3.5	135695.670	4.5
594.3240	75.00	-1.72	15647.559	0.0	32473.398	0.0
594.3388	6.00	-3.09	72610.720	2.0	89431.480	2.0
594.3494	25.01	-3.88	65567.070	2.0	82387.530	3.0
594.3501	12.01	-1.55	97468.920	1.5	114289.360	.5
594.3582	28.01	-3.43	113407.310	2.5	130227.520	2.5
594.3583	26.00	-4.28	17726.985	2.0	34547.192	2.0
594.3600	26.00	-4.83	34328.733	3.0	51146.892	2.0
594.3608	26.00	-4.97	34328.733	3.0	51146.670	3.0
594.3731	28.01	-3.55	98122.630	.5	114942.420	1.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
594.3847	28.01	-3.59	118874.110	3.5	135693.570	4.5
594.3858	26.02	-2.66	182480.720	2.0	199300.150	2.0
594.3890	7.01	-.78	209823.910	4.0	226643.250	4.0
594.3893	18.00	-3.04	105462.804	3.0	122282.134	2.0
594.3897	28.01	-4.87	118874.110	3.5	135693.430	3.5
594.4003	25.01	-2.19	53698.700	2.0	70517.720	3.0
594.4020	73.00	-1.52	9920.875	0.0	26744.506	0.0
594.4077	28.01	-3.96	113408.710	1.5	130227.520	2.5
594.4165	28.01	-3.22	113407.310	2.5	130225.870	3.5
594.4225	25.02	-4.12	121117.140	3.5	137935.530	4.5
594.4304	22.00	-3.72	27025.652	4.0	43843.820	3.0
594.4455	26.02	-2.01	182444.700	3.0	199262.440	3.0
594.4547	9.02	-2.69	413195.000	2.5	430012.480	1.5
594.4639	6.00	-4.42	69689.480	1.0	86506.700	2.0
594.4650	22.00	-3.89	0.000	2.0	16817.190	1.0
594.4809	23.00	-3.90	20606.430	.5	37423.170	1.5
594.4823	28.01	-4.16	100845.410	.5	117662.110	1.5
594.4834	10.00	-.12	134041.840	2.0	150858.508	2.0
594.4894	25.01	-2.18	72648.800	4.0	89465.300	4.0
594.4950	28.01	-3.56	118877.090	1.5	135693.430	2.5
594.4961	7.01	-2.36	209823.910	4.0	226640.220	3.0
594.5063	23.02	-1.64	144772.020	3.5	161588.040	3.5
594.5176	29.01	-4.16	129759.600	1.0	146575.300	2.0
594.5286	23.00	-3.77	20687.750	1.5	37503.140	2.5
594.5339	21.00	-1.74	18855.760	1.5	35671.000	1.5
594.5347	22.00	-1.81	28896.062	5.0	45711.280	4.0
594.5353	28.01	-3.07	100078.780	1.5	116893.980	2.5
594.5360	25.02	-.72	215663.500	3.5	232478.680	4.5
594.5375	7.01	-.73	209673.650	2.0	226488.790	3.0
594.5438	17.00	-1.53	84988.480	1.5	101803.442	2.5
594.5512	28.01	-4.65	116167.760	1.5	132982.510	1.5
594.5541	28.01	-.89	104503.220	2.5	121317.890	3.5
594.5668	25.02	-3.44	176683.760	2.5	193498.070	3.5
594.5720	39.00	-.89	16454.134	0.0	33272.955	0.0
594.5798	7.00	-1.70	93581.520	.5	110395.463	1.5
594.5849	12.02	-.72	545820.400	2.0	562634.200	1.0
594.5866	26.02	-2.89	182486.400	1.0	199300.150	2.0
594.6244	26.01	-4.01	50187.950	3.5	67000.630	2.5
594.6322	24.00	-3.98	29824.750	3.0	46637.210	3.0
594.6329	25.00	-1.97	45940.930	2.5	62753.370	2.5
594.6464	17.00	-1.98	84648.100	2.5	101460.160	1.5
594.6485	27.00	-.26	29563.170	1.5	46375.170	1.5
594.6594	23.00	-5.37	14910.040	3.5	31721.730	4.5
594.6630	25.02	.45	176945.200	4.5	193756.790	4.5
594.6640	26.02	.18	188131.700	1.0	204943.260	2.0
594.6793	24.00	-3.16	31055.350	5.0	47866.480	4.0
594.6842	7.01	-1.70	209673.650	2.0	226484.640	2.0
594.7037	28.01	-3.95	113177.610	3.5	129988.050	2.5
594.7401	24.01	-3.89	32836.840	3.5	49646.250	3.5
594.7485	26.00	-3.86	37157.546	2.0	53966.720	2.0
594.7535	7.01	-.50	209673.650	2.0	226482.680	3.0
594.7580	74.00	-1.80	13711.778	0.0	30525.339	0.0
594.7613	6.00	-3.97	69710.660	2.0	86519.470	1.0
594.7744	27.00	-8.92	8460.810	2.5	25269.250	3.5
594.8121	9.00	-2.79	117164.006	2.5	133971.380	1.5
594.8300	57.01	-1.16	20245.038	0.0	37056.564	0.0
594.8541	14.00	-.93	40991.884	1.0	57798.072	2.0
594.8562	23.01	-4.92	30613.970	4.0	47420.100	4.0
594.8570	92.00	-1.48	7581.807	0.0	24392.570	0.0
594.8589	17.00	-2.10	83364.927	.5	100170.980	1.5
594.8679	13.01	-2.75	132819.700	3.0	149625.500	2.0
594.8679	13.01	-1.57	132819.700	3.0	149625.500	3.0
594.8679	13.01	-.14	132819.700	3.0	149625.500	4.0
594.8749	13.01	-1.20	132819.900	2.0	149625.500	2.0
594.8749	13.01	-.47	132819.900	1.0	149625.500	2.0
594.8749	13.01	-.67	132819.900	2.0	149625.500	3.0
594.8820	24.00	-2.97	31009.000	3.0	47814.400	3.0
594.9082	28.01	-3.70	98276.700	4.5	115081.360	4.5
594.9219	7.00	-2.05	93581.520	.5	110385.795	.5
594.9240	18.00	-2.96	107131.755	1.0	123935.970	1.0
594.9243	28.00	-4.00	32973.414	4.0	49777.619	3.0
594.9259	26.02	-1.17	182830.760	6.0	199634.920	6.0
594.9285	26.00	-6.99	7376.762	4.0	24180.848	3.0
594.9295	28.01	-3.94	120903.200	3.5	137707.260	3.5
594.9319	28.01	-3.84	121317.890	3.5	138121.880	4.5
594.9319	26.00	-1.48	37162.729	3.0	53966.720	2.0
594.9344	24.00	-4.56	24282.340	4.0	41086.260	3.0
594.9383	26.02	-3.44	182408.910	3.0	199212.720	4.0
594.9485	26.00	-4.80	26406.490	1.0	43210.011	2.0
594.9489	28.01	-3.87	120903.200	3.5	137706.710	2.5
594.9666	25.02	-3.97	176695.060	4.5	193498.070	3.5
594.9915	14.00	-3.82	47284.061	1.0	64086.370	1.0
595.0020	39.00	-1.18	16292.819	0.0	33099.485	0.0
595.0049	6.00	-4.06	69689.480	1.0	86491.410	1.0
595.0098	23.00	-1.56	21603.170	4.5	38404.960	5.5
595.0105	26.00	-3.77	36766.950	3.0	53568.720	2.0
595.0140	9.00	-1.39	117164.006	2.5	133965.680	2.5
595.0173	28.01	-4.12	113407.310	2.5	130208.890	3.5
595.0194	28.01	-3.71	114869.350	1.5	131670.870	2.5
595.0210	75.00	-.93	28391.447	0.0	45197.577	0.0
595.0477	23.00	-3.78	9636.960	1.5	26437.680	1.5
595.0513	26.02	-.16	188142.640	2.0	204943.260	2.0
595.0527	28.01	-4.48	118892.990	5.5	135693.570	5.5
595.0697	24.00	-.96	48140.180	7.0	64940.280	7.0
595.0708	26.02	-2.15	182412.650	4.0	199212.720	4.0
595.0785	21.00	-4.42	20239.920	3.5	37039.770	2.5
595.1150	44.00	-2.01	14921.641	0.0	31725.116	0.0
595.1271	22.00	-4.91	25102.880	2.0	41901.360	1.0
595.1437	16.01	-.85	114230.750	2.5	131028.760	1.5
595.1438	26.00	-4.70	26224.961	3.0	43022.969	4.0
595.1441	29.01	-3.30	133984.600	3.0	150782.600	2.0
595.1462	23.01	-3.82	20156.640	0.0	36954.580	1.0
595.1508	26.02	-.14	188109.320	0.0	204907.130	1.0
595.1600	64.01	-1.30	10969.423	0.0	27771.627	0.0
595.1692	28.01	-3.95	117872.780	2.5	134670.070	1.5
595.1710	27.00	-1.94	29948.760	2.5	46746.000	2.5
595.1940	25.01	-3.80	49889.860	3.0	66686.450	3.0
595.2026	25.02	.57	179152.090	3.5	195948.440	3.5
595.2034	22.00	-1.88	25388.334	4.0	42184.660	4.0
595.2050	92.01	-2.34	6371.944	0.0	23172.878	0.0
595.2135	6.00	-4.67	69710.660	2.0	86506.700	2.0
595.2170	26.00	-2.78	41018.029	2.0	57813.970	3.0
595.2313	26.02	-.33	151534.130	3.0	168329.670	3.0
595.2323	28.01	-4.88	116732.510	2.5	133528.020	3.5
595.2330	28.01	-4.62	118897.940	2.5	135693.430	3.5
595.2330	28.01	-4.15	118897.940	2.5	135693.430	2.5
595.2490	7.01	-2.91	209925.760	2.0	226720.800	2.0
595.2543	26.01	-2.43	48039.230	2.5	64834.120	1.5
595.2585	26.02	-1.17	151534.900	2.0	168329.670	3.0
595.2700	26.00	-1.48	32133.977	2.0	48928.423	2.0
595.2777	28.01	-1.03	120166.520	1.5	136960.750	2.5
595.2819	24.00	-4.58	47917.930	2.0	64712.040	3.0
595.2851	26.02	-2.09	182418.700	4.0	199212.720	4.0
595.2944	2.01	-1.42	421353.130	0.0	438151.541	0.0
595.3071	28.01	-2.93	118893.240	6.5	135686.640	7.5
595.3071	28.01	-4.44	118893.240	6.5	135686.640	6.5
595.3162	22.00	-.26	15220.390	5.0	32013.534	6.0
595.3231	26.02	-2.49	182810.660	5.0	199603.610	4.0
595.3270	7.01	-2.82	209925.760	2.0	226718.600	1.0
595.3351	24.00	-3.28	27300.190	1.0	44092.800	0.0
595.3376	28.01	-4.76	95893.760	1.5	112686.300	2.5
595.3436	28.01	-1.78	119796.980	2.5	136589.350	3.5
595.3490	63.00	-.14	19680.435	0.0	36477.305	0.0
595.3613	26.02	.26	151537.800	4.0	168329.670	3.0
595.3642	24.01	-4.32	32854.460	4.5	49646.250	3.5
595.3667	24.01	-4.46	72716.910	4.5	89508.630	5.5
595.3674	23.00	-3.49	15664.750	1.5	32456.450	1.5
595.3820	22.00	-5.00	170.132	3.0	16961.420	3.0
595.3840	63.01	-2.56	10243.505	0.0	27039.388	0.0
595.3865	24.01	-4.61	32855.090	2.5	49646.250	3.5
595.3908	28.01	-3.55	116191.470	2.5	132982.510	1.5
595.3970	74.00	-1.53	20890.298	0.0	37685.814	0.0
595.4199	21.00	-4.83	24656.800	1.5	41447.020	.5
595.4276	7.01	-.81	190120.240	1.0	206910.240	0.0
595.4280	63.00	-.09	19680.435	0.0	36475.077	0.0
595.4305	28.01	-4.26	113407.310	2.5	130197.230	1.5
595.4333	28.01	-1.91	116824.150	2.5	133613.990	1.5
595.4727	24.00	-2.92	27300.190	1.0	44088.920	1.0
595.4801	28.01	-4.12	113408.710	1.5	130197.230	1.5
595.4922	9.02	-3.63	390120.770	.5	406908.950	1.5
595.4964	10.01	-3.64	302307.750	2.5	319095.810	2.5
595.5067	10.01	-2.34	302307.750	2.5	319095.520	3.5
595.5092	26.01	-4.58	50212.930	2.5	67000.630	2.5
595.5099	24.00	-3.19	48014.400	4.0	64802.080	5.0
595.5114	26.00	-4.06	36975.640	3.0	53763.280	3.0
595.5219	22.00	-2.68	19421.576	3.0	36208.920	4.0
595.5350	40.00	-2.33	0.000	0.0	16791.624	0.0
595.5419	25.02	-2.39	176970.010	5.5	193756.790	4.5
595.5447	25.01	-4.85	49889.860	3.0	66676.560	2.0
595.5522	23.00	-3.86	20828.480	2.5	37614.970	3.5
595.5525	28.01	-4.08	114869.350	1.5	131655.830	.5
595.5536	24.00	-1.48	39158.630	4.0	55945.080	5.0
595.5564	24.00	-2.26	24299.890	2.0	41086.260	3.0
595.5571	26.01	-2.91	63559.560	.5	80345.910	.5
595.5612	22.00	-2.46	24694.895	4.0	41481.130	5.0
595.5617	22.01	-4.58	12758.150	2.5	29544.370	2.5
595.5671	24.00	-3.85	31028.330	2.0	47814.400	3.0
595.5684	26.00	-4.43	34362.860	1.0	51148.892	2.0
595.5770	27.00	-4.19	30742.650	.5	47528.440	.5
595.5802	8.01	-4.99	261354.300	2.5	278140.000	1.5
595.5802	8.01	-3.83	261354.300	2.5	278140.000	2.5
595.5983	28.01	-2.99	118892.990	5.5	135678.180	6.5
595.6072	28.01	-4.89	118893.240	6.5	135678.180	6.5
595.6180	74.00	-1.94	17583.339	0.0	34372.623	0.0
595.6302	14.02	-4.76	227084.210	2.0	243868.500	3.0
595.6480	64.01	-1.57	8791.670	0.0	25580.109	0.0
595.6544	9.02	-3.32	390120.770	.5	406904.380	.5
595.6697	26.00	-5.44	6928.266	5.0	23711.443	4.0
595.6806	26.02	.48	182852.050	7.0	199634.920	6.0
595.6859	9.00	-1.86	117308.558	1.5	134091.280	1.5
595.6860	92.00	-1.50	5887.999	0.0	22675.367	0.0
595.6941	24.00	-4.60	33040.100	2.0	49822.590	2.0
595.7001	24.00	-2.77	24303.940	3.0	41086.260	3.0
595.7133	26.02	-4.76	188955.560	3.0	205737.510	2.0
595.7214	26.02	-3.58	182480.720	2.0	199262.440	3.0
595.7296	24.01	-4.95	50667.330	3.5	67448.820	4.5
595.7339	18.01	-2.82	192556.840	2.5	209338.210	3.5
595.7520	62.01	-1.90	9356.272	0.0	26141.780	0.0
595.7559	6.00	-2.99	69710.660	2.0	86491.410	1.0
595.7559	14.01	-.35	81191.600	.5	97972.350	.5
595.7573	24.00	-3.03	27300.190	1.0	44080.900	2.0
595.7656	14.00	-2.87	48102.323	2.0	64882.800	2.0
595.7700	41.00	-1.36	12905.203	0.0	29690.204	0.0
595.7758	23.00	-3.97	9824.580	2.5	26604.770	3.5
595.8098	28.01	-4.91	118914.340	4.5	135693.570	4.5
595.8236	26.00	-9.50	7728.058	3.0	24506.902	2.0
595.8339	26.00	-4.22	17550.180	3.0	34328.733	3.0
595.8415	28.01	-4.06	117074.700	3.5	133853.040	4.5
595.8498	17.00	-4.34	84648.100	2.5	101426.204	2.5
595.8653	22.00	-6.46	12118.394	4.0	28896.062	5.0
595.8726	22.00	-2.27	19573.968	4.0	36351.430	5.0
595.8855	24.00	-3.23	31009.000	3.0	47786.100	2.0
595.8862	28.01	-3.70	113407.310	2.5	130184.390	2.5
595.8929	24.00	-4.27	47974.530	3.0	64751.420	4.0
595.9171	24.00	-1.36	35884.400	5.0	52660.610	6.0
595.9177	9.00	-1.10	117308.558	1.5	134084.750	2.5
595.9199	28.01	-4.14	117074.700	3.5	133850.830	3.5
595.9203	24.00	-4.72	27597.220	3.0	44373.340	3.0
595.9448	26.02	-.23	188131.700	1.0	204907.130	1.0
595.9555	25.02	.09	178816.960	2.5	195592.090	1.5
595.9750	24.00	-3.51	27816.880	5.0	44591.460	5.0
595.9834	22.00	-3.08	27480.047	3.0	44254.390	3.0
595.9918	26.00	-2.95	33412.706	3.0	50186.814	2.0
596.0130	73.00	-.95	23793.968	0.0	40572.126	0.0
596.0140	22.00	-3.48	19322.988	2.0	36096.470	3.0
596.0322	6.00	-3.89	81105.030	1.0	97878.000	2.0
596.0393	28.01	-2.40	115956.710	2.5	132729.480	2.5
596.0514	23.00	-5.55	14949.300	4.5	31721.730	4.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
596.0528	25.00	-2.21	45013.550	2.5	61785.940	3.5
596.0539	24.00	-3.57	33040.100	2.0	49812.460	3.0
596.0590	57.00	-1.14	8388.382	0.0	25165.245	0.0
596.0831	18.00	-3.69	107131.755	1.0	123903.295	2.0
596.0837	17.00	-3.55	84688.637	.5	101460.160	1.5
596.0880	28.01	-3.06	103025.580	2.5	119796.980	2.5
596.0905	7.01	-.26	170666.230	0.0	187437.560	1.0
596.1022	28.01	-2.92	105499.050	3.5	122270.050	3.5
596.1147	25.02	-4.31	176464.780	3.5	193235.430	2.5
596.1246	28.01	-4.06	118923.200	3.5	135693.570	4.5
596.1296	28.01	-4.75	118923.200	3.5	135693.430	3.5
596.1382	18.01	-1.28	190507.360	1.5	207277.350	1.5
596.1499	21.00	-1.74	21085.840	3.5	37855.500	2.5
596.1623	28.01	-4.24	117872.780	2.5	134642.090	3.5
596.1737	22.00	-4.37	25102.880	2.0	41871.870	2.0
596.1858	28.01	-4.70	118927.020	4.5	135695.670	4.5
596.1893	23.00	-4.04	20606.430	.5	37374.980	.5
596.1913	7.00	-1.93	93581.520	.5	110350.014	.5
596.2082	26.02	-3.28	182444.700	3.0	199212.720	4.0
596.2158	9.00	-1.65	117164.006	2.5	133931.810	2.5
596.2191	26.00	-3.85	37157.546	2.0	53925.260	1.0
596.2213	23.00	-3.37	15688.800	2.5	32456.450	1.5
596.2462	26.02	.32	202156.130	2.0	218923.080	3.0
596.2544	28.01	-3.88	113407.310	2.5	130174.030	1.5
596.2600	57.00	-1.27	9114.300	0.0	25885.507	0.0
596.2625	22.00	-3.22	27614.667	4.0	44381.160	4.0
596.2636	28.01	-3.33	116145.690	3.5	132912.150	2.5
596.2743	18.01	-.86	190511.190	2.5	207277.350	1.5
596.2804	25.00	-4.37	25287.740	3.5	42053.730	2.5
596.2882	20.02	-2.72	373626.850	2.0	390392.620	3.0
596.3042	28.01	-4.70	113408.710	1.5	130174.030	1.5
596.3056	26.00	-4.18	29371.860	3.0	46137.140	3.0
596.3220	62.01	-1.48	12179.286	0.0	28948.749	0.0
596.3244	26.00	-4.72	17927.378	1.0	34692.130	1.0
596.3337	26.02	-1.35	188142.640	2.0	204907.130	1.0
596.3350	22.00	-2.40	25107.417	2.0	41871.870	2.0
596.3398	25.01	-2.08	53781.700	3.0	70546.020	4.0
596.3426	27.00	-.63	36092.440	2.5	52856.680	3.5
596.3451	26.00	-9.37	12968.552	2.0	29732.721	1.0
596.3558	28.01	-2.61	114052.040	3.5	130815.910	3.5
596.3760	63.00	-.15	15324.929	0.0	32092.874	0.0
596.3869	17.00	-1.83	82918.893	2.5	99681.887	1.5
596.3985	6.00	-2.80	69744.030	3.0	86506.700	2.0
596.4276	24.00	-3.62	33060.740	3.0	49822.590	2.0
596.4376	28.01	-4.43	120199.180	1.5	136960.750	2.5
596.4504	18.00	-2.61	107054.319	0.0	123815.530	1.0
596.4517	22.00	-2.04	25227.217	3.0	41988.390	3.0
596.4575	24.00	-2.39	24282.340	4.0	41043.350	3.0
596.4629	25.01	-3.89	49882.150	4.0	66643.010	4.0
596.4792	23.00	-3.23	9636.960	1.5	26397.360	.5
596.4821	25.00	-1.87	45754.270	3.5	62514.590	2.5
596.4824	28.01	-3.81	119913.330	4.5	136673.640	4.5
596.4860	28.01	-4.97	116167.760	1.5	132927.970	1.5
596.4970	22.01	-5.04	15265.600	3.5	32025.500	2.5
596.4970	26.02	-2.20	182379.860	5.0	199139.760	5.0
596.5031	27.00	-1.05	28345.860	4.5	45105.590	3.5
596.5045	18.01	-3.70	174409.830	1.5	191169.520	1.5
596.5268	9.00	-.57	117164.006	2.5	133923.070	3.5
596.5458	26.00	-2.24	34121.623	0.0	50880.152	1.0
596.5540	29.01	-2.09	133984.600	3.0	150742.900	3.0
596.5622	27.00	-2.32	29948.760	2.5	46706.830	3.5
596.5700	26.00	-4.50	26351.049	5.0	43108.899	4.0
596.5710	62.01	-1.24	10808.108	0.0	27570.572	0.0
596.5728	24.00	-3.42	31028.330	2.0	47786.100	2.0
596.5828	22.00	-.33	15156.787	4.0	31914.277	5.0
596.5832	25.02	-1.36	178558.300	1.5	195315.780	2.5
596.5860	74.00	-1.16	18873.860	0.0	35635.903	0.0
596.5892	8.01	-2.45	231427.990	3.5	248185.300	2.5
596.5910	28.01	-4.10	120203.490	2.5	136960.750	2.5
596.6039	10.00	-2.68	152970.733	0.0	169727.630	1.0
596.6049	24.00	-2.51	39158.630	4.0	55915.500	4.0
596.6070	63.01	-1.51	10001.532	0.0	26762.985	0.0
596.6227	28.01	-4.91	120203.490	2.5	136959.860	2.5
596.6348	17.00	-2.06	85244.330	.5	102000.360	1.5
596.6483	24.01	-3.84	53923.570	4.5	70679.220	4.5
596.6542	9.00	-2.90	117164.006	2.5	133919.490	1.5
596.6567	22.00	-3.78	27498.975	3.0	44254.390	3.0
596.6875	24.00	-4.43	33906.650	1.0	50661.200	0.0
596.6986	26.00	-3.17	32873.623	4.0	49627.861	4.0
596.7028	7.01	-.35	209737.970	3.0	226492.090	4.0
596.7057	28.01	-4.95	118939.530	5.5	135693.570	4.5
596.7100	63.00	.33	13389.148	0.0	30147.707	0.0
596.7509	25.01	-3.22	85952.600	3.0	102705.370	3.0
596.7555	7.01	-1.81	209925.760	2.0	226678.400	2.0
596.7798	23.01	-3.48	20617.050	2.0	37369.010	2.0
596.7840	59.01	-1.16	9598.245	0.0	26354.726	0.0
596.7874	26.00	-3.37	33946.920	2.0	50698.666	2.0
596.7883	24.00	-3.97	33060.740	3.0	49812.460	3.0
596.8051	22.00	-4.38	18825.890	1.0	35577.140	2.0
596.8104	28.01	-4.01	114869.350	1.5	131620.450	1.5
596.8204	7.01	-2.52	209737.970	3.0	226488.790	3.0
596.8232	25.01	-2.58	85952.600	3.0	102703.340	4.0
596.8254	26.01	-4.00	47674.780	1.5	64425.460	2.5
596.8302	18.00	-2.31	107131.755	1.0	123882.300	1.0
596.8414	7.01	-2.64	209925.760	2.0	226675.990	3.0
596.8430	63.00	-.42	19519.120	0.0	36273.945	0.0
596.8480	42.00	-1.01	27584.872	0.0	44339.557	0.0
596.8676	17.00	-3.85	82918.893	2.5	99668.388	3.5
596.8731	26.01	-3.17	62689.960	2.5	79439.300	3.5
596.8749	28.01	-2.33	114052.040	3.5	130801.330	4.5
596.8820	62.01	-1.38	11695.340	0.0	28449.070	0.0
596.8888	13.01	-1.45	132819.700	3.0	149568.600	3.0
596.8960	13.01	-.54	132819.900	2.0	149568.600	3.0
596.9040	9.00	-2.32	118936.797	1.5	135685.270	1.5
596.9169	24.00	-4.41	33906.650	1.0	50654.760	2.0
596.9191	21.00	-1.96	21032.780	2.5	37780.830	1.5
596.9319	6.00	-3.75	64086.920	3.0	80834.610	3.0
596.9522	29.01	-3.74	117928.480	1.0	134675.600	2.0
596.9529	26.01	-8.52	21711.890	3.5	38458.990	4.5
596.9540	26.00	-2.89	34547.192	2.0	51294.262	3.0
596.9565	10.01	-.85	302057.260	.5	318804.260	1.5
596.9600	19.01	-1.51	166461.500	1.0	183208.400	1.0
596.9626	28.01	-4.04	99340.550	3.5	116087.380	4.5
596.9682	7.01	-2.45	209737.970	3.0	226484.640	2.0
596.9770	75.00	-.91	26536.324	0.0	43287.388	0.0
596.9914	23.01	-4.00	20622.990	3.0	37369.010	2.0
597.0000	15.00	-4.03	65450.020	1.5	82195.800	1.5
597.0100	38.00	-.69	18228.600	0.0	34978.738	0.0
597.0146	28.01	-2.79	100078.780	1.5	116824.150	2.5
597.0249	17.00	-4.80	85442.430	1.5	102187.510	2.5
597.0381	7.01	-1.38	209737.970	3.0	226482.680	3.0
597.0460	24.00	-3.26	31049.330	6.0	47793.820	5.0
597.0496	28.01	-4.84	116167.760	1.5	132912.150	2.5
597.0524	28.01	-4.87	99040.750	1.5	115785.060	1.5
597.0563	25.02	-.91	215520.220	2.5	232264.420	3.5
597.0645	24.00	-3.16	31028.330	2.0	47772.300	1.0
597.0685	24.00	-1.25	35934.020	6.0	52677.880	7.0
597.0756	6.00	-4.57	64090.950	2.0	80834.610	3.0
597.0784	24.00	-4.19	25038.610	5.0	41782.190	4.0
597.0827	24.00	-2.71	24299.890	2.0	41043.350	3.0
597.0996	22.00	-1.84	29907.273	2.0	46650.260	3.0
597.1073	25.00	-4.78	30411.740	.5	47154.510	1.5
597.1076	22.00	-3.42	19322.988	2.0	36065.750	3.0
597.1090	57.01	-2.57	10001.532	0.0	26748.893	0.0
597.1101	28.00	-3.65	40361.254	3.0	57103.946	3.0
597.1134	28.01	-3.36	98467.250	3.5	115209.850	3.5
597.1234	17.00	-3.41	84485.309	1.5	101227.630	.5
597.1280	69.00	-2.21	0.000	0.0	16746.828	0.0
597.1462	26.01	-4.36	49506.990	1.5	66248.670	.5
597.1500	92.00	-1.71	564.603	0.0	17310.814	0.0
597.1508	22.00	-4.07	18911.399	2.0	35652.950	3.0
597.1592	18.00	-2.04	107131.755	1.0	123873.070	0.0
597.1619	24.00	-4.47	24833.860	3.0	41575.100	3.0
597.1633	7.00	-1.59	93581.520	.5	110322.721	1.5
597.1690	63.00	-.13	19438.462	0.0	36184.140	0.0
597.1700	56.00	-.11	9215.000	0.0	25960.650	0.0
597.1955	13.01	-.80	125866.700	1.0	142607.000	2.0
597.1983	25.01	-3.53	53805.800	4.0	70546.020	4.0
597.2183	28.01	-3.55	116261.810	.5	133001.470	.5
597.2272	24.00	-2.02	24303.940	3.0	41043.350	3.0
597.2336	24.00	-3.11	31048.850	1.0	47788.080	0.0
597.2361	28.01	-4.57	113408.710	1.5	130147.870	.5
597.2368	25.02	-.19	176209.150	1.5	192948.290	1.5
597.2520	74.00	-3.38	3306.958	0.0	20050.309	0.0
597.2586	6.00	-3.63	69710.660	2.0	86449.190	3.0
597.2607	24.00	-2.15	31055.350	5.0	47793.820	5.0
597.2750	63.00	.14	15566.901	0.0	32309.607	0.0
597.2767	17.00	-2.13	84485.309	1.5	101223.330	2.5
597.2776	22.00	-.68	29912.262	3.0	46650.260	3.0
597.2889	28.01	-.66	104503.220	2.5	121240.900	3.5
597.3032	23.01	-3.57	20522.140	1.0	37259.420	1.0
597.3043	24.00	-3.92	31048.850	1.0	47786.100	2.0
597.3125	24.00	-4.65	48014.400	4.0	64751.420	4.0
597.3171	17.00	-3.03	84988.480	1.5	101725.370	1.5
597.3275	28.01	-3.63	119656.250	3.5	136392.850	3.5
597.3303	24.01	-4.66	74114.480	3.5	90851.000	4.5
597.3306	18.01	-3.31	157673.320	2.5	174409.830	1.5
597.3310	28.01	-3.62	116191.470	2.5	132927.970	1.5
597.3354	26.00	-3.26	37521.144	2.0	54257.520	2.0
597.3380	44.00	.29	30165.913	0.0	46906.854	0.0
597.3482	25.01	-3.56	53781.700	3.0	70517.720	3.0
597.3530	57.01	-.54	22180.818	0.0	38921.338	0.0
597.3642	28.01	-.93	105439.850	1.5	122175.420	2.5
597.3645	28.00	-3.02	33610.916	2.0	50346.477	2.0
597.3653	22.00	-4.03	29914.720	3.0	46650.260	3.0
597.3653	25.00	-3.82	38669.600	3.5	55405.140	2.5
597.3670	90.00	-2.04	3629.588	0.0	20369.716	0.0
597.3696	23.00	-4.09	20687.750	1.5	37423.170	1.5
597.3881	25.00	-2.33	30419.610	2.5	47154.510	1.5
597.4114	14.00	-4.08	47284.061	1.0	64018.310	1.0
597.4170	44.00	-1.29	20809.640	0.0	37548.367	0.0
597.4192	18.01	-2.12	191012.350	1.5	207746.380	2.5
597.4260	42.00	-.76	27584.872	0.0	44323.347	0.0
597.4280	72.00	-.84	18228.600	0.0	34967.019	0.0
597.4467	23.01	-4.34	30318.630	4.0	47051.890	3.0
597.4563	26.02	-4.78	105895.350	1.0	122628.340	2.0
597.4603	26.00	-2.15	33801.555	2.0	50534.435	3.0
597.4628	28.01	-2.18	120166.520	1.5	136899.330	1.5
597.4720	72.00	-1.17	19680.435	0.0	36417.621	0.0
597.5060	90.00	-1.71	6291.287	0.0	23027.521	0.0
597.5169	22.00	-3.05	25227.217	3.0	41958.510	2.0
597.5337	26.00	-.99	38995.717	1.0	55726.540	0.0
597.5342	23.00	-.29	27187.770	2.5	43918.580	2.5
597.5353	26.00	-1.67	32873.623	4.0	49604.402	5.0
597.5534	10.00	-1.01	134041.840	2.0	150772.112	1.0
597.5750	57.00	-1.39	7581.807	0.0	24316.108	0.0
597.5870	58.01	-.78	10646.793	0.0	27380.758	0.0
597.5945	24.00	-3.08	35862.820	4.0	52591.940	5.0
597.5949	18.01	-.73	194996.490	1.5	211725.600	2.5
597.6060	25.00	-3.87	30425.710	1.5	47154.510	1.5
597.6174	26.00	-3.21	34636.820	2.0	51365.300	3.0
597.6274	30.02	-3.80	217655.800	3.0	234384.000	3.0
597.6292	28.01	-4.67	101144.630	3.5	117872.780	2.5
597.6320	92.00	-1.07	3710.246	0.0	20442.951	0.0
597.6503	28.01	-2.94	119665.290	2.5	136392.850	3.5
597.6663	26.02	-2.44	182412.650	4.0	199139.760	5.0
597.6674	28.01	-4.30	99418.610	3.5	116145.690	3.5
597.6677	6.00	-2.90	69689.480	1.0	86416.550	1.0
597.6761	26.00	-1.35	31805.059	3.0	48531.896	3.0
597.6764	26.02	.10	190393.270	1.0	207120.100	2.0
597.6849	24.00	-2.64	35934.020	6.0	52660.610	6.0
597.6892	24.01	-4.21	50667.330	3.5	67393.800	3.5
597.7038	2.01	-1.36	421353.130	0.0	438083.825	0.0
597.7221	23.00	-4.22	21032.520	3.5	37758.070	4.5
597.7250	64.00	-.89	6291.287	0.0	23021.389	0.0
597.7371	25.00	-2.85	45060.810	3.5	61785.940	3.5
597.7500	25.00	-2.88	45754.270	3.5	62479.040	4.5
597.7568	28.01	-1.01	104503.220	2.5	121227.800	2.5

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
597.7714	29.01	-4.74	136725.930	5.0	153450.100	5.0
597.7964	28.01	-2.31	116145.690	3.5	132869.160	3.5
597.7996	18.01	-2.43	179592.130	2.5	196315.510	2.5
597.8150	26.00	-4.19	37409.530	1.0	54132.480	1.0
597.8350	26.02	.50	190397.710	2.0	207120.100	2.0
597.8451	26.02	-3.57	105906.230	2.0	122628.340	2.0
597.8529	26.02	.50	190397.710	2.0	207119.600	3.0
597.8543	22.00	-.41	15108.121	3.0	31829.972	4.0
597.8594	24.00	-2.57	37205.880	3.0	53927.590	4.0
597.8660	72.00	-.96	18147.942	0.0	34874.098	0.0
597.8661	25.01	-1.98	53805.800	4.0	70527.320	5.0
597.8701	24.00	-1.45	35870.530	4.0	52591.940	5.0
597.8826	26.02	-3.78	182418.700	4.0	199139.760	5.0
597.8887	23.00	-4.63	15000.840	5.5	31721.730	4.5
597.8890	74.00	-.48	28068.817	0.0	44794.330	0.0
597.8930	14.01	-.05	81251.580	1.5	97972.350	.5
597.8955	23.00	-3.11	21603.170	4.5	38323.870	4.5
597.8955	28.01	-3.77	116261.810	.5	132982.510	1.5
597.8962	28.01	-2.91	116191.470	2.5	132912.150	2.5
597.9015	26.00	-2.80	36940.600	2.0	53661.130	3.0
597.9015	26.02	-3.11	189011.840	4.0	205732.370	3.0
597.9101	29.01	-2.70	119039.680	2.0	135759.970	2.0
597.9201	28.01	-2.15	116893.980	2.5	133613.990	1.5
597.9216	24.01	-2.76	50667.330	3.5	67387.300	2.5
597.9316	26.02	.14	151757.670	2.0	168477.360	1.0
597.9380	62.00	-1.42	1451.835	0.0	18175.977	0.0
597.9448	23.00	-4.32	14548.830	2.5	31268.150	3.5
597.9661	22.00	-1.93	25388.334	4.0	42107.060	4.0
598.0071	24.00	-5.00	27816.880	5.0	44534.460	4.0
598.0470	63.00	-.45	19277.147	0.0	35998.241	0.0
598.0511	24.00	-3.09	39158.630	4.0	55874.980	5.0
598.0546	25.01	-2.56	85989.120	2.0	102705.370	3.0
598.0711	26.02	-.07	190404.310	3.0	207120.100	2.0
598.0717	22.00	-4.16	25107.417	2.0	41823.190	3.0
598.0729	25.01	-4.01	53781.700	3.0	70497.440	4.0
598.0768	23.00	-1.79	9636.960	1.5	26352.590	2.5
598.0824	22.00	-4.73	8602.340	2.0	25317.813	1.0
598.0890	26.02	.57	190404.310	3.0	207119.600	3.0
598.0958	30.02	-1.15	216895.300	1.0	233610.400	2.0
598.1069	26.02	.76	190404.310	3.0	207119.100	4.0
598.1187	7.01	-.46	209925.760	2.0	226640.220	3.0
598.1226	6.00	-3.93	64086.920	3.0	80801.270	2.0
598.1269	23.00	-4.77	14514.750	1.5	31228.980	2.5
598.1283	56.01	-.29	50011.220	0.0	66730.041	0.0
598.1360	76.00	-1.92	18793.202	0.0	35511.808	0.0
598.1384	25.00	-2.93	45013.550	2.5	61727.460	2.5
598.1631	28.01	-2.94	114052.040	3.5	130765.260	3.5
598.1691	8.01	-3.78	231296.050	1.5	248009.100	1.5
598.1741	18.01	-3.62	179592.130	2.5	196305.040	3.5
598.1824	26.01	-2.84	63465.190	1.5	80177.870	1.5
598.1860	39.00	-.84	16292.819	0.0	33010.027	0.0
598.1922	18.00	-2.27	105617.315	2.0	122329.720	3.0
598.1989	27.00	-3.02	17233.680	3.5	33945.900	2.5
598.2096	25.01	-4.97	53805.800	4.0	70517.720	3.0
598.2261	27.00	-.32	35450.560	3.5	52162.020	3.5
598.2275	6.00	-4.93	64089.850	1.0	80801.270	2.0
598.2350	57.00	-1.85	2581.041	0.0	19296.880	0.0
598.2556	22.00	-3.28	19421.576	3.0	36132.210	4.0
598.2576	28.01	-4.38	120250.170	3.5	136960.750	2.5
598.2669	6.00	-4.83	64090.950	2.0	80801.270	2.0
598.2887	24.01	-4.63	32855.090	2.5	49564.800	1.5
598.2930	42.00	-.89	26213.694	0.0	42927.913	0.0
598.2952	22.00	-3.65	18818.230	0.0	35527.760	1.0
598.3140	63.00	-.68	15324.929	0.0	32038.561	0.0
598.3142	14.00	-3.61	62955.000	2.0	79664.000	1.0
598.3220	41.00	-1.76	5242.739	0.0	21956.147	0.0
598.3220	76.00	-.88	25487.776	0.0	42201.184	0.0
598.3256	28.01	-4.38	113623.100	.5	130331.780	1.5
598.3281	27.00	-1.33	29216.370	2.5	45924.980	3.5
598.3521	23.00	-4.42	15078.250	.5	31786.190	.5
598.3600	45.00	-1.18	12663.231	0.0	29375.578	0.0
598.3658	26.00	-1.71	36686.159	4.0	53393.715	4.0
598.3664	24.00	-4.23	35884.400	5.0	52591.940	5.0
598.3671	25.00	-4.46	34845.260	.5	51552.780	.5
598.3675	23.00	-3.72	20767.570	3.5	37475.080	3.5
598.3780	63.00	-.20	19277.147	0.0	35988.991	0.0
598.3840	74.00	-.47	28068.817	0.0	44780.494	0.0
598.3900	71.01	-1.64	11695.340	0.0	28406.849	0.0
598.3951	24.00	-4.24	27382.180	2.0	44088.920	1.0
598.3997	14.00	-3.19	47284.061	1.0	63990.670	2.0
598.4083	27.00	-3.27	14036.280	1.5	30742.650	.5
598.4176	15.01	-.53	101636.490	1.0	118342.600	1.0
598.4205	26.02	-.28	190413.570	4.0	207119.600	3.0
598.4230	40.00	-.54	14921.641	0.0	31632.229	0.0
598.4252	27.00	-.22	35450.560	3.5	52156.460	4.5
598.4255	6.00	-2.67	69710.660	2.0	86416.550	1.0
598.4384	26.02	.54	190413.570	4.0	207119.100	4.0
598.4406	28.01	-2.87	114052.040	3.5	130757.510	4.5
598.4409	27.00	-3.97	16467.900	4.5	33173.360	3.5
598.4448	18.01	-4.74	172335.520	2.5	189040.870	1.5
598.4516	6.00	-3.50	69744.030	3.0	86449.190	3.0
598.4524	28.01	-1.56	105439.850	1.5	122144.990	2.5
598.4553	22.00	-3.82	170.132	3.0	16875.190	2.0
598.4563	26.02	.97	190413.570	4.0	207118.600	5.0
598.4595	23.00	-2.13	9544.540	.5	26249.480	1.5
598.4624	27.00	-2.14	27497.060	2.5	44201.920	2.5
598.4793	26.00	-.51	38175.332	3.0	54879.720	2.0
598.4825	26.02	-.64	202156.130	2.0	218860.430	2.0
598.4901	9.00	-2.12	116040.883	1.5	132744.970	1.5
598.5377	24.00	-4.57	27597.220	3.0	44299.980	2.0
598.5696	22.00	-3.48	18825.890	1.0	35527.760	1.0
598.5918	18.01	-2.12	179931.770	1.5	196633.020	2.5
598.5928	25.00	-4.24	52015.000	3.5	68716.220	4.5
598.6054	17.00	-2.34	85244.330	.5	101945.200	.5
598.6054	17.00	-2.96	85244.330	.5	101945.200	1.5
598.6065	28.01	-4.74	116145.690	3.5	132846.530	3.5
598.6069	26.00	-2.52	38678.015	2.0	55378.842	2.0
598.6080	41.00	-1.17	13066.518	0.0	29771.941	0.0
598.6100	92.00	-1.62	3790.903	0.0	20496.270	0.0

WAVELENGTH	ELEM	LOGGF	ELO	JLO	EUP	JUP
598.6215	25.00	-2.18	51638.170	2.5	68336.590	3.5
598.6262	28.01	-4.95	122140.710	4.5	138841.000	3.5
598.6312	28.01	-4.94	120199.180	1.5	136899.330	1.5
598.6334	24.00	-3.27	29824.750	3.0	46524.840	2.0
598.6402	6.00	-4.57	69689.480	1.0	86389.380	2.0
598.6484	24.01	-3.81	50687.630	2.5	67387.300	2.5
598.6538	26.01	-6.23	22409.820	.5	39109.340	.5
598.6606	9.00	-.99	117391.950	.5	134091.280	1.5
598.6656	24.00	-2.91	33113.270	4.0	49812.460	3.0
598.6825	24.00	-3.63	27382.180	2.0	44080.900	2.0
598.6963	26.00	-4.42	26627.612	4.0	43325.946	3.0
598.7043	23.01	-3.11	20343.000	2.0	37041.110	2.0
598.7046	26.00	-.73	38678.015	2.0	55376.117	1.0
598.7287	25.00	-3.52	45013.550	2.5	61710.980	3.5
598.7293	18.00	-1.98	105462.804	3.0	122160.220	3.0
598.7334	28.00	-3.54	27414.893	2.0	44112.192	1.0
598.7370	12.02	-.44	548034.400	0.0	564731.600	1.0
598.7449	22.00	-2.58	28788.372	4.0	45485.350	5.0
598.7646	24.00	-2.49	24286.540	1.0	40982.970	2.0
598.7757	24.00	-2.49	48140.180	7.0	64836.300	6.0
598.7914	17.00	-3.95	85442.430	1.5	102138.110	.5
598.7976	24.00	-3.55	45966.450	2.0	62661.960	3.0
598.8020	64.00	.36	15728.216	0.0	32426.227	0.0
598.8060	17.00	-3.68	83894.037	3.5	100589.312	2.5
598.8124	18.00	-2.99	107131.755	1.0	123826.850	2.0
598.8170	42.00	-.32	27584.872	0.0	44284.465	0.0
598.8198	29.01	-.25	120919.410	1.0	137614.300	0.0
598.8295	18.01	-.17	192556.840	2.5	209251.460	3.5
598.8313	18.01	-.57	195031.120	2.5	211725.690	3.5
598.8345	18.01	-1.87	195031.120	2.5	211725.600	2.5
598.8363	24.01	-3.31	52298.120	3.5	68994.550	4.5
598.8421	21.00	-.37	17012.980	2.5	33707.250	2.5
598.8485	24.00	-3.18	37233.500	5.0	53927.590	4.0
598.8558	22.00	-1.83	15220.390	5.0	31914.277	5.0
598.8670	44.00	-2.49	8711.012	0.0	25409.210	0.0
598.8725	22.00	-4.74	27887.740	3.0	44581.160	2.0
598.8740	26.02	-.68	190425.720	5.0	207119.100	4.0
598.8794	24.00	-3.66	33934.880	3.0	50628.110	3.0
598.8919	26.02	.37	190425.720	5.0	207118.600	5.0
598.9070	24.00	-4.35	33935.650	2.0	50626.110	3.0
598.9070	90.01	-2.73	1451.835	0.0	18148.918	0.0
598.9099	26.02	1.14	190425.720	5.0	207118.100	6.0
598.9131	24.01	-3.02	50687.630	2.5	67379.920	1.5
598.9256	28.01	-4.99	120268.810	3.5	136960.750	2.5
598.9278	23.00	-2.56	15270.420	1.5	31962.300	.5
598.9292	25.00	-2.36	45940.930	2.5	62632.770	3.5
598.9339	18.01	-1.38	192556.840	2.5	209248.550	2.5
598.9340	60.01	-2.07	5968.656	0.0	22664.986	0.0
598.9364	25.01	-4.87	53805.800	4.0	70497.440	4.0
598.9393	6.00	-4.33	64090.950	2.0	80782.510	1.0
598.9470	42.00	-.08	33714.843	0.0	50410.811	0.0
598.9569	27.00	-2.41	32027.500	3.5	48718.570	2.5
598.9576	28.01	-4.60	120268.810	3.5	136959.860	2.5
598.9744	22.00	-3.47	19322.988	2.0	36013.570	2.0
598.9910	29.01	-4.83	136765.380	4.0	153455.500	4.0
598.9990	75.00	-1.60	22987.393	0.0	39681.912	0.0
599.0013	22.00	-1.76	25227.217	3.0	41917.050	4.0
599.0154	28.01	-4.80	121325.090	2.5	138014.530	2.5
599.0265	28.01	-2.73	116312.340	1.5	133001.470	.5
599.0391	28.01	-4.29	120271.970	2.5	136960.750	2.5
599.0416	27.00	-3.67	16778.160	2.5	33466.870	3.5
599.0514	22.00	-4.44	386.874	4.0	17075.310	4.0
599.0584	26.01	-7.20	26932.740	.5	43620.980	1.5
599.0609	28.01	-4.55	115108.090	2.5	131796.260	2.5
599.0671	7.01	-4.68	186570.980	3.0	203258.980	2.0
599.0710	28.01	-4.82	120271.970	2.5	136959.860	2.5
599.0947	23.00	-4.04	20687.750	1.5	37374.980	.5
599.0980	6.00	-3.58	69710.660	2.0	86397.800	3.0
599.0990	27.00	-3.88	15184.040	2.5	31871.150	3.5
599.1030	90.00	-2.03	6291.287	0.0	22982.908	0.0
599.1190	45.00	-2.07	14679.669	0.0	31370.844	0.0
599.1195	24.00	-3.41	27382.180	2.0	44068.720	3.0
599.1292	24.01	-4.27	50667.330	3.5	67353.600	4.5
599.1350	42.00	-.94	27584.872	0.0	44275.601	0.0
599.1392	26.01	-3.88	25428.800	5.5	42114.790	4.5
599.1407	23.00	-4.12	20789.130	2.5	37475.080	3.5
599.1446	18.01	-1.75	186815.960	3.5	203501.800	2.5
599.1457	17.00	-2.63	83364.927	.5	100050.736	1.5
599.1510	70.01	-.40	35650.624	0.0	52340.907	0.0
599.1572	26.00	-3.33	36975.640	3.0	53661.130	3.0
599.1615	23.00	-4.52	14514.750	1.5	31200.120	1.5
599.1837	24.00	-2.50	24286.540	1.0	40971.290	2.0
599.1848	29.01	-2.58	136765.380	4.0	153450.100	5.0
599.1866	27.00	-2.04	16778.160	2.5	33462.830	2.5
599.1891	28.02	-4.32	121802.800	3.0	138487.400	3.0
599.2057	23.00	-3.48	15664.750	1.5	32348.890	.5
599.2187	18.00	-2.54	107131.755	1.0	123815.530	1.0
599.2315	24.00	-1.57	37244.170	4.0	53927.590	4.0
599.2360	57.00	-1.48	7420.492	0.0	24108.408	0.0
599.2419	24.01	-3.87	53271.070	2.5	69954.200	2.5
599.2437	24.00	-2.19	24299.890	2.0	40982.970	2.0
599.2630	26.00	-4.77	33695.378	5.0	50377.920	5.0
599.2642	25.02	-3.55	176265.780	1.5	192948.290	1.5
599.2699	9.02	-2.51	441276.720	2.5	457959.070	3.5
599.2830	63.00	.35	15970.189	0.0	32656.796	0.0
599.2865	21.00	-1.36	17025.360	1.5	33707.250	2.5
599.2975	26.00	-2.08	34017.084	1.0	50698.666	2.0
599.3077	23.00	-3.08	9824.580	2.5	26505.880	2.5
599.3127	28.01	-4.57	105588.890	4.5	122270.050	3.5
599.3184	29.01	-.68	120092.200	2.0	136773.200	1.0
599.3490	23.00	-5.11	14548.830	2.5	31228.980	2.5
599.3490	24.00	-3.99	45966.450	2.0	62646.600	2.0
599.3501	6.00	-3.18	69689.480	1.0	86369.600	2.0
599.3515	27.00	-4.49	16470.600	1.5	33150.680	1.5
599.3594	27.00	-2.58	36092.440	2.5	52772.300	2.5
599.3650	44.00	-1.80	11695.340	0.0	28379.664	0.0
599.3806	23.01	-5.83	20522.140	1.0	37201.410	0.0
599.3838	22.00	-4.76	29971.078	4.0	46650.260	3.0
599.3892	24.00	-3.07	24303.940	3.0	40982.970	2.0

NOTICE

This series of Special Reports was instituted under the supervision of Dr F. L. Whipple, Director of the Astrophysical Observatory of the Smithsonian Institution, shortly after the launching of the first artificial earth satellite on October 4, 1957. Contributions come from the Staff of the Observatory

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